Metropolitan Transportation Authority

# Capital Program Oversight Committee Meeting

## March 2021

**Committee Members**

P. Foye, Chair
N. Zuckerman, Vice Chair
A. Albert
J. Barbas
N. Brown
M. Fleischer
R. Glucksman
R. Herman
D. Jones
K. Law
R. Linn
D. Mack
J. Samuelsen
V. Tessitore

# Capital Program Oversight Committee Meeting

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

**Wednesday, 3/17/2021**
**10:00 AM - 5:00 PM ET**

## 1. PUBLIC COMMENTS PERIOD

## 2. APPROVAL OF MINUTES FEBRUARY 18, 2021

*CPOC Committee Minutes - Page 3*

## 3. COMMITTEE WORK PLAN 2021 - 2022

*CPOC Committee Work Plan - Page 4*

## 4. PRESIDENT'S REPORT

*President's Report - Page 6*

## 5. CAPITAL PROGRAM UPDATE

*Progress Report on Infrastructure Projects - Page 11*
*IEC Project Review on Coney Island Yard Long Term Flood Mitigation - Page 16*
*IEC Project Review on Clifton Shop (NYCT/SIR) (Sandy) - Page 20*
*IEC Project Review on Rutgers Tube Rehabilitation - Page 24*
*IEC Project Review on 207th Street Flood Mitigation & Sewer Replacement - Page 28*
*IEC Project Review on Bus Radio System - Page 37*
*IEC Project Review on Harmon Shop Replacement Phase V, Stage 2 - Page 44*

## 6. CAPITAL PROGRAM STATUS

*Commitments, Completions, and Funding Report - Page 48*

## 7. QUARTERLY TRAFFIC LIGHT REPORTS

*Fourth Quarter 2020 Core & Sandy Traffic Light Reports - Page 64*

**MINUTES OF MEETING**

**MTA CAPITAL PROGRAM OVERSIGHT COMMITTEE**

**February 18, 2021**

**New York, New York**

**10:00 A.M.**

Because of the ongoing COVID-19 public health crisis, the MTA Chairman convened a one-day, virtual Board and Committee meeting session on February 18, 2021, which included the following committees:

- Long Island Rail Road and Metro-North Railroad;
- New York City Transit;
- MTA Bridges and Tunnels;
- Finance;
- Diversity;
- Capital Program Oversight Committee.

To see a summary of the CPOC Committee meeting, please refer to the February 18, 2021 Board minutes in the February Board Book available here on the Board materials website: https://new.mta.info/transparency/board-and-committee-meetings/march-2021

Metropolitan Transportation Authority

# 2021- 2022 CPOC Committee Work Plan

I. Recurring Agenda Items

Approval of the Minutes
Committee Work Plan
Commitments/Completions and Funding Report

II. Specific Agenda Items

**April**
Overall Capital Program
- Signals and Train Control

Security Projects
Minority, Women and Disadvantaged Business Participation

**May**
Overall Capital Program
- Integrated Megaprojects

**June**
Overall Capital Program
Rolling Stock
OMNY
Quarterly Traffic Light Report

**July**
Overall Capital Program
- Stations

**September**
Overall Capital Program
- Railroads

Quarterly Traffic Light Report

**October**
Overall Capital Program
- Infrastructure

**November**
Overall Capital Program
- Signals and Train Control

Minority, Women and Disadvantaged Business Participation
Small Business Development Program

**December**
Overall Capital Program
- Integrated Megaprojects

OMNY
Quarterly Traffic Light Report

**January**
Overall Capital Program
Rolling Stock

**February**
Overall Capital Program
- B&T
- Railroads

**March**
Overall Capital Program
- Infrastructure

Quarterly Traffic Light Report

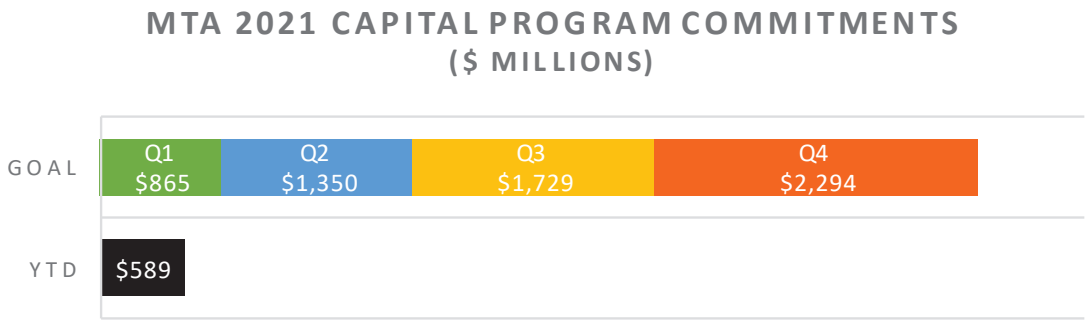
# Capital Program Update
March 2021

## Program Commitments

The MTA's goal is to award at least $6.2 B in total project work to third-party contractors or in-house teams in 2021. Our goal for Q1 is $865 M, which we are on target to meet.

Through February, MTA agencies have committed $589 million in awards, including:

- Purchase of 27 Metro-North passenger-service locomotives ($353 M)
- Normal replacement of signals on LIRR ($22M) and Main Line high speed track turnouts ($45 M)

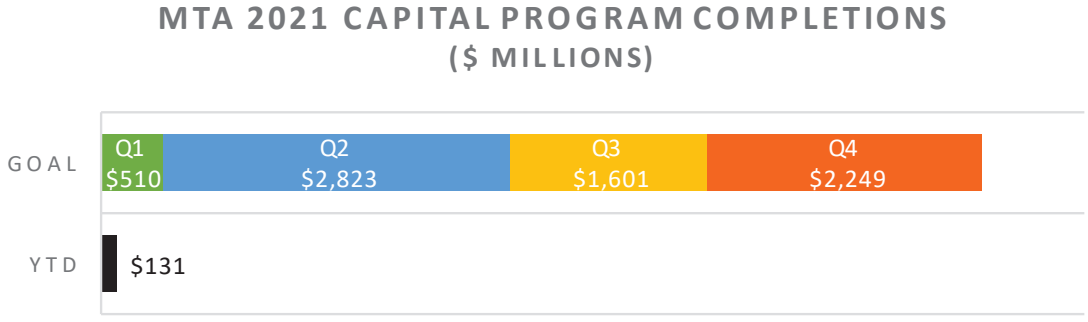



## Program Completions

The value of the project work that is completed in a given year is one of the metrics that MTA C&D uses to measure progress on the Capital Program. C&D plans to complete a record $7.2 B of work in 2021, including 51 major completions (a major completion is one with a significant dollar value or high visibility). Our goal for Q1 is $510 M in completions.

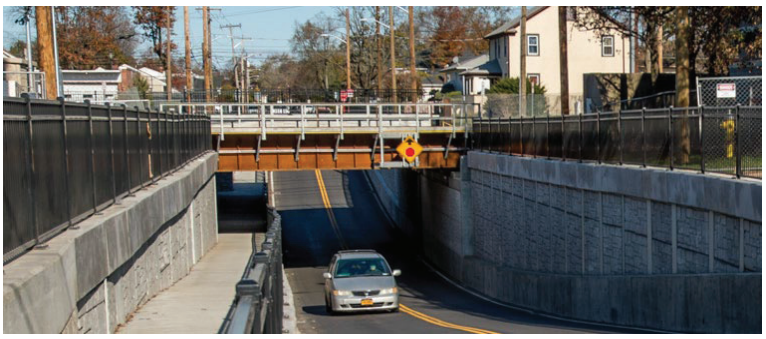
Through February, MTA agencies have completed $131 M worth of projects, including:

- New power substation for SIR in Tottenville
- Tunnel lighting on the Queens Boulevard Line from Roosevelt Ave to Elmhurst Ave



## Project Highlight: LIRR Expansion – Grade Crossing Eliminations

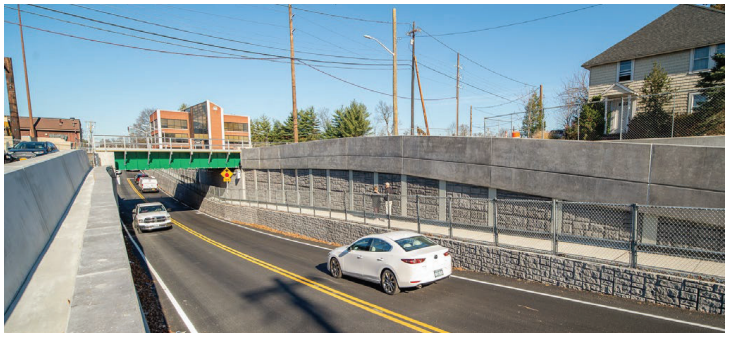
in February, MTA C&D closed the Main Street railroad crossing in Mineola, the final railroad crossing to be permanently eliminated as part of the LIRR Expansion Project. In total, MTA has eliminated eight crossings since 2019, enhancing safety and service reliability, and reducing traffic and noise in adjacent communities.



The Covert Avenue crossing closed on Apr 15, 2019 and reopened as an underpass on Oct 12, 2019.

The Urban Avenue crossing closed Mar 8, 2019 and reopened as an underpass Sep 6, 2019.

The New Hyde Park Road crossing closed on Feb 3, 2020 and reopened on Aug 24, 2020.



The School Street crossing closed on May 18, 2020 and reopened as an underpass on Nov 13, 2020.


The Main Street crossing is closed and being rebuilt as a pedestrian overpass with elevators, to open in spring 2021.

The South 12 Street crossing closed on Oct 24, 2020 and is being rebuilt as an underpass for pedestrians, to open in summer 2021.

Two adjacent crossings at Willis Avenue closed on Nov 30, 2020. They are being rebuilt as an underpass scheduled to open in the fall. One of those crossings is on the Main Line and one is on the Oyster Bay Branch.

## Project Highlight: New Substations on the Canarsie L Line at Maspeth & Harrison

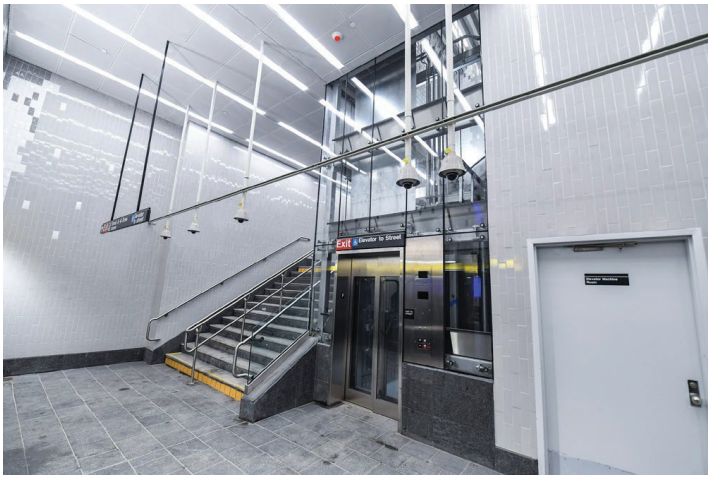
MTA C&D is nearing completion on two brand-new underground substations on the Canarsie L Line. These substations will increase traction-power capacity, and maximize the benefits of modern CBTC signals on the L Line by providing enough power and redundancy for more frequent and reliable service. Both facilities have been outfitted with all new electrical, mechanical, fiber optic and communications equipment, and are waiting for Con Edison to energize them with high-tension electrical service. The Maspeth Substation was awarded as Design-Bid-Build, while Harrison Substation was awarded as Design-Build. Both substations will be placed into service in May 2021.

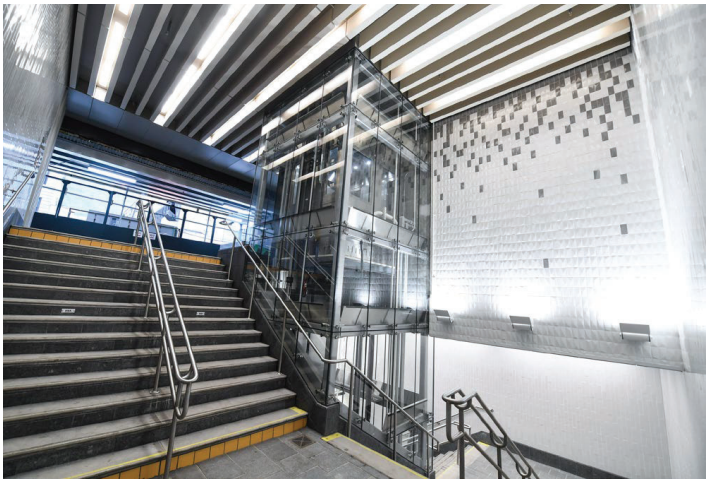
Harrison Substation

Maspeth Substation

## Project Highlight: ADA at Court Square Station

The Manhattan-bound side of the Court Sq-23 St (E-M) subway station in Long Island City, Queens, is now ADA accessible. The station upgrades, which include a new elevator and ramp, and a widened staircase, were completed through MTA C&D's Transit-Oriented Development Program and the External Partner Program, leveraging private-development investment in the neighborhood. Plans are underway to make the Queens-bound platform ADA accessible as part of the 2020-2024 Capital Plan.



## Program Highlight: Building Near Transit

The MTA supports public and private initiatives to create new development projects above and around our train stations, as these investments are critical to the region's economy and quality of life. Leveraging private-development investments also helps to increase accessibility on the MTA network.


**C&D's Transit-Oriented Development** Team collaborates with property owners and municipalities across the region to promote development around transit stations that increase accessibility and provide housing, retail shops, office and public improvements. We work with municipalities and community groups wanting to improve neighborhoods around MTA train stations. We also provide guidance to property owners seeking to conform with zoning regulations near transit. Once concepts are developed, projects are handed over to the External Partner Program for design and construction.

Recently completed: One Vanderbilt, Court Square, LIRR Wyandanch Village TOD
Under construction: MNR Harrison Station TOD, Queens Plaza
In procurement: LIRR Westbury Station TOD

**C&D's External Partner Program** guides public- and private-sector designers and contractors through the technical implementation of projects that require MTA review and approval. EPP supports our partners through design and constructability reviews, construction initiation and oversight, and project close-outs. EPP also reviews and approves thousands of private development projects as well as public-agency projects being built within 200 feet of MTA property.

The program was launched in 2020 to improve transparency, consistency, accountability and collaboration with our partners. The program is reducing turnaround times. Roughly $1 M in applicant fees has been collected already, making the program self-funded.

C&D's last report to the Capital Program Committee on Infrastructure Projects was in October 2020. More than 110 Infrastructure Projects are presently under construction, for a total cumulative value of $3,637,676,102. This document summarizes the progress on some of the most significant infrastructure projects since our last review, and identifies primary factors influencing the projects' performance.

**Coney Island Yard Long-Term Flood Mitigation for NYCT**
C34836

*The project will provide the Coney Island Yard Complex, the largest rapid transit yard in the world, with resilient systems and storm-surge flood protection. It involves the construction of 2.5 miles of perimeter wall, 4,200 LF of cable bridge, more than 20,000 LF of new drainage, 600 linear feet of new track and third rail, two new pump stations, and other elements.*

| ***PROJECT STATUS*** | ***Original*** | ***Forecast*** |
|---|---|---|
| ***Substantial Completion*** | *Sept 2022* | *Sept 2022* |
| ***Budget*** | *$514 M* | *$514 M* |
| *The project is approximately 50% complete* | | |

Recent activities:

- Drainage system: 13,000 LF out of approximately 20,000 LF has been installed along with many drainage structures
- Perimeter protection: 4,700 LF out of 11,300 LF of flood wall has been installed
- Shell Road perimeter protection: Approximately 140 of the 344 piles needed to support the future concrete wall have been installed
- Traction Power Cable Bridge: 60 out of 84 bridge spans have been installed
- Thousands of feet of communication and power cable have been installed

Looking ahead:

- Cable Bridge span installation will continue through the summer
- Major drainage work installation will take place at Stillwell Yard through the Spring and Summer months
- Steel sheeting installation will continue along the southern perimeter and concrete wall installation will continue on Shell Road
- West End line work will commence in the Fall

Progress has been complicated by numerous underground obstructions in the vast yet congested worksite. C&D has mitigated this issue by working with our contractors to adjust designs as needed. In addition, slight reductions in subway service due to the COVID pandemic have kept more train cars in the

Yard, making the contractors work logistically more difficult. The project currently has a three-month delay, but the project team is evaluating mitigation strategies to bring the project back on schedule.

**Clifton Shop for SIR**
C82004

*This project is to fortify Staten Island's Clifton Shop and Yard infrastructure and equipment against heavy rainfall and/or storm surges. The project entails constructing a brand-new maintenance facility to replace the existing obsolescent buildings.*

| ***PROJECT STATUS*** | ***Original*** | ***Forecast*** |
|---|---|---|
| ***Beneficial Use*** | *Jul 2020* | *Sept 2021* |
| ***Budget*** | *$211.5 M* | *$211.5 M* |
| *The project is approximately 84% complete* | | |

Recent milestones:

- The new maintenance shop building is now enclosed and protected from the elements. Fireproofing, roofing, stairways, building façade and windows have been completed.
- Rooftop HVAC units, emergency generator and other electrical systems were completed. Permanent electrical service was obtained in January 2021.

Looking ahead:

- Electrical, communications, fire protection, mechanical and plumbing systems are under construction
- Installation of interior finishes and equipment continues to progress
- Working with utility companies to obtain gas service and activate water service
- Continue with delivery of shop equipment, furniture and architectural finishes
- Continue commissioning activities
- After the new shop is occupied, the existing obsolete facilities will be demolished.

No additional delay impacts have occurred since our last report to CPOC in October 2020. All previously identified delay issues (incurred before C&D took over the project last year) have been resolved – and with 83% of the project complete, no additional schedule delays are anticipated. Nevertheless, the project is trending 17 months behind schedule. We anticipate the project to achieve beneficial use in August/September 2021, with project completion December 2021.

**Rutgers Tunnel for NYCT**
ET0902
ET0903
T80502
T80412
ET0603

*MTA C&D is repairing the damage caused by Superstorm Sandy to the Rutgers Tunnel, and fortifying it against future flooding. This is the last of the 11 MTA cross-river tunnels to be rehabbed through the Capital Program. The project also entails making significant station improvements at East Broadway. The Design-Build project is being accelerated to a record 14 months to take advantage of the current period of low ridership. This project continues to implement the lessons learned from the past Sandy projects, particularly the Canarsie Tunnel (L Train) project. to ensure rapid delivery and minimum disruption to subway services.*

| ***PROJECT STATUS*** | ***Original*** | ***Forecast*** |
|---|---|---|
| ***Substantial Completion*** | *Aug 2021* | *Aug 2021* |
| ***Budget*** | *$167 M* | *$167 M* |
| *The project is approximately 53% complete* | | |

Recent activities:

- The rehabilitation of the East Broadway Station was completed in February 2021, on schedule. This work included retiling 13,000 SF of track wall; repairing columns and track roof beams; painting ceilings, walls and steel members, replacing 1,350 LF of platform edges, replacing the existing with new steel stairs, and making other important structural repairs.
- Progress on the tunnel work includes installing 9,300 LF of continuous welded rail, replacing nearly 5,000 LF of track ties and plates and 18,000 of snake trays.

Looking ahead:

- Installing new communication / signal and electrical cables is in progress.
- New pumps and controls have been installed, need testing and commissioning
- Signal and radio systems have been installed, and cut-over has begun
- The tunnel track work is due to be completed on April 12, 2021. With the goals of reducing service outages and make most efficient use of NYCT force account labor, C&D wrote the contract to include an incentive payment for the contractor if that work is completed before March 29. C&D and contractor are pushing to achieve the 3/29 milestone for all the contractual work that requires GOs.

**207 St Yard for NYCT**
C34838
P36450
S32150
C34849
C34869
S32156

*This project repairs damage to the 207 St Yard caused by Hurricane Sandy and fortifies it against future flooding events. The 43-acre yard services trains on the A, C and 1 lines. The project bundle is comprised of six components: Perimeter Walls and Gates, Tunnel Portal, Traction Power Cable Replacement, Signals (including two new relay buildings), Yard Track, and Yard Switches.*

| ***PROJECT STATUS*** | ***Original*** | ***Forecast*** |
|---|---|---|
| ***Substantial Completion*** | *Nov 2023* | *Nov 2023* |
| ***Budget*** | *$633 M* | *$638 M* |
| *The project is approximately 52% complete* | | |

In Q2 2018, NYC Transit bundled together multiple projects at the 207 St Yard to ensure central single point management of the many overlapping projects in the yard. The project is now administered by one C&D Project CEO, and one project management team oversees multiple contractors in the yard. The single point of control on these projects has allowed C&D to allocate resources more efficiently, which is particularly important as space in the yard is very constrained. Consolidation has also reduced management costs and helped maintain schedule.

Recent activities:

- Track work, traction power, preliminary signal and structural work.
- Ten week “General Order” shutdown for a Track in the 207 St yard.

Looking ahead:

- Continue track and systems work and flood wall installation.

C&D is closely monitoring potential delays in the installation of wayside signal equipment. The root cause of these potential delays is Siemens sub fabricator capacity to meet the high demands for equipment needed by this and other MTA projects. The delay has not yet been mitigated, but the project team is collaborating with Siemens regional and facility managers to prioritize deliveries across all of the projects for which Siemens is the supplier. C&D have worked with Siemens to enhance production – particularly by increasing the pool of sub-suppliers that can be utilized to mitigate production issues.

**Bus Radio Project for NYCT**
W32366

*The project involves implementing a new digital bus radio system for NYCT and MTA Bus. The project includes: 1) constructing 35 new radio base station sites throughout the five boroughs on properties owned or leased by the MTA; 2) retrofitting the entire fleet of buses (approx. 6,000) and non-revenue vehicles with new radio equipment; and 3) Furnishing a new radio control and dispatch system in the new Bus Command Center.*

| ***PROJECT STATUS*** | ***Original*** | ***Forecast*** |
|---|---|---|
| ***Substantial Completion*** | *Dec 2020* | *Dec 2021* |
| ***Budget*** | *$274.2 M* | *$293.8 M* |
| *The project is approximately 71% complete* | | |

The project is a Design-Build contract awarded in 2016 to Parsons Transportation Group (PTG). C&D assumed responsibility for the project in Q2 2020. The project is currently running approximately one year late with the risk of further slippage.

Recent milestones:

- Utility, real estate and access issues affecting the construction of the new radio base stations have been resolved. Construction is nearing completion at all 35 base stations.
- The new command center has been completed, and training of MTA staff is underway

Factors that continue to affect progress:

- PTG has not been able to meet the MTA's quality control requirements. To address:
  - PTG has replaced their quality manager
  - Additional quality management staff specializing in technology has been assigned to the project to join the project
  - Clever Devices (a key supplier of the tech radio kits) is recertifying quality of bus install kits
  - PTG will enhance its fault traceability program and record keeping
- PTG has had difficulty proving the technology for the ongoing Staten Island radio pilot program, which is on the critical path of the project. Complications were added recently due to enhanced MTA security requirements resulting from global MTA security concerns.
- Decision to install bus kits in two steps to mitigate past radio tower permitting problems has not proven successful. To mitigate schedule slippage PTG is planning to shift back to a one-step install.
- PTG is negotiating with specialist installers as subcontractors.
- COVID delayed field activities and training.

# March 2021 CPOC
# Independent Engineering Consultant
# Project Review

## Coney Island Yard
## Long Term Flood Mitigation

## MTA C&D Infrastructure

McKissack

*MTA Independent Engineering Consultant*

# Coney Island Yard Long Term Flood Mitigation

## Scope of Work:

- Super Storm Sandy flooded and damaged the Coney Island Yard with seawater. The scope of this project includes construction of a perimeter protection wall to provide long-term resiliency against future flooding.
- Major project elements include:
  - Constructing 5,000 linear feet of bridges to elevate power and signal cable.
  - Constructing a perimeter protection wall approximately 12 to 15 feet above and 30 feet below grade.
  - Constructing approximately 25,000 linear feet of new pipe to provide drainage.

# Coney Island Yard Long Term Flood Mitigation

## Budget:

- Based on the IEC's review of the project expenditures, contingency, work in place, soft costs, change orders and risks, the IEC concurs with the agency's Estimate at Completion of $514.3M, which equals the project budget. However, scope changes underway have not been incorporated into the budget/EAC amounts.

## Schedule:

- NTP was March 30, 2018. The original completion date is September 30, 2022, which is a 54-month project duration. The February 2021 contractor's schedule, which the agency has not approved, indicates the project completion date is December 2022, which reflects a delay, due to unforeseen site conditions, of 3 months as previously reported at CPOC.
  - C&D has directed the contractor to re-sequence the work so that the fabricator can continuously progress the work to address the delay of cable bridge activities, due to unforeseen field conditions.
  - The project is 52% complete with 61% of the time having elapsed.
  - The IEC has reviewed the schedule logic, constraints, resources and it is our opinion that the delay of three months is not recoverable.

# Coney Island Yard Long Term Flood Mitigation

**Risk:**

- The existing Circuit Breaker House (CBH) is deteriorated and would expose the new equipment, installed under this contract, to the weather. Therefore, as part of C&D's acceleration program and given the contractor is currently performing work on-site, a change order for a new CBH is being negotiated. There is, however, risk that this construction may have commercial and schedule impacts on the overall project.

# March 2021 CPOC
# Independent Engineering Consultant
# Project Review

## Clifton Shop (NYCT/SIR) (Sandy)

## MTA C&D Infrastructure

McKissack

*MTA Independent Engineering Consultant*

# Clifton Shop

## Project Scope:

The Clifton Maintenance shop for Staten Island Railroad (SIR) is located approximately 250 feet from the shoreline on the corner of Front and Bay streets in Staten Island. This project replaces the existing shop buildings that were damaged by flood waters during superstorm Sandy. The existing Clifton Shop facility consisted of four buildings: a paint shop, diesel shop, storage, and MUE shop. A critical requirement of this program is for the MUE shop to remain operational during all phases of the shop replacement.

This project will consolidate all shop functions and SIR administrative offices in one state-of-the-art facility designed for SLOSH Category 2+3' flood resiliency.

There are separate and concurrent projects underway for the Clifton yard track replacement and traction power work, and the new Clifton DC substation.

The delivery method for the Clifton Shop replacement project is design-build. The work of the design-build contract is phased as follows:

- **Phase 1 (*completed*):** Initial removals, relocations, staging.
- **Phase 2 (*completed*):** Demolition of the existing diesel and paint shops. Contaminated soil found during this phase has impacted the project schedule.
- **Phase 3 (*underway*):** Construction of the new maintenance facility. Completion of this phase will occur with beneficial use of the new facility.
- **Phase 4 (*will follow Phase 3 completion*)**: Demolition of the remaining former shop buildings.
- **Phase 5 (*will follow Phase 4 completion*)**: Final site work and site finishes. Completion of this phase will occur when the project reaches substantial completion.

# Clifton Shop

## Schedule Review:

Current contractor schedule updates project beneficial use in June 2021 and substantial completion in December 2021. The IEC concurs with Agency projections that there may be additional delays to beneficial use (Phase 3 completion). The IEC also notes that any delay in achieving beneficial use is likely to delay substantial completion.

- NTP was December 30, 2016. The original design-build contract duration was 43 months, with phase 3 completion (beneficial use) on January 7, 2020 and phase 5 completion (substantial completion) on July 31, 2020.
- Several time extensions were granted, increasing the contract duration to 48 months. The contract completion date has passed with 83% of the work of the contract completed. Additional time extensions are under review.
- Remaining work required to achieve beneficial use consists primarily of interior finishes, testing and commissioning, and satisfying code compliance requirements to obtain a Certificate of Occupancy.

# Clifton Shop

## Budget Review:

- The current budget and Agency EAC for Clifton Shop is $211.5M.
- IEC analysis indicates the budgeted reserve may not be sufficient to cover additional costs due to ongoing schedule delays. The IEC estimate at completion (EAC) indicates up to $3M in additional funding may be required to complete the program scope. The IEC EAC includes the following:
  - Projected contractor and Agency management costs from current contract completion of December 2020 to the projected completion date of December 2021.
  - A construction contingency of 5% of remaining work.
  - Potential cost impacts of open litigations and remaining risks outlined below that are not included in Agency budget projections.

## Risk Review:

As the Clifton Shop project nears completion, most construction risks have been closed. The remaining major risks to cost and schedule are:

- Phase 3 completion (beneficial use) of the shop may be impacted if issues arise during testing and commissioning that require rework on systems such as fire alarm. The project team is mitigating this risk by engaging a specialized consultant to lead the testing and commissioning efforts on Clifton Shop.
- Phase 4 demolition of the existing shop may incur cost and schedule impacts if additional unforeseen hazardous materials are discovered during this phase. Unforeseen hazardous materials impacted the initial demolitions during Phase 2 of this project.

# March 2021 CPOC
# Independent Engineering Consultant
# Project Review

## Rutgers Tube Rehabilitation

## MTA C&D Infrastructure

McKissack

*MTA Independent Engineering Consultant*

# Rutgers Tube Rehabilitation (Design/Build)

## Scope of Work:

- Rutgers Tunnel (twin tubes that run between E. Broadway Station in Manhattan and York Street Station in Brooklyn on the F Line) incurred significant damage as a result of Super Storm Sandy. The scope of this project, which incorporates the lessons learned from the successful Canarsie Tube, is to restore this tunnel structure and its system to a State of Good Repair and provide long-term resiliency measures against future flooding. Major project elements include:
  - Design, furnish and install a new cable management racking system.
  - Install a fiber optic cable network and power system within the tube for future cellular service.
  - Replacement of 9,300 linear feet of Continue Welded Rail (CWR) and 4,600 feet of track components (ties and plates); remove and reinstall existing contact rail; replace/relocate signal heads, stop machine and signal cables at multiple locations.
  - Remove and replace 8 sewer pumps, controls, heat trace, and insulation of discharge lines in four (4) pump rooms.

# Rutgers Tube Rehabilitation (Design/Build)

## Budget:

- Based on the IEC's review of the project expenditures, contingency, work in place, soft costs and risks, the IEC concurs with the agency's Estimate at Completion of $172M, which equals the project budget.

## Schedule:

- NTP was July 28, 2020 with a completion date of August 28, 2021, which is a 13-month project duration. The contract was awarded to J-Track/TC Electric Rutgers JV.
- The contractor's baseline schedule indicates the Substantial Completion date is August 2021.
  - Based on our analysis, the schedule logic and activity durations support the contractor will meet that date.
- The following are the two incentive milestones:
  - Milestone #1 – Completion of E. Broadway Station work on February 16, 2021. All work has been completed and this milestone has been achieved.
  - Milestone #2 – An incentive payment will be made to the contractor if track work is completed on or before March 29, 2021. Long lead items have been ordered; however, delivery is tracking two weeks late, causing this milestone payment to be at risk.

# Rutgers Tube Rehabilitation (Design/Build)

## Observation:

- Long lead items for the supervisory control system (SCADA) have been ordered, however, delivery is tracking two weeks behind schedule. This may impact the contractor's ability to meet the agreed upon GO schedule and impact NYCT's effective use of their force account labor.

# March 2021 CPOC
# Independent Engineering Consultant
# Project Review

## 207th Street Flood Mitigation and Sewer Replacement

## MTA C&D Infrastructure

McKissack

*MTA Independent Engineering Consultant*

# 207th Street Yard and Shop Flood Mitigation

## Scope of Work:

- 207th Street Yard sustained extensive saltwater damage during Super Storm Sandy. The saltwater from the Harlem River flooded the yard and consequently the 200th Street and 207th Street interlockings located on the 8th Avenue 'A' line.
- Major project elements include:
  - Construction of two new relay room buildings, five new Central Instrumentation House locations and one enclosures to house new equipment for signals and auxiliary systems.
  - Repair or replace track system damaged by Super Storm Sandy.
  - Design, furnish, install, test and place in-service new signal system and auxiliary support systems throughout the 207th Street Yard, and modify tie-ins (interfaces) with the main line.
  - Provide temporary crew quarters to accommodate services and personnel affected by the work under this contract.

# 207th Street Yard and Shop Flood Mitigation

## Budget:

- Based on the IEC's review of the project's costs, contingency, work in place, soft costs, pending change orders and risks, the IEC concurs with the agency's Estimate at Completion of $635.4M which equals the project budget.

## Schedule:

- NTP was issued September 4, 2018. The contract completion date is November 4, 2023, which is a 62-month project duration.
- The IEC performed a schedule analysis (update #25) and find the logic, durations, resources and constraints support the current Substantial Completion (SC).
- While the signal equipment delivery is now expected to be late, the contractor is making every effort to complete the project utilizing the existing project schedule contingency.

# 207th Street Yard and Shop Flood Mitigation

## Top risks and mitigations:

- Risk - Solid state interlocking equipment, relay room equipment and cable delivery
  - Mitigation – A C&D Project Controls Manager is in place in the factory to monitor quality and signal equipment production. Also, C&D is now meeting with signal contractor bi-weekly (vs. monthly) on delivery of long lead signal equipment procurement and installation items.
- Risk - contractor interface during construction
  - Mitigation – CM/CCM coordinate with contractors on other contracts working at 207th St yard to avoid interferences.
- Risk - contractor coordination with NYCT Yard Operations
  - Mitigation - CM/CCM and the contractors have agreed with the yardmaster and NYCT Operations Planning on a revised outage schedule. Weekly communications take place to coordinate all work.
- IEC sees these actions as appropriate to address these risks.

# 207th Street Yard and Shop Flood Mitigation

## Observations:

- Risk Assessment refresher for 207th St Yard was performed in the fall and has served as a useful tool for the project to maintain the schedule.
- An updated site work plan, revised track and signal work plan and G.O. phasing plan have been developed and implemented.
- C&D has undertaken a program-wide schedule analysis of contractor's work across all signal projects, with consideration of resources including manpower, shop constraints and specific project need dates.

# 207th Street Sewer Replacement

## Scope of Work:

- 207th Street Yard sustain extensive water damage during Super Storm Sandy from the brackish water from the Harlem River. This project will relocate NYC owned sewers to outside 207th Street Yard.
- Major project elements include:
  - Removing and relocating the existing DEP regulator, diversion chamber, tide gates, and internal sanitary service connections in the yard.
  - Construct new project elements for the relocated sewer.
  - Installation of reinforced sewer lines and back-water valves.

# 207th Street Sewer Replacement

## Budget:

- Based on the IEC's review of the project's costs, contingency, work in place, soft costs, pending changes and risks, the IEC concurs with the agency's Estimate at Completion of $152.4M which equals the project budget.

## Schedule:

- NTP was December 27, 2019. The original contract completion date was February 28, 2024, which is a 50-month project duration.
- The IEC performed an analysis of the contractor's schedule update #7 which reflects progress through February 2021. The IEC analysis indicates that the project will meet the Substantial Completion date of February 2024.

# 207th Street Sewer Replacement

## Top risks and mitigations:

- Risk - coordination with utility companies may take longer than anticipated impacting the schedule. Utility companies may not perform the work as scheduled.
  - Mitigation – CM/CCM are coordinating with utility companies for early identification and scheduling of critical utility activities.
- Risk - coordination with other work underway at the yard may prevent contractor to follow its plan.
  - Mitigation – contractor participates in coordination meetings with the Yardmaster, Operations Planning and other on-site contractors.
- Risk - The 207th Street site has a history of industrial use. The actual site conditions may differ from those identified in the contract documents.
  - Mitigation – contractor test pits and borings cover the entire project footprint.

# 207th Street Sewer Replacement

## Observation:

- Project has worked well coordinating work with the numerous yard contractors and with the outside agencies around the perimeter of the yard.
- The IEC is concerned that performance of 3rd party utility contractor may impact the completion of this project by not relocating utilities lines within the schedule window.

# March 2021 CPOC
# Independent Engineering Consultant
# Project Review

## Bus Radio System

## MTA C&D Infrastructure

McKissack

*MTA Independent Engineering Consultant*

# Bus Radio System (Design/Build)

**Project Scope:**

- Project provides for a new integrated digital bus radio system for NYCT and MTA Bus, and includes:
  - Installation of 35 base stations throughout the five (5) boroughs and Kearny, New Jersey
  - Outfitting over 6,000 buses with new radio equipment
  - Outfitting the new Bus Command Center (BCC) with bus dispatch consoles and radio equipment hardware and software to support voice and data traffic between the BCC and individual or group of buses

# Bus Radio System (Design/Build)

**Budget:**

- Current budget is $291M with Estimate at Completion (EAC) of $294M.
  - Costs due to continuing delays will likely require a budget modification.

# Bus Radio System (Design/Build)

**Schedule:**

- Contractual Substantial Completion (SC) was January 2021. C&D now forecasts completion by December 2021.
- Contractor's recent schedule update, which has not been accepted by C&D, shows a March 2022 SC. Schedule continues to slip; C&D is increasing pressure on the Contractor to recover schedule.
- Field progress based on payments is at 71%. Completion of base station installations, bus equipment installations, and testing and commissioning of the system are remaining.
- The IEC finds that timely completion depends upon a successful pilot, increased staffing, increased productivity, and improved quality and workmanship.

| | Schedule Update Sep. '20 | Schedule Update Dec. '20 |
|---|---|---|
| Activity | Completion Date | Completion Date |
| Bus Command Center | December 2020 | January 2021 |
| Base Station Installation | June 2021 | July 2021 |
| Pilot Testing | December 2020 | July 2021 |
| Bus Installation | June 2021 | March 2022 |
| Substantial Completion | July 2021 | March 2022 |

# Bus Radio System (Design/Build)

**Schedule:**

- Bus Installation
  - Thirteen (13) buses have been fully installed with on-board equipment. Pilot test is delayed until 200 buses are fully installed, and pilot site acceptance tests have been completed, 7-month slip since last report.
  - Based on IEC analysis, performance to date, and the time required to complete bus equipment installation, planned 40 bus installations per day is not achievable.
- Base Station Installation
  - Construction of 7 out of 35 base stations is complete, with some testing and commissioning remaining.
  - Remaining sites are in various stages of completion:
    - Approximately half of remaining sites are over 85% complete.
    - Issues with several sites, including finalization of agreements such as Kearny, New Jersey, are being addressed for installation work to start.
    - Completion of base stations by July 2021 milestone will be challenging.

# Bus Radio System (Design/Build)

**Project Risk:**

- Bus installation remains the highest risk to project schedule and is driving the critical path. Contractor must address several issues including training and quality to advance to bus equipment installation.

# Bus Radio System (Design/Build)

**Observations:**

- Contractor has not demonstrated the ability to effectively manage the project; and has not provided a proper path to completion. The IEC has little confidence that the project can be completed by the latest schedule completion date.
- Contractor is having difficulty meeting the MTA quality standards, particularly bus installation. C&D has requested that the Contractor provide Quality Assurance Plan to allow this work to resume.
- Contractor must ensure that coverage, performance and quality requirements are not impacted by schedule delays and mitigations.

# March 2021 CPOC
# Independent Engineering Consultant
# Project Review

## Harmon Shop Replacement Phase V Stage 2

## MTA C&D Infrastructure

McKissack

*MTA Independent Engineering Consultant*

# Harmon Shop Replacement
## Phase V Stage 2

### Program Scope:

Phase V Stage 2 of the Harmon Shop replacement is the final stage of a multi-phase program of capital improvements and upgrades at MNR's Croton-Harmon Shops and Yards. Previous phases:

Phase I (completed): Yard Infrastructure

Phase II (completed): MoW Bldg, Communication Building, Material Distribution Center addition.

Phase III (completed): Wheel True Facility, Coach and Locomotive Shops

Phase IV (completed): Priority roof repairs to Building #6

Phase V (current): Consist Shop (CSF), EMU Annex, EMU Running Repair and Support Shop (RRSS) and blowshed.

### Current Phase:

The current and final Phase V replaces the old equipment maintenance facility (Building 6) with new Electric Car and Support Shop facilities. The work of Phase V is being completed in two separate design-build contracts:

**Phase V - Stage 1:** Nearing completion with some punch list work remaining. Stage 1 scope includes the design and construction of the new Consist Shop and EMU Annex Buildings. This phase also completed the required preliminary Engineering design work for both the Stage 1 and Stage 2 contracts.

**Phase V - Stage 2 (current work)**: The scope of 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. This Stage 2 EMU Running Repair and Support Shop Facility will be constructed directly adjacent to the Phase V Stage 1 Consist Shop and will be connected to the Stage 1 EMU Annex Building via a second floor overpass connection.

# Harmon Shop Replacement
## Phase V Stage 2

### Schedule Review:

- NTP was October 31, 2018. The original design-build contract duration was 48 months, with completion on October 30, 2022.
- A six-month time extension was granted for Stage 1 schedule impacts to the Stage 2 contract. The revised contract completion is now April 30, 2023. No additional Stage 1 impacts to Stage 2 are anticipated.
- Since last report, the contractor's schedule slipped 6 weeks and now indicates substantial completion (SC) on June 2, 2023.
- IEC analysis indicates that the work of the contract is 27% complete and progress to date is consistent with tracking milestones in the contractor's revised schedule. The IEC concurs with the substantial completion date of June 2, 2023.

### Current Status:

Current construction activities include site utilities, dewatering, controlled inspections, excavation of elevator pits and construction of the shop foundation.

Completed milestones:

- The design build team has completed all design packages.
- Relocations have been completed by third party SBMP contractors.
- Demolition of Bldgs. 5 and 6 is completed and the adjacent yard has been turned over to Stage 2 construction forces.

Upcoming critical milestones:

- Completion of shop foundation in June 2021
- Completion of structural steel in December 2021

# Harmon Shop Replacement
## Phase V Stage 2

### Budget Review:

- The current program budget of $439.6M has not changed since award.
- IEC analysis of project costs, work in place, contingency draw-down, pending changes and outstanding risks indicates the project remains within budget.

### Top Risks:

The top cost and schedule risk facing the project at this time is potential impacts related to delays in turning over a portion of the South yard to the design-builder. The project team is mitigating impacts by resequencing work between the North and South yards. Completing the North yard earlier than plan poses challenges to the project team due to required concurrence from MNR transportation and maintenance of equipment MOE groups to minimize impact to yard operations.

### IEC Observations:

In the IEC's opinion, the management of the Harmon Shop program is sound, and no recommendations are required at this time.

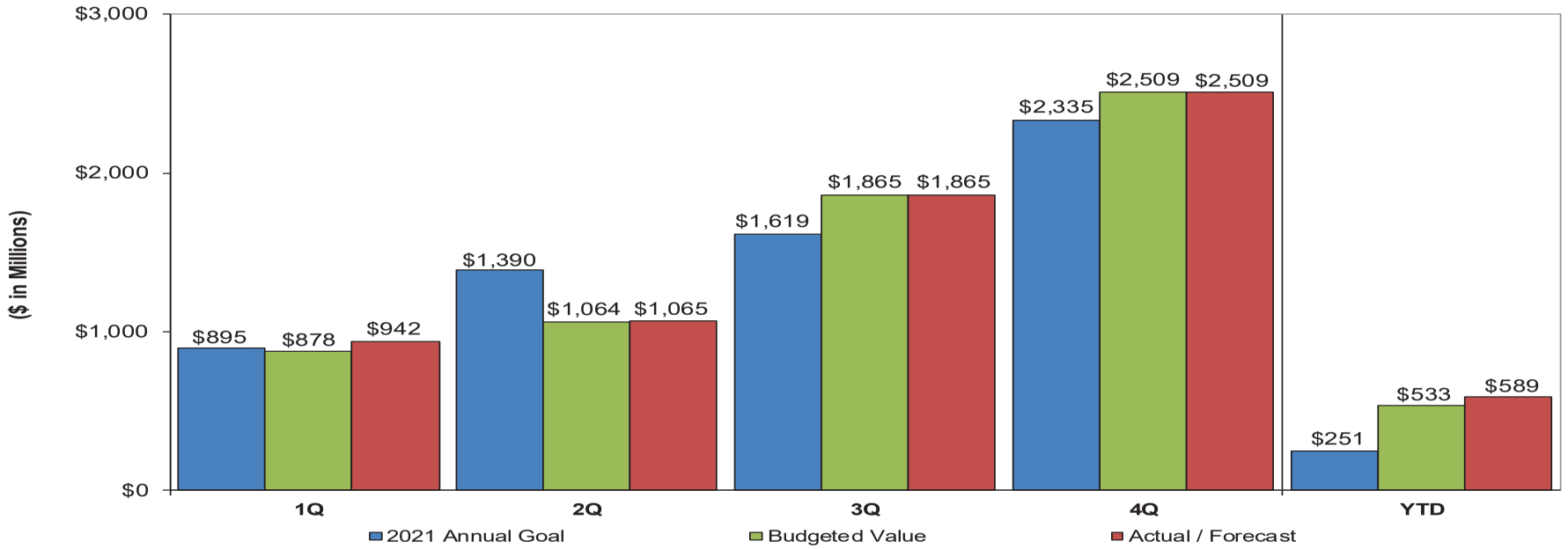
# MTA Capital Program
# Commitments & Completions

## through
## February 28, 2021

Metropolitan Transportation Authority

## Capital Projects – Commitments – February 2021

### MTA-wide 2021 Commitments




**Annual Goals:** Dollar and time-based programmatic milestones for the commitment of contracts established at the start of each year and which are achievable during the year.
**Actuals:** The value of the goals and any additional unplanned commitments as they are achieved during the year.
**Forecasts:** The updated estimates by quarter for remaining goals as well as any unplanned commitments that might occur during the year.
**Budget:** The budgeted value assumed in the capital program for the Actual and Forecasted Commitments being tracked during the year.

### Commitments Summary

In 2021, agencies have a goal of $6.2 billion in overall commitments, including $3,839 million for NYCT, $485 million for LIRR, $777 million for MNR, $57 million for MTA Bus, $40 million for MTA Interagency, $867 million for MTA Expansion, and $173 million for B&T.

Through February, agencies have committed $589 million versus a $251 million goal reflecting the early award of 27 Locomotives for $353 million for MNR. At the end of each quarter in 2021, schedule variances will be explained on the following pages.

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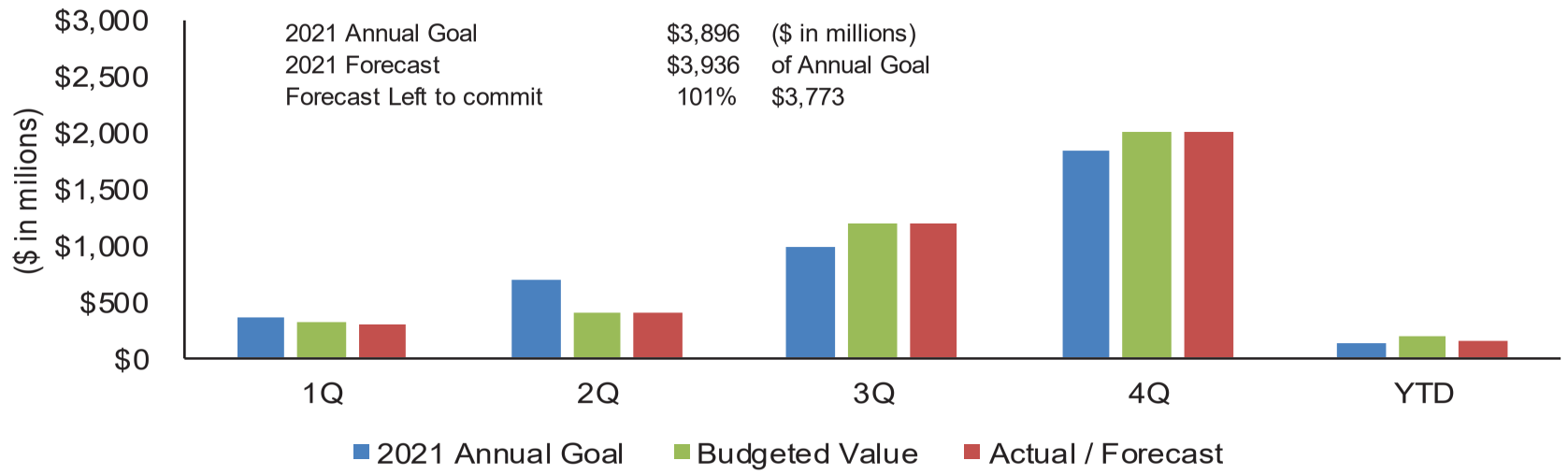
## NYCT/MTA Bus Capital Projects – Commitments – February 2021 – Budget Analysis and Schedule Variances

### NYCT and MTA Bus Budget Analysis



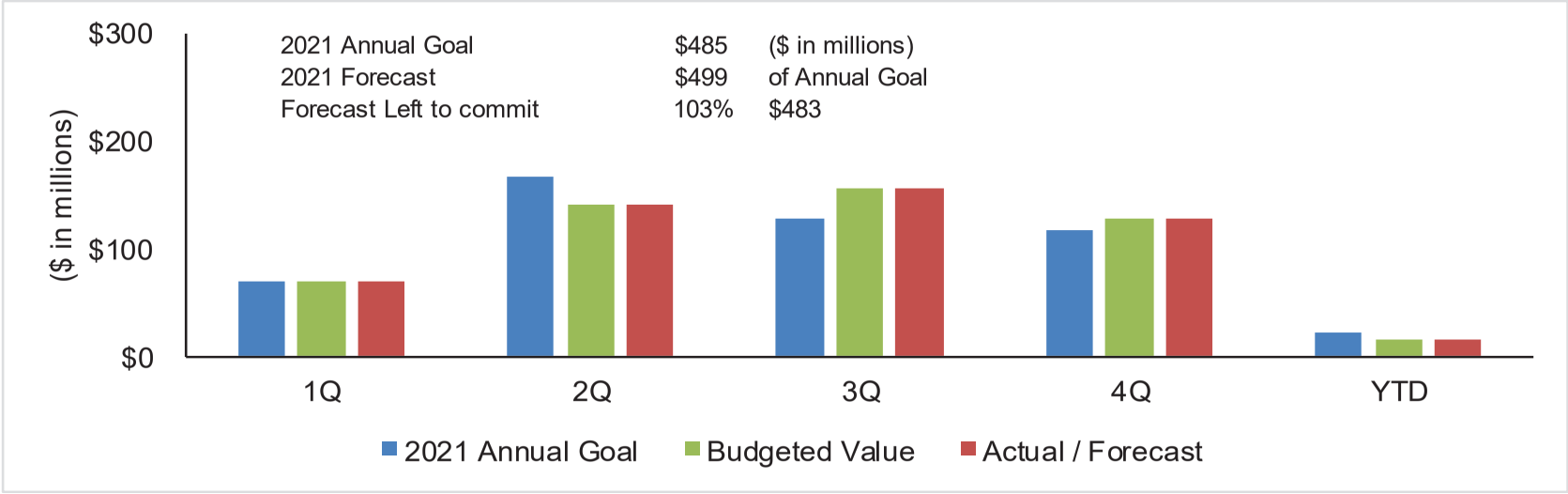

### Schedule Variances

There are no schedule variances to report at this time.

Metropolitan Transportation Authority

## LIRR Capital Projects – Commitments – February 2021 – Budget Analysis and Schedule Variances

### LIRR Budget Analysis

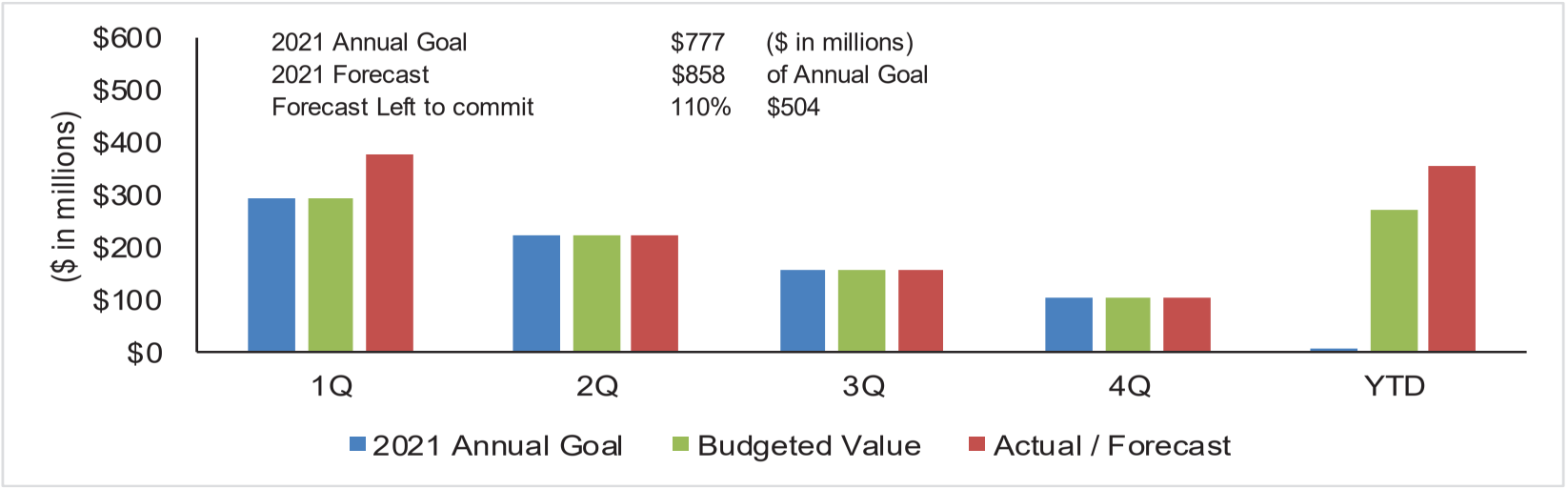



### Schedule Variances

There are no schedule variances to report at this time.

## MNR Capital Projects – Commitments – February 2021 – Budget Analysis and Schedule Variances

### MNR Budget Analysis

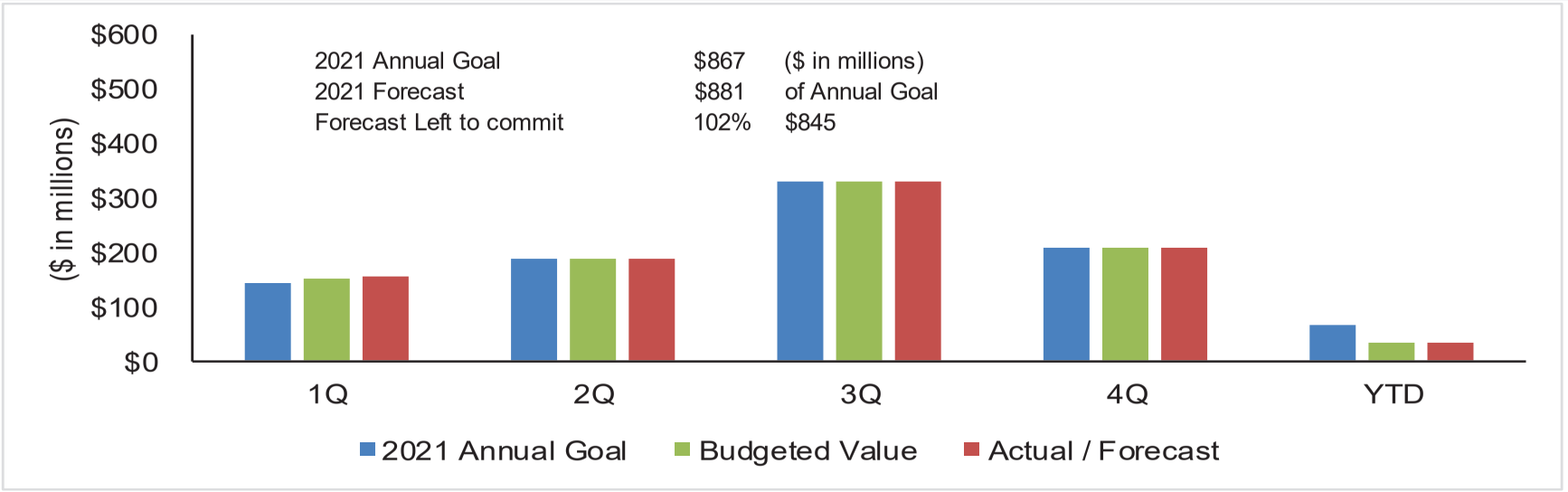



### Schedule Variances

The actual YTD accomplishments reflect the early award of 27 Locomotives for $353 million. There are no schedule variances to report at this time.

## MTA Expansion Capital Projects – Commitments – February 2021 – Budget Analysis and Schedule Variances

### MTA Expansion Budget Analysis



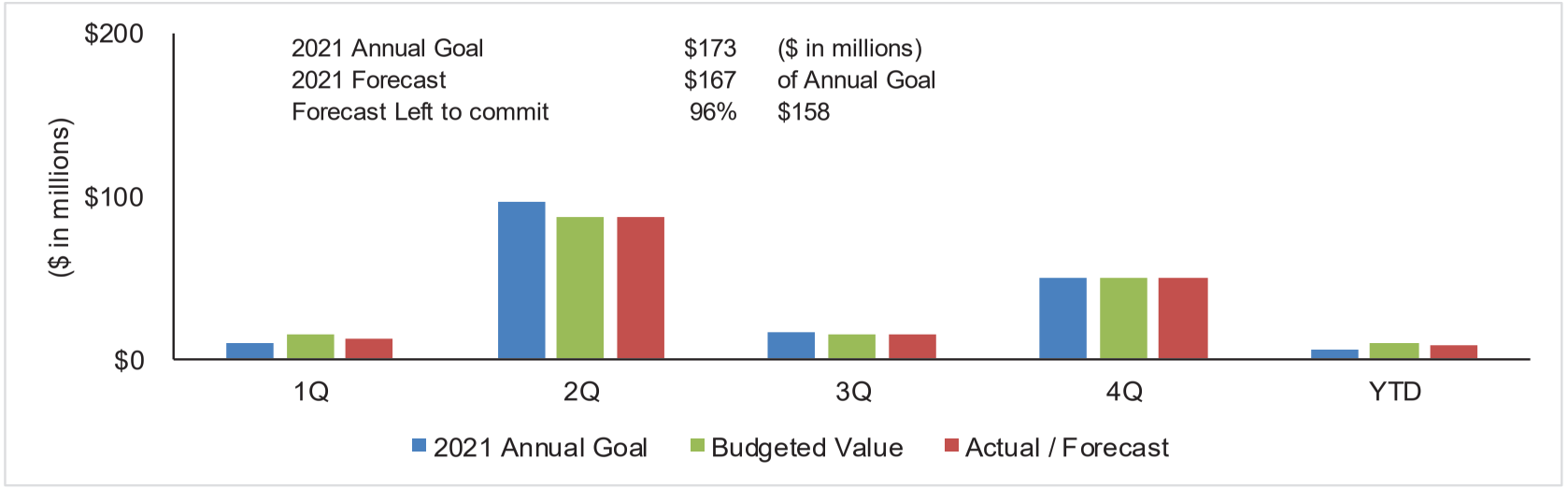

### Schedule Variances

There are no schedule variances to report at this time.

Metropolitan Transportation Authority

## B&T Capital Projects – Commitments – February 2021 – Budget Analysis and Schedule Variances

### B&T Budget Analysis




### Schedule Variances

There are no schedule variances to report at this time.

Metropolitan Transportation Authority

## Capital Projects – Completions – February 2021

| Goal \ Actual | | MTA-wide 2021 Major Completions | | | | | | | | | | | | Post 2021 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Jan-21 | Feb-21 | Mar-21 | Apr-21 | May-21 | Jun-21 | Jul-21 | Aug-21 | Sep-21 | Oct-21 | Nov-21 | Dec-21 | |
| Total | 51 | 1 | 1 | 3 | 3 | 6 | 7 | 3 | 4 | 2 | 7 | 2 | 12 | 0 |
| Jan-21 | 1 | 1 | | | | | | | | | | | | |
| Feb-21 | 2 | | | 2 | | | | | | | | | | |
| Mar-21 | 1 | | | 1 | | | | | | | | | | |
| Apr-21 | 3 | | | | 3 | | | | | | | | | |
| May-21 | 7 | | 1 | | | 6 | | | | | | | | |
| Jun-21 | 7 | | | | | | 7 | | | | | | | |
| Jul-21 | 3 | | | | | | | 3 | | | | | | |
| Aug-21 | 5 | | | | | | | | 4 | | | | 1 | |
| Sep-21 | 2 | | | | | | | | | 2 | | | | |
| Oct-21 | 7 | | | | | | | | | | 7 | | | |
| Nov-21 | 2 | | | | | | | | | | | 2 | | |
| Dec-21 | 11 | | | | | | | | | | | | 11 | |

BLUE = Forecast/Actual earlier than Goal
GREEN = Forecast/actual matches Goal
AMBER = Forecast/actual within 2 months of Goal
RED = Forecast/actual beyond 2 months of Goal

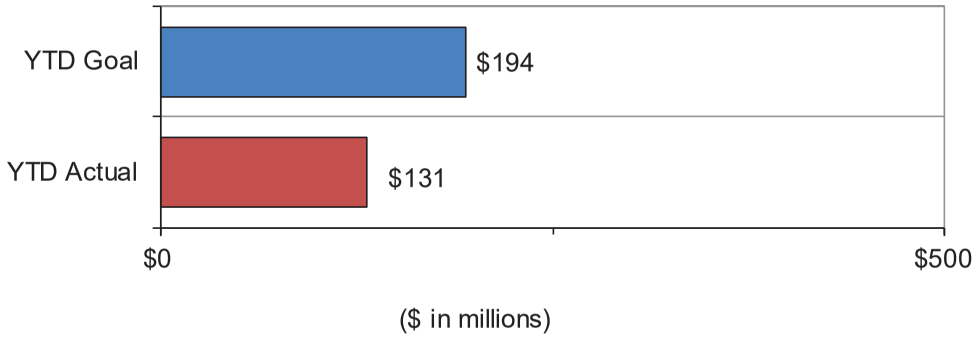
## Completions Summary

In 2021, agencies have a goal of completing $7.2 billion in work including 51 major completions. Major completions are generally those that have significant dollar value or have high visibility. In 2021, major completions total 72% of the annual goal. Major completions for 2021 by agency include 26 for NYCT, 7 for LIRR, 7 for MNR, 2 for MTA Bus, 5 for MTA Expansion, and 4 for B&T.

Through February, agencies have completed $131 million versus a $194 million goal. The shortfall is mainly due to slips of two major completions. The two major slips are explained on the following pages.

## Budget Analysis

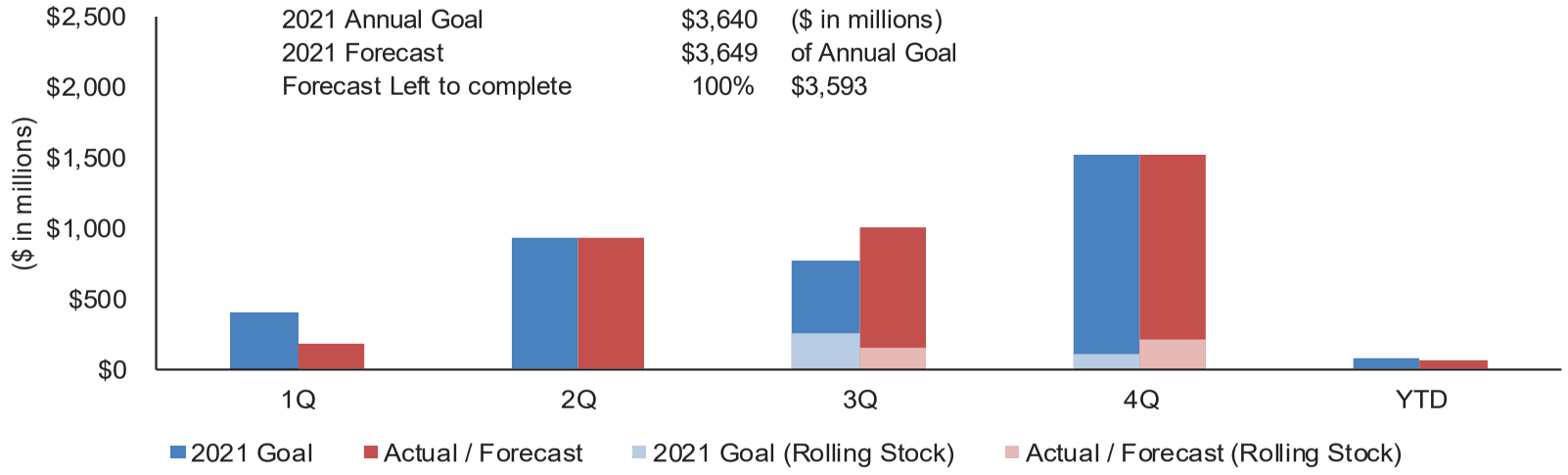
| | | | |
|---|---|---|---|
| 2021 Annual Goal | $7,183 | ($ in millions) | |
| 2021 Forecast | 100% | of Annual Goal | ($7,196) |
| Forecast left to Complete | 98% | ($7,064) | |



Metropolitan Transportation Authority

# NYCT/MTA Bus Capital Projects – Completions – February 2021 – Budget Analysis and Schedule Variances

## NYCT and MTA Bus Budget Analysis




## Schedule Variances

### 1 All-Agency Amber Completions (1 New Item)

| Project | Completion | Goal | Forecast |
|---|---|---|---|
| ***NYCT*** | | | |
| *Passenger Stations* | | | |
| **ADA: Gun Hill Rd / Dyre (New Item)** | Construction Award | Feb-21<br>$55.1 | Mar-21<br>$55.3 |

Project completion delayed due to an additional work order for the redesign of the fire sprinkler and fire alarm system as a result of changes to standards.

### 1 All-Agency Red Completions (1 New Item)

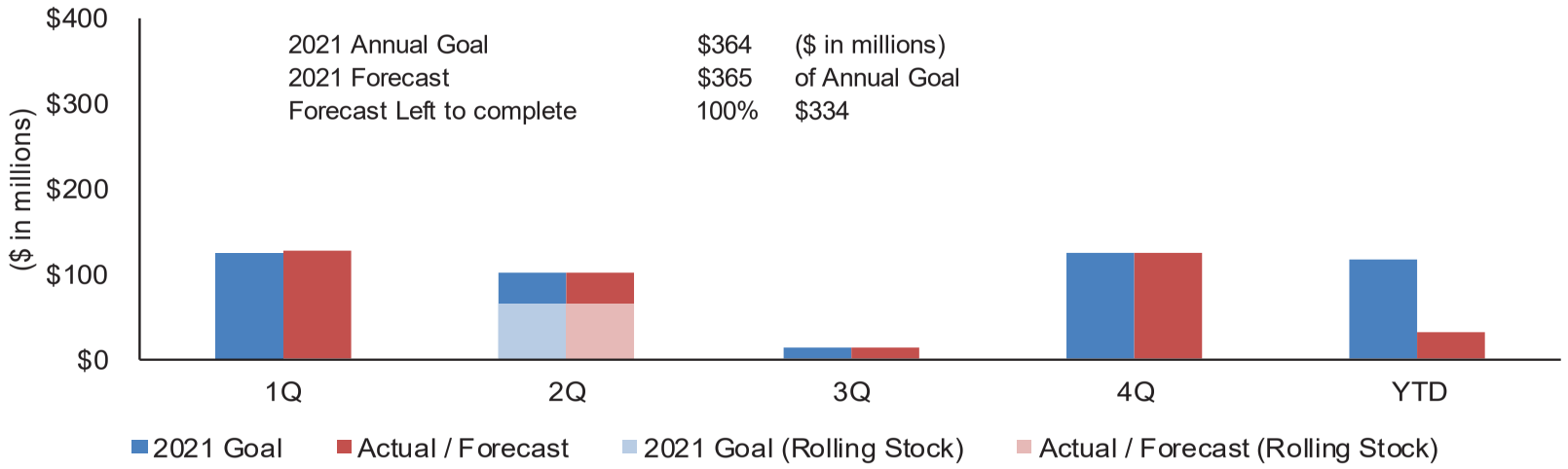
| Project | Completion | Goal | Forecast |
|---|---|---|---|
| ***NYCT*** | | | |
| *Passenger Stations* | | | |
| **CBTC Queens Blvd West - 50 St to Union Tpke: Ph 1 (New Item)** | Construction Award | Aug-21<br>$235.8 | Dec-21<br>$235.8 |

This project's substantial completion is delayed due to software reliability issues as well as additional time needed to allow for proper time to monitor each section of the line's performance prior to entering beneficial use.

Metropolitan Transportation Authority

# LIRR Capital Projects – Completions – February 2021 – Budget Analysis and Schedule Variances

## LIRR Budget Analysis

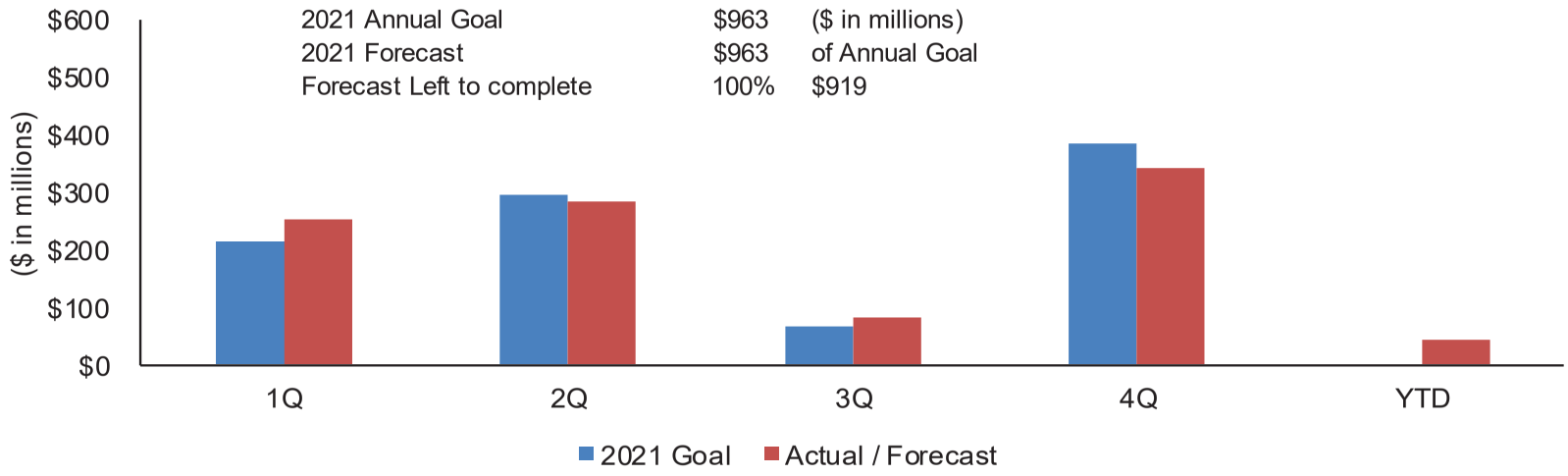



## Schedule Variances

| Project | Completion | Goal | Forecast |
|---|---|---|---|
| **1 All-Agency Amber Completions (1 New Item)** | | | |
| ***LIRR*** | | | |
| *Shops and Yards* | | | |
| **Diesel Locomotive Shop Improvements (New Item)** | Construction Award | Feb-21<br>$94.4 | Mar-21<br>$94.4 |
| Project completion delayed due to design and fabrication of a diesel fire pump and emergency generator as well as delays related to the COVID-19 pandemic. | | | |

# MNR Capital Projects – Completions – February 2021 – Budget Analysis and Schedule Variances

## MNR Budget Analysis

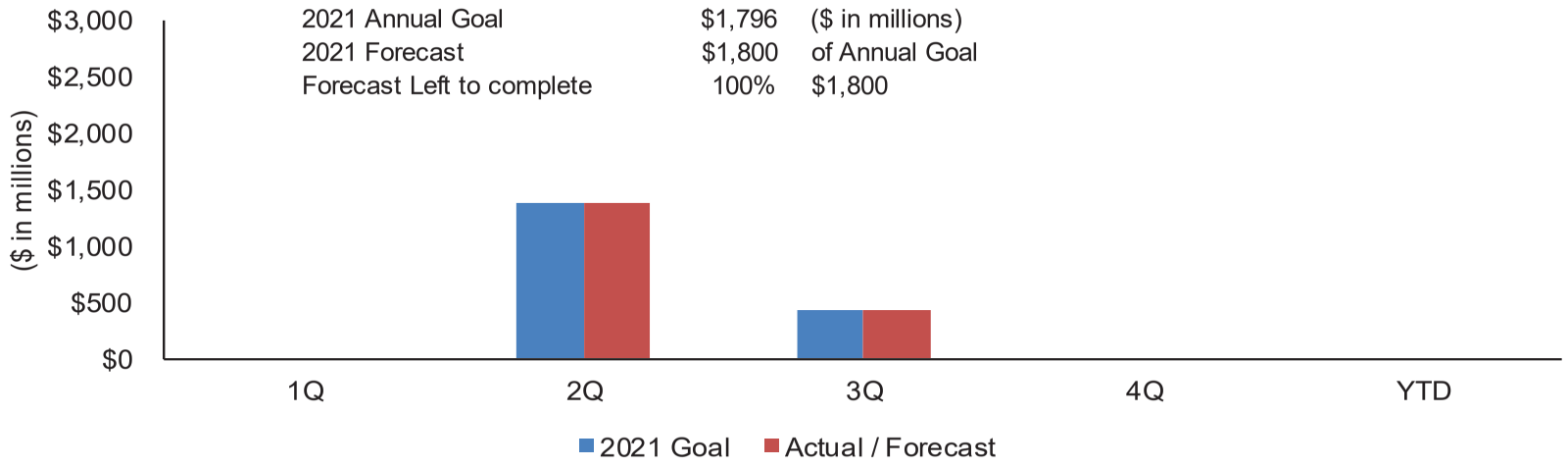



## Schedule Variances

There are no schedule variances to report at this time.

## MTA Expansion Capital Projects – Completions – February 2021 – Budget Analysis and Schedule Variances

### MTA Expansion Budget Analysis

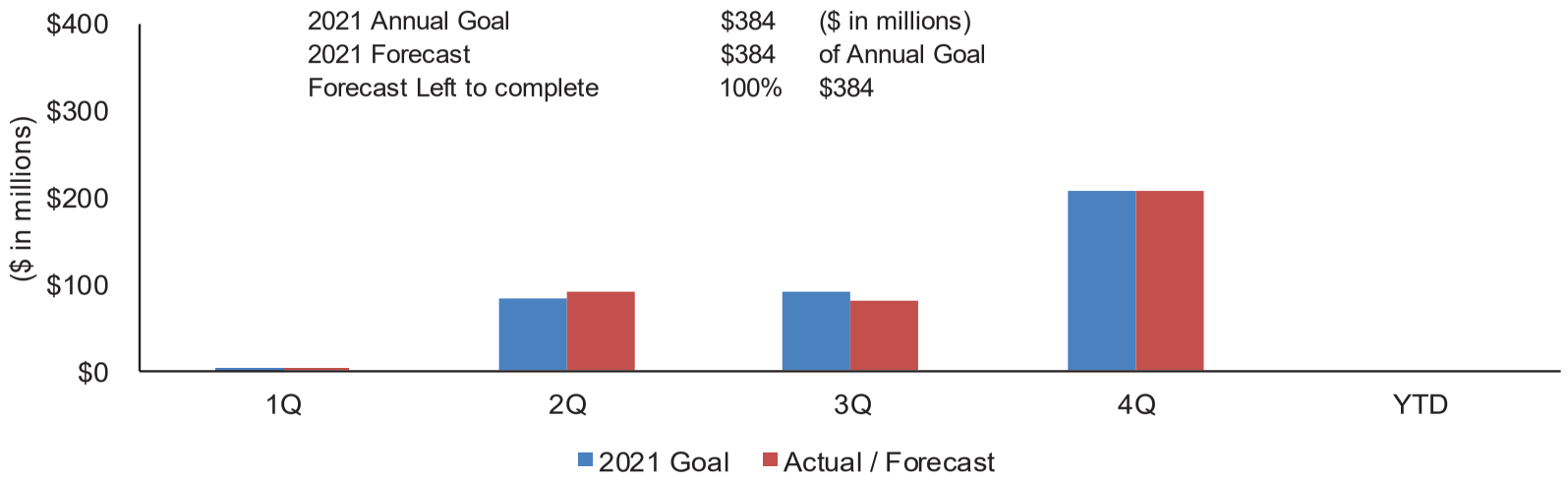



### Schedule Variances

There are no schedule variances to report at this time.

## B&T Capital Projects – Completions – February 2021 – Budget Analysis and Schedule Variances

### B&T Budget Analysis



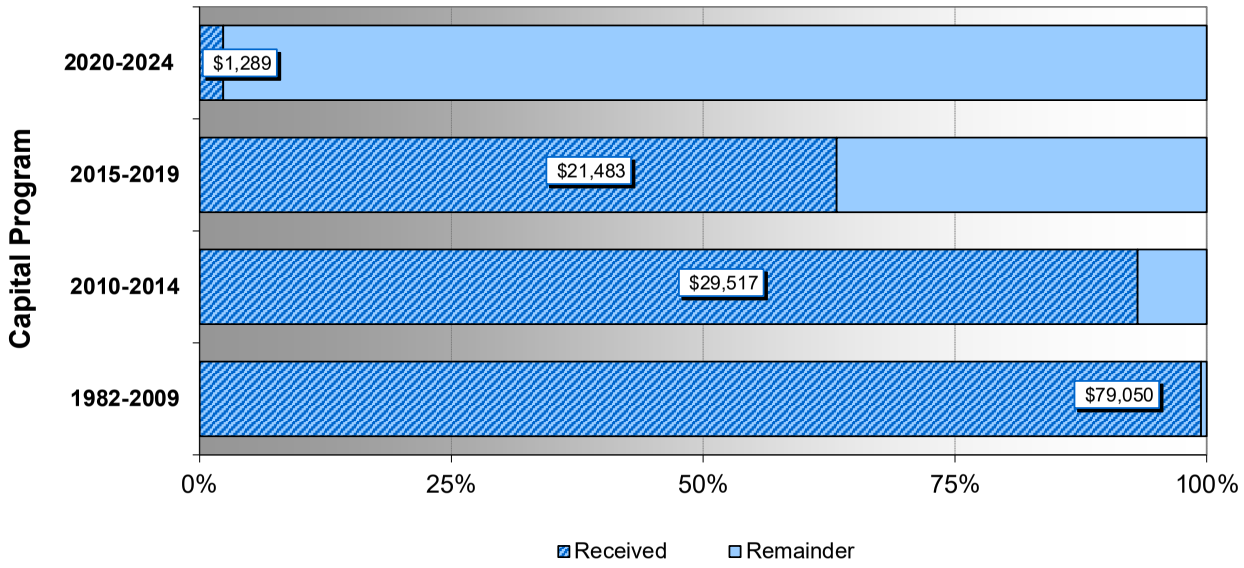

### Schedule Variances

There are no schedule variances to report at this time.

# Status of MTA Capital Program Funding

**Capital Funding (February 2021)**

$ in millions



# Capital Funding Detail (February 2021)

$ in millions

| 2010-2014 Program | Funding Plan Current | Receipts Thru Jan | Receipts This month | Receipts Received to date |
|---|---|---|---|---|
| Federal Formula, Flexible, Misc | $5,844 | $5,839 | $ - | $5,839 |
| Federal High Speed Rail | 173 | 173 | - | 173 |
| Federal New Start | 1,271 | 1,257 | - | 1,257 |
| Federal Security | 89 | 89 | - | 89 |
| Federal RRIF Loan | - | - | - | - |
| City Capital Funds | 719 | 608 | - | 608 |
| State Assistance | 770 | 770 | - | 770 |
| MTA Bus Federal and City Match | 132 | 112 | - | 112 |
| MTA Bonds (Payroll Mobility Tax) | 11,625 | 10,450 | - | 10,450 |
| Other (Including Operating to Capital)** | 1,290 | 1,273 | 6 | 1,279 |
| B&T Bonds | 2,175 | 2,019 | - | 2,019 |
| Hurricane Sandy Recovery | | | | |
| *Insurance Proceeds/Federal Reimbursement* | 6,697 | 6,697 | - | 6,697 |
| *PAYGO* | 18 | 18 | - | 18 |
| *Sandy Recovery MTA Bonds* | 659 | 182 | - | 182 |
| *Sandy Recovery B&T Bonds* | 230 | 23 | - | 23 |
| **Total** | **31,691** | **29,511** | **6** | **29,517** |

| 2015-2019 Program | Funding Plan Current | Receipts Thru Jan | Receipts This month | Receipts Received to date |
|---|---|---|---|---|
| Federal Formula, Flexible, Misc | $6,704 | $4,989 | $ - | $4,989 |
| Federal High Speed Rail | $122 | $122 | - | $122 |
| Federal Core Capacity | 100 | - | - | - |
| Federal New Start | 500 | - | - | - |
| Federal Security | 19 | 15 | - | 15 |
| State Assistance | 9,064 | 3,723 | - | 3,723 |
| City Capital Funds | 2,667 | 1,235 | - | 1,235 |
| MTA Bonds | 8,474 | 7,818 | - | 7,818 |
| Asset Sales/Leases | 959 | 315 | - | 315 |
| Pay-as-you-go (PAYGO)** | 2,145 | 1,572 | - | 1,572 |
| Other | 265 | 41 | 9 | 50 |
| B&T Bonds & PAYGO/Asset Sale | 2,942 | 1,644 | - | 1,644 |
| **Total** | **33,961** | **21,475** | **9** | **21,483** |

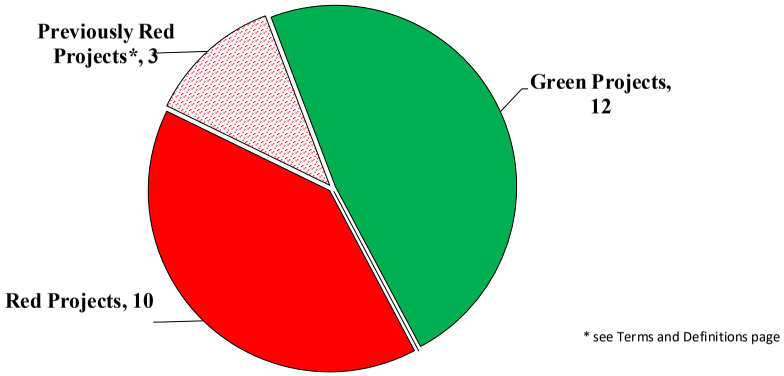
| 2020-2024 Program | Funding Plan Current | Receipts Thru Jan | Receipts This month | Receipts Received to date |
|---|---|---|---|---|
| Capital from Central Business District Tolling | $15,000 | $ - | $ - | $ - |
| Capial from New Revenue Sources | 10,000 | - | - | - |
| MTA Bonds and PAYGO | 9,782 | 80 | - | 80 |
| Federal Formula | 7,500 | 1,119 | - | 1,119 |
| State of New York | 3,000 | - | - | - |
| City of New York | 3,000 | 80 | - | 80 |
| Federal New Start (SAS Ph2) | 2,905 | - | - | - |
| Federal Flexible | 275 | - | - | - |
| Federal Security | 10 | 10 | - | 10 |
| B&T Bonds (Self-Funded) | 3,327 | 1 | - | 1 |
| **Total** | **54,799** | **1,289** | **-** | **1,289** |

Metropolitan Transportation Authority

# 4th Quarter 2020 Traffic Light Report on MTA Core Capital Program Projects

**A total of 283 Projects were Reviewed for the 4th Quarter 2020**

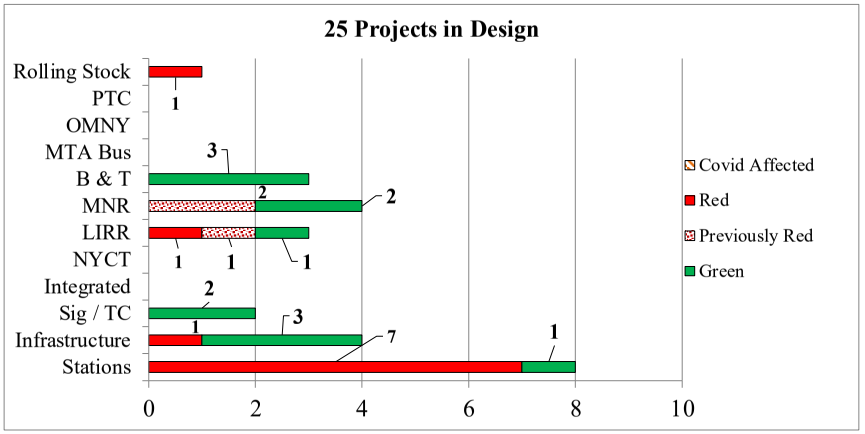
## 25 Projects in Design



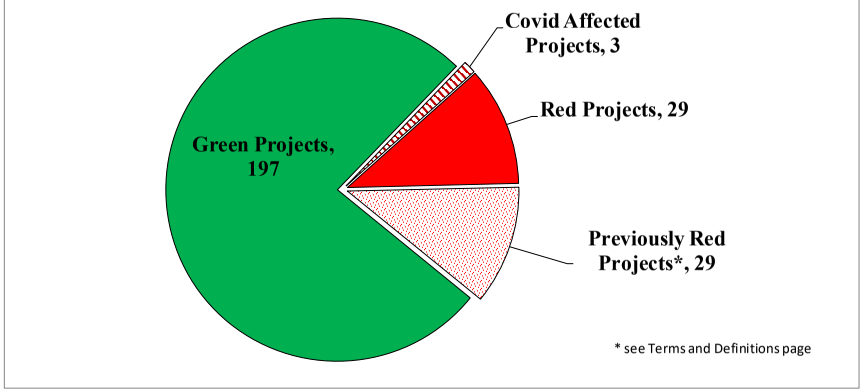

**Fourth Quarter:** 25 projects were reviewed in the design phase with 12 (48%) projects designated green, 3 previously red, and 10 red. This is an increase of 9 red projects from the last quarter. All 10 red projects were for schedule variances. The schedule variances were due to repackaging of projects into Design-Build bundles, approval of funding, additional surveys, and availability of design personnel due to higher priority projects, and coordination with other agencies.

**Covid Impacts:** No projects in design were impacted by Covid-19 this quarter.

**Third Quarter:** 25 projects were reviewed in the design phase with 13 projects designated green, 11 previously red, and 1 red.



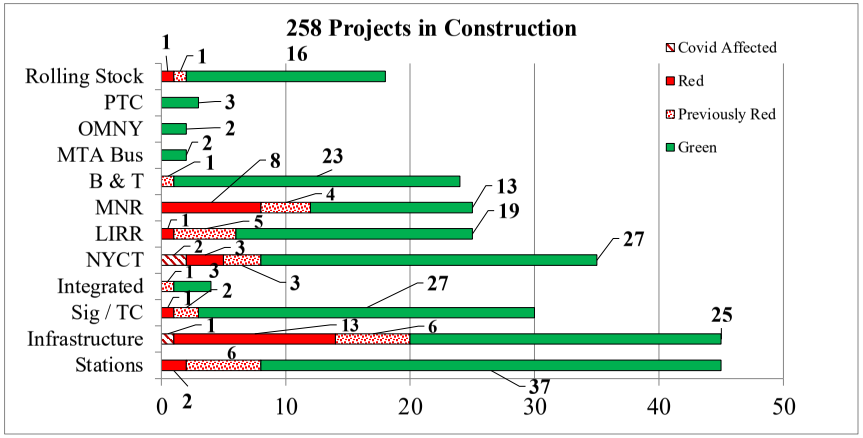

## 258 Projects in Construction




**Fourth Quarter:** 258 projects were reviewed in the construction phase with 197 (76%) designated green, 29 previously red, and 29 red. Of the 29 red projects, 27 (93%) were red for a schedule variance, 1 for a cost variance and 1 for both cost and schedule variances. This is an increase of 19 red projects from last quarter. For the 27 projects designated red for schedule, the variances ranged from 3 to 18 months and due to G.O. availability, rephasing of work, added scope, and Con Edison coordination.

**Covid Impacts:** All 3 projects had schedule variances due to Covid-19 impacting fabrication and delivery of equipment and reduction in manpower availability for G.O.s.

**Third Quarter:** 257 projects were reviewed in the construction phase with 189 designated green, 49 previously red, 10 red, and 8 impacted by Covid-19.



# MTA Capital Core Project Terms and Definitions
# 4th Quarter 2020 Traffic Light Report

The following Terms and Definitions are used to identify a project's Traffic Light color designation using variances from quarter to quarter and are based on two performance indicators: cost and schedule. A project is designated a "***green light project***" when no performance indicator has exceeded the Traffic Light Report thresholds. A project is designated a "***red light project***" when one or more of the two indicators exceed a specified threshold. Variance reports are required for all qualified red light projects. Included in these reports are one-page project summaries (on pink paper stock) of issues associated with each project showing a **red** indicator and how the issues are being resolved. *A project is designated a "***previous red project***" after one or more performance indicators had triggered a red in a previous quarter(s). A "***previous red project***" may revert back to green after two consecutive quarters if the performance indicator(s) have not worsened.

## Core Traffic Light Report Project Terms and Definitions

| **Projects in Design: 25** |
|---|
| Green: Indices less than 110% and index movement of less than 10%. |
| Red: Cost Index - An EAC increase of 10% (or index movement of 10% or more since last Traffic Light Report). |
| Red: Schedule Variance - An increase of 3 months or more to substantial completion since last Traffic Light Report. |
| Previous Red: Previously indicated as **red** with no new substantial change since last Traffic Light Report / A project in design that has been designated as Previous Red may be returned to Green when it has been in compliance with the two performance indicators for two consecutive quarters. |

| **Projects in Construction: 258** |
|---|
| Green: Indices less than 110% and index movement of less than 10%. Other indices not exceeding those criteria specified in index formulas and criteria. |
| Red: Cost Index - An increase of 10% (or index movement of 10% or more since last Traffic Light Report). |
| Red: Schedule Variance - An increase of 3 months or more to substantial completion since last Traffic Light Report. |
| Previous Red: Previously indicated as **red** with no new substantial change since the last Traffic Light Report / A project in construction that has been designated as Previous Red may be returned to Green when it has been in compliance with the two performance indicators for two consecutive quarters. |

| **Projects impacted by Covid-19 (Temporary TLR Criteria): 3** |
|---|
| Projects in this category have triggered one or more reporting variances that are impacted by the Covid-19 pandemic. The Key Performance Indicators have exceeded one or more of the Traffic Light reporting thresholds this quarter, however, a project issue has been directly attributed to Covid-19. The issues may include; the implementation of safety protocols, new work rules and occupancy restrictions, travel limitations, reduced personnel availability, funding delays, etc. Covid-19 is a temporary imposition on the MTA's Capital Program and therefore a temporary TL has been developed for these projects. |

| **Projects impacted by Covid-19 (Temporary TLR Criteria) (cont'd):** |
|---|
| Red Lined: Cost Index - An increase of 10% (or index movement of 10% or more since the last Traffic Light Report). |
| Red Lined: Schedule Variance - An increase of 3 months or more to substantial completion since the last Traffic Light Report. |
| Previous Red: Previously indicated as Red Lined with no new substantial change since the last Traffic Light Report / A project in construction or design that has been designated Previous Red may be returned to Green when it has been in compliance with the two performance indicators for two consecutive quarters. |

| **Report Index Formulas and Criteria:** |
|---|
| ➢ Cost Index = Total Project EAC / Current Approved Budget<br>(Note: Current Budget is not Budget at Award)<br>➢ Cumulative Cost Variance = 3 consecutive quarters with a total cost index increase that cumulatively exceeds the TLR threshold of 10% over 3 quarters. |
| ➢ Schedule Variance = Number of months of change in schedule since last Traffic Light Report<br>➢ Cumulative Schedule Variance = 3 consecutive quarters with a total change in schedule that cumulatively exceeds the TLR threshold of 3 months or more. |
| ➢ The Core TLR includes projects in CPOC's Risk-Based Monitoring Program listed at the end of the report |
| ➢ Only projects with budgets of $7M or greater are included in the report. |

**4th Quarter 2020 Traffic Light Report**
**Projects in Design and Construction**

▲ = Index increase: Trending indicates condition worsening since last quarterly report
▼ = Index decrease: Trending indicates condition improving since last quarterly report
▬ = No Change since last quarterly report

| ACEP | Description | Phase | Total Project EAC | % Phase Complete | Cost Index | Cost Trend | Schedule Variance (Months) | Schedule Trend | Traffic Light |
|---|---|---|---|---|---|---|---|---|---|
| **Construction & Development** | | | | | | | | | |
| **Stations** | | | | | | | | | |
| **Stations - ADA Accessibility Program - Projects in Construction** | | | | | | | | | |
| T6041311 | ADA Phase 2 at 57 St Station-Broadway Line | Construction | $35,857,557 | 81 | 1.00 | ▬ | 0 | ▬ | R |
| T7041301 | ADA: Bedford Av CNR | Construction | $74,823,712 | 100 | 1.00 | ▬ | 0 | ▬ | G |
| T7041302 | ADA: Astoria Blvd AST | Construction | $43,719,216 | 98 | 1.00 | ▬ | 0 | ▬ | G |
| T7041303 | ADA: Bedford Pk Blvd BXC | Construction | $37,119,638 | 99 | 1.00 | ▬ | 0 | ▬ | R |
| T7041305 | ADA: Gun Hill Road DYR | Construction | $61,019,265 | 91 | 1.00 | ▬ | 2 | ▲ | R |
| T7041306 | ADA: Eastern Pkwy-Bklyn Museum EPK | Construction | $42,294,610 | 98 | 1.00 | ▬ | 1 | ▲ | R |
| T7041307 | ADA: Times Square Complex, Ph 3 - Shuttle | Construction | $218,265,693 | 57 | 1.00 | ▬ | 0 | ▬ | G |
| T7041308 | ADA: Chambers St NAS | Construction | $47,094,376 | 98 | .99 | ▬ | 0 | ▬ | G |
| T7041309 | ADA: Greenpoint Av XTN | Construction | $39,493,261 | 93 | .95 | ▬ | -1 | ▼ | G |
| T7041310 | ADA: 59 St 4AV | Construction | $58,733,105 | 85 | 1.00 | ▬ | -5 | ▼ | G |
| T7041312 | ADA: 1 Av CNR | Construction | $33,969,390 | 11 | .99 | ▬ | 0 | ▬ | G |
| T7041315 | ADA: 149 Street-Grand Concourse Complex | Construction | $114,921,881 | 4 | .99 | ▬ | 0 | ▬ | G |
| T7041323 | ADA: 57 Street BWY Additional Support Costs | Construction | $52,038,195 | 81 | 1.00 | ▬ | 0 | ▬ | R |
| T7041331 | ADA: Livonia Ave CNR | Construction | $87,290,193 | 19 | 1.00 | ▬ | 0 | ▬ | G |
| T7041332 | ADA: 170 Street JER | Construction | $62,229,252 | 36 | 1.00 | ▬ | 0 | ▬ | G |
| T7041338 | ADA: Tremont Ave BXC | Construction | $54,412,226 | 5 | 1.00 | ▬ | 0 | ▬ | G |
| T8041303 | ADA: Dyckman St (NB) BW7 | Construction | $18,349,115 | 0 | .84 | ▲ | 0 | ▬ | G |
| T8041313 | ADA: Avenue H (NB) BRT | Construction | $10,962,101 | 2 | .43 | ▬ | 0 | ▬ | G |
| T8041332 | ADA: East 149th St PEL | Construction | $42,024,738 | 0 | 1.00 | ▲ | 0 | ▬ | G |
| T8041337 | ADA: Beach 67th St FAR | Construction | $45,532,886 | 0 | 1.00 | ▲ | 0 | ▬ | G |
| **Non ADA Stations Projects** | | | | | | | | | |
| T60412C2 | Components: Aqueduct-North Conduit Av RKY | Construction | $7,347,627 | 99 | 1.00 | ▬ | 0 | ▬ | G |
| T7040701 | Replace 11 Hydraulic Elevators / Various | Construction | $73,783,585 | 0 | 1.00 | ▬ | 0 | ▬ | G |

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## 4th Quarter 2020 Traffic Light Report
## Projects in Design and Construction

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▬ = No Change since last quarterly report

| ACEP | Description | Phase | Total Project EAC | % Phase Complete | Cost Index | Cost Trend | Schedule Variance (Months) | Schedule Trend | Traffic Light |
|---|---|---|---|---|---|---|---|---|---|
| **Construction & Development** | | | | | | | | | |
| **Stations** | | | | | | | | | |
| **Non ADA Stations Projects** | | | | | | | | | |
| T7040702 | Replace 12 Traction Elevators BW7 | Construction | $109,733,900 | 70 | 1.00 | ▼ | 0 | ▬ | R |
| T7040704 | Replace 6 Traction Elevators 8AV | Construction | $45,936,633 | 59 | .99 | ▬ | 0 | ▬ | G |
| T7040705 | Replace 2 Hydraulic Elevators: Borough Hall CLK | Construction | $14,082,111 | 50 | 1.00 | ▬ | 0 | ▬ | G |
| T7040708 | Replace 2 Escalators: Pelham Pkwy WPR | Construction | $15,816,293 | 0 | 1.00 | ▬ | 0 | ▬ | G |
| T7040709 | Replace 6 Escalators / Various | Construction | $46,405,219 | 0 | .92 | ▼ | 0 | ▬ | G |
| T7040710 | Escalator Relocation: Jay St-MetroTech FUL | Construction | $21,724,370 | 85 | 1.00 | ▬ | 0 | ▬ | G |
| T7040711 | Replace 2 Hydraulic Elevators: Franklin Av FRK | Construction | $13,537,851 | 50 | 1.00 | ▬ | 0 | ▬ | G |
| T7040712 | Replace 3 Escalators: Main St FLS | Construction | $27,368,587 | 39 | 1.00 | ▬ | 0 | ▬ | G |
| T7041202 | Renewal: 138 St-Grand Concourse JER | Construction | $25,606,623 | 97 | 1.00 | ▬ | -1 | ▼ | G |
| T7041204 | Renewal: Astoria Blvd AST | Construction | $56,306,681 | 98 | .99 | ▬ | 0 | ▬ | G |
| T7041236 | Platform Components: Longwood Ave PEL | Construction | $9,975,676 | 100 | .99 | ▬ | 0 | ▬ | G |
| T7041237 | Platform Components: 2 Locs LNX | Construction | $7,845,231 | 98 | 1.00 | ▬ | 0 | ▬ | G |
| T7041345 | Station Enhancements: Canarsie Line | Construction | $10,756,622 | 11 | 1.00 | ▬ | 0 | ▬ | G |
| T7041401 | Station Signage Improvements | Construction | $10,225,624 | 60 | .94 | ▬ | 12 | ▲ | R |
| T7041404 | Reconstruction: Times Sq Complex, Ph3 - Shuttle | Construction | $29,341,315 | 57 | 1.00 | ▬ | 0 | ▬ | G |
| T7041411 | New Street Stairs: 2 Locs CNR | Construction | $6,973,332 | 11 | .92 | ▬ | 0 | ▬ | G |
| T7050240 | 2016 Mainline Track Repl: Canarsie Tube | Construction | $64,210,907 | 100 | 1.00 | ▬ | 0 | ▬ | G |
| T7070308 | Rehab Emergency Exits (3rd Party) - Var Locs | Construction | $21,660,172 | 10 | 1.04 | ▬ | 21 | ▲ | R |
| T7090210 | Install Low-Resistance Contact Rail - CNR Tube | Construction | $28,661,710 | 11 | .99 | ▬ | 0 | ▬ | G |
| T7090221 | New Substation: 14 St-Avenue B CNR | Construction | $81,712,075 | 11 | .99 | ▬ | 0 | ▬ | G |
| T7160729 | RTO Facility Repair: 3 Avenue-138 Street PEL | Construction | $15,849,402 | 12 | 1.04 | ▼ | 0 | ▬ | G |
| T8041216 | Platform Components: E Broadway 6AV | Construction | $14,595,786 | 21 | 1.00 | ▬ | 0 | ▬ | G |
| T8050204 | 2020 Mainline Track Repl: Rutgers | Construction | $18,600,588 | 21 | 1.00 | ▬ | 0 | ▬ | G |

Metropolitan Transportation Authority

## 4th Quarter 2020 Traffic Light Report
## Projects in Design and Construction

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| ACEP | Description | Phase | Total Project EAC | % Phase Complete | Cost Index | Cost Trend | Schedule Variance (Months) | Schedule Trend | Traffic Light |
|---|---|---|---|---|---|---|---|---|---|
| **Construction & Development** | | | | | | | | | |
| **Stations** | | | | | | | | | |
| **Non ADA Stations Projects** | | | | | | | | | |
| T7041201 | Water Remediation - Renewal: Borough Hall LEX | Design | $17,691,438 | 60 | .72 | ▬ | 3 | ▲ | R |
| T7041251 | Platform Components: 5 Locs CNR | Design | $19,460,670 | 25 | .80 | ▬ | 0 | ▬ | G |
| T70412L1 | Renewal: 14 St BW7 | Design | $48,855,000 | 25 | 1.00 | ▬ | 7 | ▲ | R |
| T70412L2 | Platform Components: 14 St 6 AV | Design | $11,564,000 | 25 | 1.00 | ▬ | 7 | ▲ | R |
| T7041322 | ADA: 95 St 4AV | Design | $50,019,153 | 25 | 1.42 | ▬ | 3 | ▲ | R |
| T7041330 | ADA: 14th St 6th Av/7th Av Complex DES | Design | $41,481,848 | 25 | 3.90 | ▬ | 7 | ▲ | R |
| T7041347 | ADA: 14 St 6AV | Design | $43,683,587 | 25 | 1.00 | ▬ | 7 | ▲ | R |
| T7041348 | ADA: 14 St BW7 | Design | $55,577,009 | 25 | 1.00 | ▬ | 7 | ▲ | R |
| **Infrastructure** | | | | | | | | | |
| T6040401 | MetroCard-Electronic Components Replacement | Construction | $16,340,035 | 89 | 1.00 | ▬ | 0 | ▬ | R |
| T6041304 | Imprve Platfrm Horizntl/Vertical Clearance-Var Loc | Construction | $14,745,538 | 94 | 1.37 | ▬ | 3 | ▲ | R |
| T6100454 | 207th St. OH Shop: Boiler Upgrades & Site Remed | Construction | $11,423,059 | 77 | 1.00 | ▬ | 4 | ▲ | R |
| T6120403 | Replace Bus Radio System | Construction | $211,691,224 | 100 | 1.01 | ▬ | 0 | ▬ | G |
| T6160611 | Replace Fire Alarm Systems at 13 Locations | Construction | $27,545,620 | 55 | 1.00 | ▬ | 0 | ▬ | G |
| T6160717 | Livingston Plaza Repairs | Construction | $51,752,632 | 61 | 1.00 | ▬ | 6 | ▲ | R |
| T7060503 | Replace Supervisory Vent Controls - Var Locs | Construction | $30,183,479 | 48 | 1.00 | ▬ | 0 | ▬ | R |
| T7060506 | Rehab Forsyth St Vent Plant | Construction | $90,374,945 | 19 | .99 | ▬ | 13 | ▲ | R |
| T7060514 | Tunnel Lighting: Roosevelt Av to Elmhurst Av QBL | Construction | $15,083,640 | 98 | 1.00 | ▬ | 0 | ▬ | G |
| T7070303 | Struct Rehab: Livonia Yard Overpass & Retain Wall | Construction | $27,083,332 | 36 | 1.00 | ▬ | 0 | ▬ | R |
| T7070316 | Overcoat: Broadway - End of Line MYR | Construction | $58,258,534 | 17 | .99 | ▬ | 0 | ▬ | G |
| T7070317 | Overcoat: 48 St - 72 St FLS | Construction | $57,133,383 | 78 | 1.00 | ▬ | 0 | ▬ | G |
| T7070323 | LSCRP: Brooklyn (EPK) | Construction | $82,731,099 | 17 | .99 | ▬ | 0 | ▬ | G |
| T7070344 | Repairing 'A' and 'B' Column Base Conditions WPR | Construction | $17,000,070 | 74 | .97 | ▬ | 0 | ▬ | R |

## 4th Quarter 2020 Traffic Light Report
## Projects in Design and Construction

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▬ = No Change since last quarterly report

| ACEP | Description | Phase | Total Project EAC | % Phase Complete | Cost Index | Cost Trend | Schedule Variance (Months) | Schedule Trend | Traffic Light |
|---|---|---|---|---|---|---|---|---|---|
| **Construction & Development** | | | | | | | | | |
| **Infrastructure** | | | | | | | | | |
| T7090201 | Substation Renewal: Burnside Av BXC | Construction | $22,857,912 | 96 | 1.00 | ▬ | 3 | ▲ | R |
| T7090202 | Substation Renewal: Av Z CUL | Construction | $32,177,194 | 67 | .99 | ▬ | 2 | ▲ | G |
| T7090203 | Substation Rnwl & New Rectifier: Centrl SS 6AV | Construction | $43,431,274 | 32 | 1.00 | ▬ | 0 | ▬ | G |
| T7090205 | Replace 25Hz Freq Converters - Various Locs | Construction | $19,857,653 | 85 | 1.03 | ▬ | 1 | ▲ | R |
| T7090206 | Replace HT Switchgear - Various Locs | Construction | $30,315,905 | 66 | .99 | ▬ | 0 | ▬ | G |
| T7090215 | Supplemental Negative Cables QBL | Construction | $53,023,972 | 100 | 1.00 | ▬ | 0 | ▬ | G |
| T7090218 | Install Low-Resistance Contact Rail QBL | Construction | $47,828,349 | 99 | 1.00 | ▬ | 0 | ▬ | G |
| T7090222 | New Substation: Maspeth Av-Humboldt St CNR | Construction | $51,458,306 | 99 | .99 | ▬ | 4 | ▲ | R |
| T7090223 | New Substation: Harrison Pl CNR | Construction | $58,204,402 | 98 | .98 | ▬ | 4 | ▲ | R |
| T7090406 | Rehab CBH # 85 & New Ducts: Bedfrd-N 6 St SS CNR | Construction | $13,403,145 | 99 | .99 | ▬ | 4 | ▲ | R |
| T7090414 | Repl Control & Bat Cables: Substation CZs | Construction | $28,783,652 | 82 | 1.00 | ▬ | 0 | ▬ | G |
| T7090415 | Reconstruct CBH # 392 Flushing River Bridge FLS | Construction | $15,370,715 | 100 | 1.01 | ▬ | -9 | ▼ | G |
| T7100401 | DCE Shop Components Ph 1: 180 St, CI, PEL | Construction | $33,723,023 | 71 | 1.00 | ▬ | 0 | ▬ | G |
| T7100402 | 207th St Maint & OH Shop Roof & Component Repl | Construction | $59,961,172 | 37 | 1.00 | ▬ | 0 | ▬ | G |
| T7100403 | DCE Shop Components Ph 2: 239 St, Concourse, ENY | Construction | $45,922,515 | 62 | 1.00 | ▬ | 0 | ▬ | R |
| T7100405 | DCE Shop Components Ph 4: 207 St Admin | Construction | $24,328,231 | 70 | .99 | ▬ | 0 | ▬ | G |
| T7100407 | Upgrade Central Electronics Shop: Woodside | Construction | $16,633,672 | 100 | 1.03 | ▬ | 1 | ▲ | R |
| T7100409 | Heavy Shop Equipment | Construction | $14,729,150 | 47 | 1.00 | ▬ | 0 | ▬ | G |
| T8050225 | Archer Direct Fixation | Construction | $41,308,027 | 100 | 1.00 | ▬ | 0 | ▬ | G |
| T8070308 | Structural Repairs Steinway Loop QBL | Construction | $1,085,915 | 85 | 1.00 | ▬ | 0 | ▬ | G |
| T8070311 | Plenum Plate Demo & Struct. Rehab EPK | Construction | $497,251 | 0 | 1.00 | ▬ | 0 | ▬ | G |
| S7070102 | SIR Station Component Program | Construction | $18,917,569 | 60 | .99 | ▬ | 0 | ▬ | G |
| S7070103 | SIR Mainline Track Replacement | Construction | $48,852,964 | 92 | 1.00 | ▬ | 0 | ▬ | G |
| S7070105 | New Power Substation: Tottenville | Construction | $27,092,166 | 99 | .99 | ▬ | 5 | ▲ | R |

Metropolitan Transportation Authority

## 4th Quarter 2020 Traffic Light Report
## Projects in Design and Construction

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▼ = Index decrease: Trending indicates condition improving since last quarterly report
▬ = No Change since last quarterly report

| ACEP | Description | Phase | Total Project EAC | % Phase Complete | Cost Index | Cost Trend | Schedule Variance (Months) | Schedule Trend | Traffic Light |
|---|---|---|---|---|---|---|---|---|---|
| **Construction & Development** | | | | | | | | | |
| **Infrastructure** | | | | | | | | | |
| S7070106 | New Power Substation: New Dorp | Construction | $25,381,307 | 91 | 1.04 | ▬ | 5 | ▲ | R |
| S7070107 | New Power Substation: Clifton | Construction | $30,741,073 | 93 | 1.00 | ▬ | 5 | ▲ | R |
| S7070111 | Relocate HQ to Clifton Shop | Construction | $9,141,188 | 80 | 1.00 | ▬ | 3 | ▲ | R |
| S7070113 | SIR Clifton Yard Track and Switch Replacement | Construction | $17,329,373 | 81 | 1.00 | ▬ | 11 | ▲ | R |
| S8070101 | Station Components: Various Locations | Construction | $36,253,705 | 0 | .91 | ▼ | 0 | ▬ | G |
| U6030226 | Bus Radio System | Construction | $28,693,109 | 65 | 1.03 | ▬ | 0 | ▬ | G |
| U7030211 | Bus Radio System - MTA Bus Share | Construction | $37,355,831 | 36 | 1.00 | ▬ | 0 | ▬ | G |
| T8040705 | Escalator Design | Design | $10,691,859 | 10 | 1.01 | ▬ | 2 | ▲ | G |
| T8120303 | Jamaica Depot Reconstruction | Design | $375,541,493 | 8 | .98 | ▬ | 0 | ▬ | G |
| S8070102 | Track and Switch Replacement | Design | $137,523,856 | 9 | 1.12 | ▲ | 3 | ▲ | R |
| S8070103 | Bridge Structures: Various Locations | Design | $55,773,352 | 20 | 1.03 | ▬ | 2 | ▲ | G |
| **Signals / Train Controls** | | | | | | | | | |
| T50803QB | CBTC QBL Phase 1 | Construction | $69,919,994 | 81 | 1.19 | ▬ | 0 | ▬ | G |
| T6080319 | CBTC Queens Blvd Ln West Ph 1 | Construction | $117,825,996 | 85 | 1.00 | ▬ | 0 | ▬ | G |
| T6080602 | Application Cutover to SONET Phase 1 | Construction | $13,044,136 | 100 | 1.00 | ▬ | 0 | ▬ | G |
| T6080661 | ISIM-B Module 3A RCC Build Out | Construction | $25,425,919 | 41 | 1.00 | ▬ | 0 | ▬ | G |
| T7080301 | CBTC: QBL West Ph2 (50 St - Union Tpke) | Construction | $454,728,646 | 74 | 1.07 | ▬ | 0 | ▬ | G |
| T7080304 | CBTC: 8AV (59 St - High St) | Construction | $220,201,814 | 17 | 1.00 | ▬ | 0 | ▬ | G |
| T7080307 | Interlocking Modernization: Ditmas CUL | Construction | $133,574,754 | 50 | 1.00 | ▬ | 0 | ▬ | G |
| T7080308 | Interlocking Modernization: Kings Highway CUL | Construction | $179,435,183 | 93 | 1.00 | ▬ | 0 | ▬ | G |
| T7080322 | AC to DC Line Relay Upgrade BCT | Construction | $25,168,851 | 45 | 1.00 | ▬ | 0 | ▬ | G |
| T7080323 | Signal Key-By Modifications, Ph4 | Construction | $18,429,499 | 80 | 1.00 | ▬ | 0 | ▬ | G |
| T7080324 | Code Cable Replacement BW7 | Construction | $41,790,878 | 4 | 1.00 | ▬ | 0 | ▬ | G |
| T7080325 | Signal Room Fire Suppression, Phase 2 | Construction | $25,609,793 | 87 | 1.00 | ▬ | 0 | ▬ | G |

## 4th Quarter 2020 Traffic Light Report
## Projects in Design and Construction

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| ACEP | Description | Phase | Total Project EAC | % Phase Complete | Cost Index | Cost Trend | Schedule Variance (Months) | Schedule Trend | Traffic Light |
|---|---|---|---|---|---|---|---|---|---|
| **Construction & Development** | | | | | | | | | |
| **Signals / Train Controls** | | | | | | | | | |
| T7080326 | Life Cycle Replacement of Code Systems | Construction | $48,925,537 | 2 | .99 | ▬ | 0 | ▬ | G |
| T7080327 | Life Cycle Mod - Speed Enforcement Systems | Construction | $65,429,183 | 0 | 1.00 | ▬ | 1 | ▲ | G |
| T7080332 | CBTC: CUL (Church Av to W8 St) | Construction | $116,770,424 | 60 | .99 | ▬ | 0 | ▬ | G |
| T7080333 | Interlocking Modernization: Ave X CUL | Construction | $200,040,640 | 60 | 1.00 | ▬ | 0 | ▬ | G |
| T7080335 | Interlocking Modernization: 30 St & 42nd St / 8AV | Construction | $258,886,569 | 17 | 1.00 | ▬ | 0 | ▬ | G |
| T7080342 | CBTC: Carborne Equipment Purchase | Construction | $84,663,722 | 8 | 1.00 | ▬ | 0 | ▬ | G |
| T7080343 | 2018 M/L Switch Repl: 7 Switches CBTC CUL | Construction | $32,479,364 | 66 | 1.00 | ▬ | 0 | ▬ | G |
| T7080344 | 2019 M/L Switch Repl: 10 Switches CBTC 8AV | Construction | $27,563,382 | 17 | 1.00 | ▬ | 0 | ▬ | G |
| T7080345 | 2019 M/L Switch Repl: 12 Switches Kings Hwy CUL | Construction | $26,368,385 | 0 | 1.00 | ▬ | 0 | ▬ | G |
| T7080602 | Upgrade Async Network to SONET, Rings A and C | Construction | $30,961,649 | 95 | 1.00 | ▬ | 3 | ▲ | R |
| T7080603 | PBX Upgrade | Construction | $48,564,396 | 91 | 1.17 | ▬ | 7 | ▲ | R |
| T7080604 | Fiber Optic Cable Replacement Ph2 | Construction | $28,694,060 | 95 | 1.00 | ▬ | 0 | ▬ | G |
| T7080614 | ISIM-B Module 3: Rail Traffic Systems | Construction | $91,696,705 | 42 | 1.00 | ▬ | 0 | ▬ | G |
| T7080617 | LiftNet Transition to Ethernet | Construction | $15,792,305 | 82 | .99 | ▬ | 0 | ▬ | G |
| T7080646 | Antenna Cable: Next Generation Pilot & Testing | Construction | $10,911,976 | 20 | 1.00 | ▬ | 0 | ▬ | R |
| T7080651 | Help Point: Upgrades and CAI Removals | Construction | $20,205,948 | 25 | 1.00 | ▬ | 0 | ▬ | G |
| T7160716 | RCC and PCC Power Upgrade | Construction | $63,370,962 | 91 | 1.00 | ▬ | 0 | ▬ | G |
| T8080312 | Mechanical Plug-In Timer Relays Replacement | Construction | $13,962,325 | 100 | .99 | ▬ | -2 | ▼ | G |
| T8080603 | Fiber Optic Cable Replacement: Various Locations | Design | $47,194,594 | 10 | 1.00 | ▬ | 0 | ▬ | G |
| T8080607 | Station Comm Room Upgrades: Various Locations | Design | $36,000,064 | 17 | 1.00 | ▬ | 0 | ▬ | G |
| **Integrated Projects** | | | | | | | | | |
| L70204VZ | Elmont Station | Construction | $105,700,000 | 28 | 1.00 | ▬ | 0 | ▬ | G |
| L70206EF | PSNY-33rd Corridor (Phase 1B Construction) | Construction | $44,020,612 | 67 | 1.00 | ▬ | -36 | ▼ | G |
| L70206VN | PSNY-33rd Corridor (Ph1A Constr. & Shared Support) | Construction | $176,825,202 | 80 | 1.00 | ▬ | 0 | ▬ | G |

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## Projects in Design and Construction

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| ACEP | Description | Phase | Total Project EAC | % Phase Complete | Cost Index | Cost Trend | Schedule Variance (Months) | Schedule Trend | Traffic Light |
|---|---|---|---|---|---|---|---|---|---|
| **Construction & Development** | | | | | | | | | |
| **Integrated Projects** | | | | | | | | | |
| L70206VP | Penn Sta Elevator/Escalator Renewal | Construction | $12,441,500 | 82 | 1.00 | ▬ | 2 | ▲ | R |
| **New York City Transit** | | | | | | | | | |
| T6160402 | NYCT-Wide Storage Area Network/Disaster Recovery | Construction | $22,484,619 | 75 | 1.00 | ▬ | 6 | ▲ | R |
| T7041274 | Station Lighting: 7 Locs / Various | Construction | $7,686,619 | 21 | 1.00 | ▬ | 0 | ▬ | G |
| T7041275 | Station Ventilators: 2 Locs (2019) | Construction | $5,571,319 | 18 | .67 | ▼ | 0 | ▬ | G |
| T7070307 | Rehab Emergency Exits (ICC) - Various Locs | Construction | $16,997,741 | 100 | 1.00 | ▬ | 0 | ▬ | G |
| T7090204 | Substation Roof & Encl: Wash Heights 8AV [SBDP] | Construction | $8,637,502 | 85 | 1.00 | ▬ | 1 | ▲ | G |
| T7120301 | Artic Modification: ENY Depot | Construction | $17,845,001 | 55 | 1.00 | ▬ | 1 | ▲ | G |
| T7120306 | Generator: Yukon Depot | Construction | $10,970,558 | 1 | .92 | ▼ | 0 | ▬ | G |
| T7120307 | Roof, Office, HVAC: Fresh Pond Depot | Construction | $15,240,139 | 24 | 1.00 | ▬ | 0 | ▬ | G |
| T7120315 | HVAC: Zerega Consolidated Maintenance Facility | Construction | $8,500,000 | 100 | 1.00 | ▬ | -10 | ▼ | G |
| T7120321 | Artic Modification Windows/Façade: ENY Depot | Construction | $17,181,652 | 12 | 1.00 | ▬ | 0 | ▬ | G |
| T7120408 | Elevator Upgrades: JG,GH,MTV,CS,ENY | Construction | $22,796,195 | 100 | .99 | ▬ | -1 | ▼ | R |
| T7160512 | Test Pits | Construction | $10,756,669 | 29 | 1.00 | ▬ | 0 | ▬ | G |
| T7160601 | Fire Alarm System Replacement - 3 Locs | Construction | $19,785,003 | 100 | .99 | ▬ | -1 | ▼ | G |
| T7160704 | Emp Fac Component Repairs: 7 Locs / Manhattan | Construction | $10,139,980 | 97 | 1.04 | ▬ | 6 | ▲ | R |
| T7160714 | Livingston Plz Elec, Mechanical, Generator Phase A | Construction | $31,919,176 | 100 | 1.00 | ▬ | 0 | ▬ | R |
| T7160733 | Emp Fac Component Repairs at Various Stations | Construction | $15,000,000 | 98 | 3.13 | ▲ | 0 | ▬ | G |
| T8041206 | Small Business Mentoring Program - Stations | Construction | $202,418,369 | 43 | .99 | ▬ | 0 | ▬ | G |
| T8050205 | Mainline Track Replacement 2020 / Queens | Construction | $7,700,196 | 32 | 1.00 | ▬ | 0 | ▬ | G |
| T8050206 | Mainline Track Replacement 2020 / 8th Avenue | Construction | $20,726,225 | 52 | 1.00 | ▬ | 0 | ▬ | G |
| T8050207 | Mainline Track Replacement 2020 / Broadway-7th Ave | Construction | $35,259,977 | 39 | 1.00 | ▬ | 4 | ▲ | R |
| T8050208 | Mainline Track Replacement 2020 / Flushing | Construction | $59,886,344 | 45 | 1.00 | ▬ | 0 | ▬ | G |
| T8050209 | Mainline Track Replacement 2020 / Lexington | Construction | $22,018,001 | 67 | 1.00 | ▬ | 3 | ▲ | R |

## 4th Quarter 2020 Traffic Light Report
## Projects in Design and Construction

▲ = Index increase: Trending indicates condition worsening since last quarterly report
▼ = Index decrease: Trending indicates condition improving since last quarterly report
▬ = No Change since last quarterly report

| ACEP | Description | Phase | Total Project EAC | % Phase Complete | Cost Index | Cost Trend | Schedule Variance (Months) | Schedule Trend | Traffic Light |
|---|---|---|---|---|---|---|---|---|---|
| **Construction & Development** | | | | | | | | | |
| **New York City Transit** | | | | | | | | | |
| T8050210 | Mainline Track Replacement 2020 / Brighton | Construction | $15,212,679 | 13 | 1.00 | ▬ | 8 | ▲ | R |
| T8050211 | Mainline Track Replacement 2020 / Jamaica | Construction | $28,061,426 | 23 | 1.00 | ▬ | 0 | ▬ | G |
| T8050212 | Mainline Track Replacement 2020/ Lenox-White Plain | Construction | $13,153,929 | 38 | 1.00 | ▬ | 0 | ▬ | G |
| T8050213 | Mainline Track Replacement 2020 / 6th Avenue | Construction | $19,911,466 | 45 | 1.00 | ▬ | 0 | ▬ | G |
| T8050222 | Mainline Track - 2020 Support Costs | Construction | $9,314,077 | 45 | 1.06 | ▲ | 0 | ▬ | G |
| T8050223 | Continuous Welded Rail 2020 | Construction | $35,009,063 | 32 | 1.00 | ▬ | 0 | ▬ | G |
| T8050224 | 2020 Track Force Account | Construction | $35,000,000 | 0 | 1.00 | ▬ | 0 | ▬ | G |
| T8050303 | Mainline Track Switches 2020 / Brighton | Construction | $15,001,523 | 92 | .86 | ▼ | 0 | ▬ | G |
| T8050306 | Mainline Track Switches 2020 / Queens | Construction | $7,531,710 | 5 | 1.00 | ▬ | 4 | ▲ | R |
| T8050308 | Mainline Track Switches 2020 / 4th Avenue | Construction | $29,403,221 | 86 | 1.00 | ▬ | -6 | ▼ | G |
| T8050310 | Mainline Track Switches 2020 / White Plains Rd | Construction | $21,100,168 | 75 | 1.00 | ▬ | 0 | ▬ | G |
| T8050311 | Mainline Track Switches 2020 / Broadway | Construction | $12,433,728 | 0 | 1.00 | ▬ | 0 | ▬ | G |
| T8130204 | Purchase 27 Flat Cars | Construction | $21,772,241 | 15 | 1.00 | ▲ | 0 | ▬ | G |
| **Long Island Rail Road** | | | | | | | | | |
| L50304TQ | MLC-Hicksville North Siding | Construction | $43,714,446 | 86 | .99 | ▬ | 0 | ▬ | G |
| L60304TU | Jamaica Capacity Improvements - Phase One | Construction | $301,967,981 | 82 | 1.00 | ▬ | 0 | ▬ | G |
| L60601YN | New Mid Suffolk Electric Yard | Construction | $80,152,917 | 99 | .99 | ▬ | 0 | ▬ | G |
| L60701AR | Replacement of Richmond Hill Substation | Construction | $16,867,791 | 60 | 1.01 | ▬ | 0 | ▬ | R |
| L70204U9 | Jamaica Station - Planning & Engineering | Construction | $9,809,352 | 36 | .98 | ▬ | 0 | ▬ | G |
| L70206VS | MOYNIHAN TRAIN HALL | Construction | $118,669,974 | 99 | 1.02 | ▬ | 0 | ▬ | G |
| L70301WH | Retaining Walls / Right of Way Projects | Construction | $9,908,959 | 95 | .99 | ▬ | 0 | ▬ | G |
| L70401BS | Bridge Waterproofing | Construction | $8,048,756 | 33 | 1.00 | ▬ | 1 | ▲ | R |
| L70401BU | MENTOR ALLOWANCE - LINE STRUCTURES | Construction | $10,821,048 | 82 | .73 | ▬ | -1 | ▼ | R |
| L70501SD | Fiber Optic Network | Construction | $34,460,000 | 85 | 1.00 | ▬ | 0 | ▬ | G |

Metropolitan Transportation Authority

## 4th Quarter 2020 Traffic Light Report
## Projects in Design and Construction

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▼ = Index decrease: Trending indicates condition improving since last quarterly report
▬ = No Change since last quarterly report

| ACEP | Description | Phase | Total Project EAC | % Phase Complete | Cost Index | Cost Trend | Schedule Variance (Months) | Schedule Trend | Traffic Light |
|---|---|---|---|---|---|---|---|---|---|
| **Construction & Development** | | | | | | | | | |
| **Long Island Rail Road** | | | | | | | | | |
| L70502LJ | Signal Normal Replacement Program | Construction | $29,927,088 | 98 | .99 | ▬ | 0 | ▬ | G |
| L70502LN | Babylon to Patchogue | Construction | $45,637,479 | 16 | .99 | ▬ | 0 | ▬ | G |
| L70601YG | DIESEL LOCOMOTIVE SHOP IMPROVEMENTS | Construction | $101,965,000 | 98 | .99 | ▬ | 3 | ▲ | R |
| L70601YR | Mid Suffolk Yard Improvements | Construction | $49,786,421 | 99 | .99 | ▬ | 0 | ▬ | G |
| L70701XB | Substation Components | Construction | $24,306,295 | 30 | .66 | ▬ | 0 | ▬ | R |
| L70701XF | 3rd Rail -Composite Rail | Construction | $11,600,000 | 89 | 1.00 | ▬ | 0 | ▬ | R |
| L70701XU | Substation Repl Pkg 2: Construction | Construction | $24,235,477 | 0 | 1.00 | ▼ | 0 | ▬ | G |
| L8020417 | Tactile Strips - Various Locations | Construction | $12,800,000 | 4 | 4.57 | ▬ | 0 | ▬ | G |
| L8020418 | Mets-Willets EIC Relocation | Construction | $208,700,000 | 0 | 7.27 | ▲ | 0 | ▬ | G |
| L8030105 | 2020 - Annual Track Program | Construction | $100,000,000 | 52 | .66 | ▬ | -5 | ▼ | G |
| L8030110 | Concrete Tie Program | Construction | $55,000,000 | 67 | 1.00 | ▬ | 0 | ▬ | G |
| L8050205 | Signal Replacement and Interlocking Improvements | Construction | $19,693,456 | 1 | .32 | ▼ | 0 | ▬ | G |
| L8070102 | Lighting Improvements | Construction | $18,000,000 | 0 | 1.00 | ▲ | 0 | ▬ | G |
| L8070103 | Power Component Repairs and Replacements | Construction | $50,400,000 | 0 | 1.00 | ▲ | 0 | ▬ | G |
| L8070104 | 3rd Rail Upgrades | Construction | $43,000,000 | 0 | 1.00 | ▲ | 0 | ▬ | G |
| L70204UO | East Yaphank Station | Design | $20,000,000 | 22 | 1.00 | ▬ | -4 | ▼ | R |
| L70304WU | Jamaica Capacity Improvements Ph 2 DES | Design | $42,490,000 | 54 | 1.00 | ▬ | 0 | ▬ | G |
| L70502LH | Babylon Interlocking Renewal | Design | $32,640,000 | 7 | 1.00 | ▬ | 11 | ▲ | R |
| **Metro-North Railroad** | | | | | | | | | |
| M6020208 | Customer Communication / Connectivity Improvements | Construction | $16,808,750 | 92 | .99 | ▬ | 0 | ▬ | G |
| M6040102 | West of Hudson Signal Improvements | Construction | $63,797,143 | 95 | .94 | ▬ | 12 | ▲ | R |
| M6050101 | Substation Bridge 23 - Construction | Construction | $41,452,052 | 95 | .99 | ▬ | 5 | ▲ | R |
| M6050103 | Harlem & Hudson Lines Power Improvements | Construction | $45,996,551 | 92 | 1.08 | ▬ | 7 | ▲ | R |
| M7020207 | Customer Communication-Stations | Construction | $75,417,951 | 87 | .93 | ▬ | 0 | ▬ | G |

Metropolitan Transportation Authority

## 4th Quarter 2020 Traffic Light Report
## Projects in Design and Construction

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▼ = Index decrease: Trending indicates condition improving since last quarterly report
▬ = No Change since last quarterly report

| ACEP | Description | Phase | Total Project EAC | % Phase Complete | Cost Index | Cost Trend | Schedule Variance (Months) | Schedule Trend | Traffic Light |
|---|---|---|---|---|---|---|---|---|---|
| **Construction & Development** | | | | | | | | | |
| **Metro-North Railroad** | | | | | | | | | |
| M7020210 | Enhanced Station Initiative, 5 Stations | Construction | $11,406,258 | 96 | .89 | ▬ | 2 | ▲ | G |
| M7020211 | Customer Communication-Systems | Construction | $12,402,514 | 74 | .92 | ▬ | 0 | ▬ | R |
| M7020213 | Enhanced Station Initiative | Construction | $110,580,989 | 96 | .90 | ▬ | 2 | ▲ | R |
| M7030104 | Turnouts - Mainline/High Speed | Construction | $47,089,483 | 80 | 1.05 | ▬ | 2 | ▲ | G |
| M7030109 | Purchase MoW Equipment | Construction | $19,581,618 | 64 | 1.02 | ▬ | 18 | ▲ | R |
| M7030112 | 2019 Cyclical Track Program | Construction | $26,230,201 | 81 | .98 | ▬ | 2 | ▲ | G |
| M7030201 | Overhead Bridge Program - E of H | Construction | $67,802,798 | 79 | 1.02 | ▬ | 0 | ▬ | G |
| M7030203 | Undergrade Bridge Rehabilitation | Construction | $80,530,535 | 25 | .97 | ▬ | 0 | ▬ | G |
| M7030209 | Harlem River Lift Bridge | Construction | $9,785,122 | 8 | .94 | ▬ | 0 | ▬ | G |
| M7040102 | Harmon to Poughkeepsie SignalSystem | Construction | $155,896,024 | 52 | 1.54 | ▲ | 9 | ▲ | R |
| M7040111 | West of Hudson Signal Improvements | Construction | $21,079,000 | 95 | 1.00 | ▬ | 12 | ▲ | R |
| M7040112 | Harlem Wayside Comm & Signal Improvements | Construction | $81,294,536 | 80 | 1.55 | ▲ | 8 | ▲ | R |
| M7050101 | Replace MA's in Signal Substations | Construction | $22,668,445 | 30 | .93 | ▬ | 0 | ▬ | G |
| M7050104 | Harlem & Hudson Power Rehabilitation | Construction | $13,226,216 | 0 | .88 | ▬ | 0 | ▬ | G |
| M7050105 | Harlem and Hudson Power Improvements | Construction | $23,236,276 | 75 | .93 | ▬ | 0 | ▬ | R |
| M7050113 | H&H Power (86th St / 110th St) | Construction | $11,217,304 | 92 | .98 | ▼ | 7 | ▲ | R |
| M7060101 | Harmon Shop Replacement - Phase V | Construction | $431,817,796 | 25 | 1.00 | ▬ | 0 | ▬ | G |
| M7080113 | Customer Communication-CM | Construction | $15,185,854 | 86 | .95 | ▼ | 2 | ▲ | R |
| M8030103 | Turnouts - Mainline, GCT, & Yards | Construction | $86,650,494 | 0 | 1.00 | ▬ | 0 | ▬ | G |
| M8030108 | 2020 Cyclical Track Program | Construction | $15,229,242 | 0 | .79 | ▬ | 0 | ▬ | G |
| M7020301 | Strategic Facilities | Design | $13,940,414 | 65 | .98 | ▬ | -1 | ▼ | R |
| M7030303 | Undergrade Bridge Rehabilitation | Design | $10,274,261 | 41 | .85 | ▬ | 0 | ▬ | G |
| M7060103 | Brewster YD Improvements - Design | Design | $7,500,000 | 33 | 1.00 | ▬ | 0 | ▬ | G |
| M7060104 | West of Hudson Capacity Improvements | Design | $23,923,618 | 26 | .98 | ▬ | 0 | ▬ | R |

## 4th Quarter 2020 Traffic Light Report
## Projects in Design and Construction

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| ACEP | Description | Phase | Total Project EAC | % Phase Complete | Cost Index | Cost Trend | Schedule Variance (Months) | Schedule Trend | Traffic Light |
|---|---|---|---|---|---|---|---|---|---|
| **Construction & Development** | | | | | | | | | |
| **Bridges & Tunnels** | | | | | | | | | |
| D701BW07 | Fender Protection around Tower Piers (Const) | Construction | $20,194,306 | 38 | .95 | ▬ | -6 | ▼ | G |
| D701CB18 | CB Scour Protect/Repair/Replace CB/MP Pier Fender | Construction | $63,108,371 | 30 | .95 | ▬ | -5 | ▼ | G |
| D701HH07 | Structural Rehabilitation | Construction | $38,232,042 | 32 | .92 | ▬ | -6 | ▼ | G |
| D701RK19 | Seismic/Wind Retrofit & Structural Rehab Ph1 | Construction | $53,072,173 | 40 | .93 | ▬ | -6 | ▼ | G |
| D701RK20 | Cable Inspection and Rehabilitation | Construction | $10,385,147 | 98 | .80 | ▼ | -7 | ▼ | G |
| D701RK70 | Miscellaneous Structural Rehabilitation | Construction | $32,519,644 | 40 | .92 | ▬ | -6 | ▼ | G |
| D701TN53 | Approach Viaduct Seismic Retrofit/Structural Rehab | Construction | $211,076,685 | 20 | .94 | ▬ | -6 | ▼ | G |
| D701VN10 | Anchorage & Piers Rehabilitation and Sealing | Construction | $46,620,515 | 75 | .95 | ▬ | 0 | ▬ | G |
| D701VN32 | Steel Repair & Concrete Rehabilitation | Construction | $32,659,403 | 35 | .95 | ▬ | -4 | ▼ | G |
| D702RK23 | Construction of New Harlem River Drive Ramp | Construction | $102,081,046 | 99 | .96 | ▬ | -1 | ▼ | G |
| D702TN49 | Replacement of Grid Decks on Suspended Span | Construction | $305,946,567 | 43 | .97 | ▬ | -6 | ▼ | G |
| D702VN11 | Brooklyn Approach Reconstruction | Construction | $27,218,578 | 93 | .93 | ▬ | -12 | ▼ | G |
| D702VN84 | Reconstruction of VN Approach Ramps - Phase1 | Construction | $206,932,870 | 23 | .93 | ▬ | -6 | ▼ | G |
| D703HH88 | Toll Plazas & Southbound Approach Reconstruction | Construction | $92,735,758 | 93 | .94 | ▬ | -1 | ▼ | R |
| D704HC07 | Rehabilitation of HCT Ventilation Systems | Construction | $76,728,503 | 63 | .87 | ▬ | -5 | ▼ | G |
| D704HC30 | Installation of Smoke Detection/Alarm Systems | Construction | $11,151,229 | 99 | .95 | ▬ | -5 | ▼ | G |
| D704QM81 | Rehab of Tunnel Controls & Communication Systems | Construction | $37,627,985 | 95 | .96 | ▬ | -12 | ▼ | G |
| D704QM91 | Installation of Smoke Detection/Alarm Systems | Construction | $12,204,458 | 100 | .96 | ▬ | -5 | ▼ | G |
| D707HH30 | Replacement of HHB Overcoat System | Construction | $18,185,692 | 48 | .92 | ▲ | -6 | ▼ | G |
| D707TN49 | Painting of Suspended Span | Construction | $20,242,135 | 43 | .95 | ▬ | -6 | ▼ | G |
| D707VN49 | Paint Suspended Span Upper & Lower Level Steel | Construction | $69,034,123 | 35 | .93 | ▬ | -6 | ▼ | G |
| D801RK70 | Structural Repairs/Flag Repairs | Construction | $61,027,720 | 0 | .98 | ▲ | 0 | ▬ | G |
| D801RK81 | Facility Interoperability Improvements | Construction | $8,742,436 | 1 | .99 | ▲ | 0 | ▬ | G |
| D802RK75 | Deck Rehabilitation & Overlay | Construction | $9,250,197 | 100 | .39 | ▼ | -2 | ▼ | G |

## 4th Quarter 2020 Traffic Light Report
## Projects in Design and Construction

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| ACEP | Description | Phase | Total Project EAC | % Phase Complete | Cost Index | Cost Trend | Schedule Variance (Months) | Schedule Trend | Traffic Light |
|---|---|---|---|---|---|---|---|---|---|
| **Construction & Development** | | | | | | | | | |
| **Bridges & Tunnels** | | | | | | | | | |
| D801HH36 | Dyckman St. Abutment Repl. & Substation Upgra | Design | $62,060,154 | 92 | .51 | ▼ | 0 | ▬ | G |
| D804BW96 | Lighting, Power Redundancy & Resiliency Imprv | Design | $54,288,119 | 10 | .98 | ▬ | 0 | ▬ | G |
| D804VN12 | Misc. Bridge Lighting & Electrical Improvemen | Design | $26,203,865 | 10 | .99 | ▬ | 0 | ▬ | G |
| **MTA Bus** | | | | | | | | | |
| U6030232 | HVAC Upgrade at College Point Bus Depot | Construction | $9,521,950 | 11 | 1.00 | ▬ | 1 | ▲ | G |
| U7030209 | Rehab and Facility Upgrade: College Point | Construction | $9,364,126 | 0 | 1.00 | ▬ | 0 | ▬ | G |
| **Cross Agency** | | | | | | | | | |
| **One Metro New York Program** | | | | | | | | | |
| L70204UV | NEW FARE PAYMENT SYSTEM | Construction | $8,920,000 | 0 | 1.00 | ▬ | 0 | ▬ | G |
| T7040401 | New Fare Payment System, Phase 2 | Construction | $463,323,580 | 42 | 1.00 | ▬ | 0 | ▬ | G |
| **Positive Train Control Program** | | | | | | | | | |
| L60502LA | Positive Train Control (PTC) | Construction | $248,958,829 | 92 | 1.00 | ▬ | 0 | ▬ | G |
| L70502LK | Positive Train Control (PTC) | Construction | $183,500,000 | 92 | 1.00 | ▬ | 0 | ▬ | G |
| M7040103 | Positive Train Control | Construction | $130,723,462 | 85 | 1.07 | ▬ | 2 | ▲ | G |
| **Rolling Stock** | | | | | | | | | |
| L60101MA | M-9 Rolling Stock Procurement - 92 cars | Construction | $364,836,340 | 74 | 1.00 | ▬ | 0 | ▬ | G |
| L70101ME | M-9 PROCUREMENT | Construction | $611,800,000 | 28 | 1.00 | ▬ | 0 | ▬ | G |
| M7010102 | M-8 Fleet Purchase | Construction | $113,564,830 | 80 | .97 | ▬ | 13 | ▲ | R |
| T6130202 | Purchase 65 Flatcars | Construction | $55,273,381 | 65 | 1.04 | ▲ | 0 | ▬ | G |
| T7010101 | Purchase 440 B-Division Cars | Construction | $1,402,231,935 | 7 | 1.00 | ▬ | 0 | ▬ | G |
| T7010102 | Purchase 20 Open Gangway Prototype Cars | Construction | $79,905,106 | 7 | 1.00 | ▬ | 0 | ▬ | G |
| T7030203 | Purchase 165 Standard Hybrid Buses (Nova) | Construction | $151,025,925 | 2 | 1.00 | ▬ | 2 | ▲ | G |
| T7030206 | Purchase 50 Express Buses | Construction | $33,947,611 | 3 | .99 | ▬ | 0 | ▬ | G |
| T7030215 | AVLM for Paratransit Vehicles | Construction | $26,938,276 | 39 | 1.00 | ▬ | 0 | ▬ | R |

## 4th Quarter 2020 Traffic Light Report
## Projects in Design and Construction

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| ACEP | Description | Phase | Total Project EAC | % Phase Complete | Cost Index | Cost Trend | Schedule Variance (Months) | Schedule Trend | Traffic Light |
|---|---|---|---|---|---|---|---|---|---|
| **Cross Agency** | | | | | | | | | |
| **Rolling Stock** | | | | | | | | | |
| T7030223 | Purchase 110 Standard Hybrid Buses (New Flyer) | Construction | $95,573,078 | 2 | .96 | ▬ | 1 | ▲ | G |
| T7130208 | Purchase 12 3-Ton Crane Cars | Construction | $32,161,361 | 11 | 1.00 | ▬ | 0 | ▬ | G |
| T7130211 | Purchase Locomotives | Construction | $256,092,473 | 5 | 1.00 | ▬ | 0 | ▬ | G |
| T7130213 | Purchase Various Non-Revenue Vehicles | Construction | $14,817,662 | 2 | 1.29 | ▬ | 0 | ▬ | G |
| T7130215 | Conversion of 10 R77E Locomotives | Construction | $34,272,847 | 7 | 1.00 | ▬ | 0 | ▬ | G |
| T8030208 | Purchase 126 Hybrid (Nova) | Construction | $107,949,896 | 1 | 1.00 | ▬ | 0 | ▬ | G |
| T8030209 | Purchase 209 Standard Diesel (Nova) | Construction | $141,211,796 | 0 | 1.00 | ▬ | 0 | ▬ | G |
| T8030211 | Purchase 139 Standard Diesel (New Flyer) | Construction | $2,839,972 | 0 | .02 | ▬ | 0 | ▬ | G |
| U7030202 | Purchase 257 Express Buses | Construction | $166,364,785 | 0 | .99 | ▬ | 0 | ▬ | G |
| T7030216 | Purchase 45 Standard Electric Buses | Design | $73,873,840 | 99 | 1.00 | ▬ | 11 | ▲ | R |

Metropolitan Transportation Authority

# Summary of Core Traffic Light Report Design Exceptions

**(Fourth Quarter 2020 - As of December 31, 2020)**

| ACEP | Project Name | Index Trigger | EAC | Design Completion Date | Reason for Variance Since Last Quarterly Report | What is Being Done | IEC Comment: All Agency Contractor Evaluation |
|---|---|---|---|---|---|---|---|
| **Construction and Development - Stations** | | | | | | | |
| T7041201 | Water Remediation - Renewal: Borough Hall Lexington Avenue Line | Schedule | $17.2M | Jan 2021 | During the Fourth Quarter 2020, the forecasted Design Completion date slipped three months, from October 2020 to January 2021, due to the NYC Department of Transportation and the NYC Department of Parks and Recreation not responding to the proposed street elevator location. In addition, the Design Manager (DM) has not been able to obtain the archived structural framing drawings for the Municipal Building, from the Department of Buildings. These are required in order to determine the platform elevator's potential impact to the structural configuration of the building. | The DM office continues to follow up, with these agencies, for approvals & submittal of the documents. Subsequent to the reporting period, the Design Completion date has slipped another five months to June 2021. | An Agency ACE evaluation is not required for this Project. |
| T70412L1 | Station Renewal at 14th Street Station - Broadway / 7th Avenue Line | Schedule | $48.9M | May 2021 | During the Fourth Quarter 2020, the forecasted Design Completion slipped seven months, from October 2020 to May 2021, due to the repackaging of the 14th Street bundle and approval of funding. | The repackaging is complete, funding is secure, and the Request to Advertise (RTA) package has been sent for approval. | The overall Contractor/Consultant performance rating for the current All-Agency report for this project is consistent with the IEC's observation of project performance, during this reporting period. |
| T70412L2 | Platform Components at 14th Street Station - 6th Avenue Line | Schedule | $11.6M | May 2021 | During the Fourth Quarter 2020, the forecasted Design Completion slipped seven months, from October 2020 to May 2021, due to the repackaging of the 14th Street bundle and approval of funding. | The repackaging is complete, funding is secure, and the RTA package has been sent for approval. | The overall Contractor/Consultant performance rating for the current All-Agency report for this project is consistent with the IEC's observation of project performance, during this reporting period. |
| T7041322 | ADA - Station Accessibility at 95th Street Station – 4th Avenue Line | Schedule | $50.0M | Jan 2021 | During the Fourth Quarter 2020, the forecast design completion date slipped three months, from October 2020 to January 2021. Due to the inability to finalize the RFP documents because design personnel were asked to emphasize other high priority projects. | The design consultant task order needs to be modified for the new RFP requirement when design personnel are available; subsequent to this reporting period, design completion slipped another five months to June 2021. | The overall Contractor/Consultant performance rating for the current All-Agency report for this project is consistent with the IEC's observation of project performance, during this reporting period. |
| T7041330 | ADA - Station Accessibility at 14th Street Station - 6th and 7th Avenue Lines - Design | Schedule | $41.5M | May 2021 | During the Fourth Quarter 2020, the forecasted Design Completion slipped seven months, from October 2020 to May 2021, due to the repackaging of the 14th Street bundle and approval of funding. | The repackaging is complete, funding is secure, and the RTA package has been sent for approval. | The overall Contractor/Consultant performance rating for the current All-Agency report for this project is consistent with the IEC's observation of project performance, during this reporting period. |
| T7041347 | ADA - Station Accessibility at 14th Street Station - 6th Avenue Line | Schedule | $43.7M | May 2021 | During the Fourth Quarter 2020, the forecasted Design Completion slipped seven months, from October 2020 to May 2021, due to the repackaging of the 14th Street bundle and approval of funding. | The repackaging is complete, funding is secure, and the RTA package has been sent for approval. | The overall Contractor/Consultant performance rating for the current All-Agency report for this project is consistent with the IEC's observation of project performance, during this reporting period. |
| T7041348 | ADA - Station Accessibility at 14th Street Station - Broadway / 7th Avenue Line | Schedule | $55.6M | May 2021 | During the Fourth Quarter 2020, the forecasted Design Completion slipped seven months, from October 2020 to May 2021, due to the repackaging of the 14th Street bundle and approval of funding. | The repackaging is complete, funding is secure, and the RTA package has been sent for approval. | The overall Contractor/Consultant performance rating for the current All-Agency report for this project is consistent with the IEC's observation of project performance, during this reporting period. |

Metropolitan Transportation Authority

# Summary of Core Traffic Light Report Design Exceptions

**(Fourth Quarter 2020 - As of December 31, 2020)**

| ACEP | Project Name | Index Trigger | EAC | Design Completion Date | Reason for Variance Since Last Quarterly Report | What is Being Done | IEC Comment: All Agency Contractor Evaluation |
|---|---|---|---|---|---|---|---|
| **Construction and Development - Infrastructure** | | | | | | | |
| S8070102 | Track and Switch Replacement – Staten Island Railway | Schedule | $137.0M | Jan 2021 | During the Fourth Quarter 2020, the forecasted design completion slipped three months, from October 2020 to January 2021. This was due to the diesel/platform clearance analysis, requested by Maintenance of Way Track Engineering, which took longer than expected. Furthermore, the SOW is under review due to potential budget constraints. | Staten Island Railway Track Engineering, as requested by C&D, are conducting a new track condition survey to reprioritize the critical sections in the event that a reduced budget scenario is approved. | An Agency ACE evaluation is not required for this Project. |
| **Long Island Rail Road** | | | | | | | |
| L70592LH | Babylon Interlocking Renewal | Schedule | $32.6M | Dec 2021 | During the Fourth Quarter 2020, the forecast Design Completion date slipped 11 months from January 2021 to December 2021. This was due to the power load study change order negotiations and associated work, as well as for procurement bid assistance for the forecasted September 2021 Signal Design-Build Contract Award. The Design Completion date is subject to change and may be advanced based upon the potential early completion of the change order and contract award date. | Negotiations were put on hold in October 2020, when it was determined that the General Engineering Consultants (GEC) Designer was not meeting their MWDBE goals and needed to add a MWDBE firm for this change order. The GEC has selected a new firm and submitted a revised MWDBE Plan for approval. We received a partial approval from MTA's Department of Diversity and Civil Rights (DDCR). After discussions with Procurement & Logistics Solicitations and DDCR, it was recommended to continue negotiations, which were reconvened recently. | The overall Contractor/Consultant performance rating for the current All-Agency report for this project is consistent with the IEC's observation of project performance, during this reporting period. |
| **Cross Agency - Rolling Stock** | | | | | | | |
| T7030216 | Purchase 45 Standard Electric Buses | Schedule | $73.9M | Nov 2021 | During the Fourth Quarter 2020, the forecasted Design Completion slipped 11 months, from December 2020 to November 2021. This was due to a revised funding strategy requiring additional time for receipt of funds and triggering the requirement to rebid the project. | The Request For Proposal (RFP) will be reissued in March 2021 to solicit proposals. | An Agency ACE evaluation is not required for this Project. |

IEC Comment: The IEC substantially agrees with the material presented in this report, including the stated problems and actions taken by the Agency.

| MTA Agency: New York City Transit | Status as of December 31, 2020 |
|---|---|
| Project Name: ADA - Gun Hill Road Station - Dyre Avenue Line | Current Budget: $60.0M |
| | Project EAC: $61.0M |
| | Substantial Completion Date at Award: Jun 2020 |
| Project No: T7041305 | Current Substantial Completion Date: Jan 2021 |
| Project Phase: Construction | Phase Complete: 93% |

**Project Description**

This project will achieve full ADA accessibility at Gun Hill Road Station on the Dyre Avenue Line in the Bronx by installing two ADA compliant elevators and associated equipment and modifying station elements including, columns, girders, stairs and fare arrays.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule**

**Schedule:** During the Fourth Quarter 2020, the forecasted Substantial Completion date slipped 2 months from November 2020 to January 2021, slipping a combined total of 6 months over the last three quarters. This was due to three Additional Work Orders (AWOs): one for modification of the entrance canopy structure, one for the platform reconstruction and one for modification of the fire sprinkler and fire alarm system.

**What is Being Done**

**Schedule:** The work described in the AWOs are ongoing; while the AWO costs are covered through project contingency funds, a budget modification for the additional EFA and TA Labor needs to address the potential overruns is under review. Upon completion, it will be circulated for the approval. An extension of time is also under review for the contract completion. Elevators were placed in service in December 2020, and subsequent to the reporting period, Substantial Completion of the contract has slipped an additional two months to March 2021.

**IEC Comment**

**Budget and Schedule Performance:** The IEC substantially agrees with the material presented in this report, including the stated problems and actions taken by the Agency.

**All Agency Contractor Evaluation:** The Overall Contractor/Consultant performance rating for the current All-Agency Contractor Evaluation (ACE) report for this project is consistent with the IEC's observation of project performance, during this reporting period.

| MTA Agency: New York City Transit | Status as of December 31, 2020 |
|---|---|
| Project Name: Station Signage Improvements | Current Budget: $10.8M |
| | Project EAC: $10.2M |
| | Substantial Completion Date at Award: Dec 2020 |
| Project No: T7041401 | Current Substantial Completion Date: Dec 2021 |
| Project Phase: Construction | Phase Complete: 60% |

**Project Description**

This project will correct sign inconsistencies by updating information, responding to vandalism and complying with Federal regulations by installing more durable wayfinding, Station ID, safety & ADA signage throughout NYCT Subway System.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule**

**Schedule:** During the Fourth Quarter 2020, the forecasted Substantial Completion date slipped 12 months from December 2020 to December 2021, due to signage resources being needed for other priority projects such as Second Avenue Subway & the Enhanced Station Initiative. For the duration of the SAS/ESI projects, signage personnel were unable to dedicate time for survey, design & installation of porcelain signs under this contract. After those projects were completed, the program area continued the permanent signage replacement program but were 12 months behind their schedule. Also, COVID-19 quarantines and alternating personnel schedules (to follow social distance requirements), throughout 2020, reduced sign fabrication & installation totals.

**What is Being Done**

**Schedule:** Signage procurement will continue with the vendor up until the end of 2021, which marks substantial completion of the contract. Installation of final signs will continue up until March 2022 in the closeout phase.

**IEC Comment**

**Budget and Schedule Performance:** The IEC substantially agrees with the material presented in this report, including the stated problems and actions taken by the Agency.

**All Agency Contractor Evaluation:** An Agency ACE evaluation is not required for this project.

| MTA Agency: New York City Transit | Status as of December 31, 2020 |
|---|---|
| Project Name: ADA - Platform Gap Retrofit - Various Locations | Current Budget: $10.7M |
| | Project EAC: $14.7M |
| | Substantial Completion Date at Award: Dec 2019 |
| Project No: T6041304 | Current Substantial Completion Date: Mar 2021 |
| Project Phase: Construction | Phase Complete: 94% |

**Project Description**

This project will bring boarding areas for 61 platform edges, at various stations, into Americans with Disabilities Act (ADA) compliance throughout the boroughs of Manhattan, Brooklyn, Queens, and the Bronx. Existing ADA boarding zones in accessible stations will undergo retrofit work, which may involve replacing platform edge strips, rubbing boards, concrete slabs, and/or floor tiles.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule**

**Schedule:** During the Fourth Quarter 2020, the forecasted Substantial Completion date slipped three months from December 2020 to March 2021 due to unavailability of General Orders (GOs) for remaining work at 2 locations: 34th/8th Track A4 and Marcy Avenue Tracks J1 & J2.

**What is Being Done**

**Schedule:** Subsequent to the reporting period, work was completed at 34th St./8th Ave. on February 19, 2020. The work at Marcy Avenue is scheduled for completion June 2021, pending GO availability. This is an additional 3 month slip, subsequent to the reporting period.

**IEC Comment**

**Budget and Schedule Performance:** The IEC substantially agrees with the material presented in this report, including the stated problems and actions taken by the Agency.

**All Agency Contractor Evaluation:** An Agency ACE evaluation report is not required for this project.

| MTA Agency: New York City Transit | Status as of December 31, 2020 |
|---|---|
| Project Name: 207th Street Overhaul Shop - Boiler Upgrades & Site Remediation | Current Budget: $10.8M |
| | Project EAC: $11.4M |
| | Substantial Completion Date at Award: Dec 2020 |
| Project No: T6100454 | Current Substantial Completion Date: Jul 2021 |
| Project Phase: Construction | Phase Complete: 77% |

**Project Description**

This project will upgrade the boiler system at the 207th Street Yard Overhaul Shop to comply with New York State Department of Environmental Conservation (NYSDEC) air emission regulations and permitting requirements. This project will also remediate soil contamination from the existing system, as required.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule**

**Schedule:** During the Fourth Quarter 2020, the forecasted Substantial Completion date slipped seven months, from December 2020 to July 2021, due to unforeseen field conditions. Installation of the exhaust stacks for Boiler #1 took longer than anticipated due to the need to repair a damaged supporting wall. This wall repair work subsequently delayed the installation of the exhaust stacks for Boiler #1 and its upgrade. In addition, commissioning of the ancillary equipment is taking longer than anticipated. Modifications to the ancillary equipment recently proposed by the Designer of Record (DOR) will be implemented through AWO #15; which was negotiated. Since we are in the heart of the cold season, it is not recommended to have one boiler carry the steam load demand from the Overhaul Shop, Administration Bldg. and other sections of the yard, so the operation of the second of the two boilers is needed, and it cannot be taken out of service and upgraded until the end of the current heating season in late spring. Also, due to the unique boiler commissioning process.

**What is Being Done**

**Schedule:** Given this situation, the testing for Boiler #2 will be have to be postponed to the Fall of 2021, to the off-peak heating season which starts, October 15, 2021. The project CEO is discussing with the DOR, users and other key stake holders to see if there is any other alternative solution to perform the functionality testing as soon as possible. Subsequent to the reporting period, the project slipped an additional five months to December 2021, due to the boiler commissioning process. The 7-day commissioning of the second boiler, using natural gas, cannot be done during summer months as the testing requires a full load being placed on the system. This continuous functionality testing will generate heat that will impact the facility and staff during warm weather. Therefore, the testing had to be moved to the start of the next heating season.

**IEC Comment**

**Budget and Schedule Performance:** The IEC substantially agrees with the material presented in this report, including the stated problems and actions taken by the Agency.

**All Agency Contractor Evaluation:** The overall Contractor/Consultant performance rating for the current All-Agency Contractor Evaluation (ACE) report for this project is consistent with the IEC's observation of project performance, during this reporting period.

| MTA Agency: New York City Transit | Status as of December 31, 2020 |
|---|---|
| Project Name: Livingston Plaza - Façade Rehabilitation (Outstanding Work) | Current Budget: $51.5M |
| | Project EAC: $51.8M |
| | Substantial Completion Date at Award: Feb 2020 |
| Project No: T6160717 | Current Substantial Completion Date: June 2021 |
| Project Phase: Construction | Phase Complete: 65% |

**Project Description**

This project will upgrade and repair the façade of the NYCT Livingston Plaza administrative facility and include additional perimeter protection improvements at sidewalk level.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule**

**Schedule:** During the Fourth Quarter 2020, the forecasted Substantial Completion slipped six months, from December 2020 to June 2021. This was due to general contractor scheduling issues and NYCT installing temporary electrical cables on the contractor's shed / scaffolding from an emergency generator on Schermerhorn Street up to the 13th floor. Some of the masonry restoration and perimeter protection work cannot be completed until the shed / scaffolding is removed. The temporary emergency generator / cables are required due to a catastrophic failure in one of the building's emergency generators and will remain in-place until the generator is repaired.

**What is Being Done**

**Schedule:** Perimeter protection and masonry work is being progressed wherever possible with the shed / scaffolding posts in-place Subsequent to the reporting period, the project has slipped an additional 2 months to August 2021.

**IEC Comment**

**Budget and Schedule Performance:** The IEC substantially agrees with the material presented in this report, including the stated problems and actions taken by the Agency.

**All Agency Contractor Evaluation:** The Overall Contractor/Consultant performance rating for the current All-Agency Contractor Evaluation (ACE) report for this project is consistent with the IEC's observation of project performance, during this reporting period.

| MTA Agency: New York City Transit | Status as of December 31, 2020 |
|---|---|
| Project Name: Rehabilitation of the Forsyth St Vent Plant | Current Budget: $90.5M |
| | Project EAC: $90.4M |
| | Substantial Completion Date at Award: Oct 2022 |
| Project No: T7060506 | Current Substantial Completion Date: Nov 2023 |
| Project Phase: Construction | Phase Complete: 19% |

**Project Description**

This project involves the construction of a new vent plant at Forsyth and Delancey Streets in the Borough of Manhattan.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule**

**Schedule:** During the Fourth Quarter 2020, the forecasted Substantial Completion date slipped 13 months, from October 2022 to November 2023, due to Con Edison changing their steam piping and electrical duct designs. They also did not come to the site to install required cables and house connections in a timely manner.

**What is Being Done**

**Schedule:** Con Edison provided the final design drawings for the steam and electrical duct. The project team has held meetings with Con Edison to apply some pressure to expedite. Now steam and electrical duct is completed and started Support of Excavation ( SOE) as planned.

**IEC Comment**

**Budget and Schedule Performance:** The IEC substantially agrees with the material presented in this report, including the stated problems and actions taken by the Agency.

**All Agency Contractor Evaluation:** The overall Contractor/Consultant performance rating for the current All-Agency Contractor Evaluation (ACE) report for this project is consistent with the IEC's observation of project performance, during this reporting period.

| MTA Agency: New York City Transit | Status as of December 31, 2020 |
|---|---|
| Project Name: Substation Renewal at Burnside Avenue - Concourse Line | Current Budget: $22.9M |
| | Project EAC: $22.9M |
| | Substantial Completion Date at Award: Nov 2020 |
| Project No: T7090201 | Current Substantial Completion Date: Feb 2021 |
| Project Phase: Construction | Phase Complete: 97% |

**Project Description**

This project will completely rehabilitate the Burnside Substation and includes partial equipment replacement at the 184th Street Substation. The scope of work includes the removal of the existing oil filled transformer and associated equipment and replacing it with a new dry air cooled transformer and associated equipment.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule**

**Schedule:** During the Fourth Quarter 2020, the forecasted Substantial Completion date slipped four months, from October 2020 to February 2021, due to delays associated with the installation of high-tension street ducts and cables by Con Edison at the Burnside Avenue Substation.

**What is Being Done**

**Schedule:** Con Edison has completed the installation of the street ducts and cables and other associated equipment at the substation. The contractor performed testing and inspections that are required in order to place the Burnside Avenue Substation into service. Subsequent to the reporting period, the projects slipped an additional two months to April 2021, due to the same reason above.

**IEC Comment**

**Budget and Schedule Performance:** The IEC substantially agrees with the material presented in this report, including the stated problems and actions taken by the Agency.

**All Agency Contractor Evaluation:** The overall Contractor/Consultant performance rating for the current All-Agency Contractor Evaluation (ACE) report for this project is consistent with the IEC's observation of project performance, during this reporting period.

| MTA Agency: New York City Transit | Status as of December 31, 2020 |
|---|---|
| Project Name: New Substation at Maspeth Ave / Humboldt St. & Rehabilitation of Circuit Breaker Houses – Canarsie Line | Current Budget: $51.5M & $13.4M |
| | Project EAC: $51.5M & $13.4M |
| | Substantial Completion Date at Award: Nov 2020 |
| Project No: T7090222 & T7090406 | Current Substantial Completion Date: Mar 2021 |
| Project Phase: Construction | Phase Complete: 99% |

**Project Description**

This contract involves both the construction of a new, two unit, underground substation at Maspeth Avenue - Humboldt Street and the rehabilitation of Circuit Breaker Houses (CBH) #85 & #86, at the Myrtle Ave. Station. These improvements are required to augment power capacity appropriately in order to support an increase in train service on the Canarsie Line, due to the ongoing installation of the Communications-Based Train Control (CBTC) system.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule**

**Schedule:** During the Fourth Quarter 2020, the forecasted Substantial Completion (SC) date slipped four months from November 2020 to March 2021, due to ConEd's required changes in the specification required to energize the high tension feeders. The current SC date was also impacted due to the following: The oil that was put in the transformer had to be retested to determine that it was still safe to use when the high tension feeders are energized. All required changes have been completed and the oil was retested and found to be safe. We are working with Con Edison to schedule a time when they will be available to energize the two high tension feeders. Currently Con Edison has no crews available during the day so the Construction Manger has proposed that Con Edison come from 4pm to 12pm to do the energization work. The project CEO is in constant communication with Con Edison on this issue.

**What is Being Done**

**Schedule:** Initially for the G&T Device issue, there were high level meetings between MTA C&D upper management and Con Ed upper management. Currently, NYCT Energy Management is in constant communication with Con Edison on crew availability to energize the two High Tension feeders. The Project CEO also is in constant contact with Con Edison in order to establish a date for energization. The dates for substantial completion are contingent upon energization of the feeders. Currently, Con Ed has a problem scheduling a crew to energize the two High Tension feeders and is trying to get a crew during the off hours from 4 PM to Midnight; subsequently, substantial completion slipped further to May 2021.

**IEC Comment**

**Budget and Schedule Performance:** The IEC substantially agrees with the material presented in this report, Including the stated problems and actions taken by the Agency.

**All Agency Contractor Evaluation:** The overall Contractor/Consultant Performance rating for the current All-Agency Contractor Evaluation (ACE) report for this project is consistent with the IEC's observation of project performance during this reporting period.

| MTA Agency: New York City Transit | Status as of December 31, 2020 |
|---|---|
| Project Name: New Substation at Harrison Place – Canarsie Line | Current Budget: $51.8M |
| | Project EAC: $51.2M |
| | Substantial Completion Date at Award: Nov 2020 |
| Project No: T7090223 | Current Substantial Completion Date: Mar 2021 |
| Project Phase: Construction | Phase Complete: 98% |

**Project Description**

This project involves the construction of a new underground substation at Harrison Place in the Borough of Brooklyn to augment power capacity to appropriately support an increase in train services on the Canarsie Line in Brooklyn, due to the installation of the Communication Based Train Control (CBTC) system.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule**

**Schedule:** During the Fourth Quarter 2020, the forecasted Substantial Completion date slipped four months from November 2020 to March 2021, due in part to Con Edison required upgrades which have been delayed. Con Edison has refused to energize the two High Tension feeders until the Con Edison Ground & Test Device was compliant to current Con Edison specifications.

**What is Being Done**

**Schedule:** The project is waiting for Con Edison to energize the service. Subsequent to this report, substantial completion has been revised to May 2021 to meet Con Edison's schedule.

**IEC Comment**

**Budget and Schedule Performance:** The IEC substantially agrees with the material presented in this report, Including the stated problems and actions taken by the Agency.

**All Agency Contractor Evaluation:** The overall Contractor/Consultant Performance rating for the current All-Agency Contractor Evaluation (ACE) report for this project is consistent with the IEC's observation of project performance during this reporting period.

| MTA Agency: New York City Transit | Status as of December 31, 2020 |
|---|---|
| Project Name: Upgrade Central Electronics Shop - Woodside Facility | Current Budget: $16.1M |
| | Project EAC: $16.6M |
| | Substantial Completion Date at Award: Aug 2019 |
| Project No: T7100407 | Current Substantial Completion Date: Nov 2020 |
| Project Phase: Construction | Phase Complete: 100% |

**Project Description**

This project constructs an extension to the Woodside Central Electronics Shop in Queens that will include new office and equipment testing spaces. Structural, architectural, modifications are required to support the extension. The scope of work also includes upgrades to the electrical, communications ,and HVAC systems.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule**

**Schedule:** During the Fourth Quarter 2020, the forecasted Substantial Completion date slipped 1 month from October to November 2020, slipping a combined 5 months total over the last three quarters. This was due to delays caused by unforeseen field conditions affecting various installations and Con Edison taking longer than expected while constructing the transformer vaults and energizing the new 4000A service, installed this contract. In addition, the electrical sub-contractor was severely impacted by COVID including shutdowns and reduced crew sizes.

**What is Being Done**

**Schedule:** All work is now complete, the new service was energized in June 2020, and substantial completion was achieved November 30, 2020.

**IEC Comment**

**Budget and Schedule Performance:** The IEC substantially agrees with the material presented in this report, including the stated problems and actions taken by the Agency.

**All Agency Contractor Evaluation:** The Overall Contractor/Consultant performance rating for the current All-Agency Contractor Evaluation (ACE) report for this project is consistent with the IEC's observation of project performance, during this reporting period.

| MTA Agency: New York City Transit | Status as of December 31, 2020 |
|---|---|
| Project Name: New Power Substation – Tottenville | Current Budget: $27.2M |
| | Project EAC: $27.1M |
| | Substantial Completion Date at Award: Apr 2019 |
| Project No: S7070105 | Current Substantial Completion Date: Mar 2021 |
| Project Phase: Construction | Phase Complete: 99% |

**Project Description**

This project involves constructing a new substation at Tottenville in Staten Island, which will improve the reliability of Staten Island Railroad (SIR) service by providing adequate electrical power along the right of way.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule**

**Schedule:** During the Fourth Quarter 2020, the forecasted Substantial Completion date slipped five months, from October 2020 to March 2021, due to design error. The contract drawings called for the installation of three Negative Return Reactors adjacent to the tracks at Tottenville. After installation and upon energization, an imbalance in the negative return system is causing the substation relays to behave erratically

What is Being Done

**Schedule:** The contractor has bypassed the negative reactors, which resolved the erratic relay behavior and is now attempting to identify the cause. MTA C&D is looking into a final design solution for the negative reactors.

**IEC Comment**

**Budget and Schedule Performance:** The IEC substantially agrees with the material presented in this report, including the stated problems and actions taken by the Agency.

**All Agency Contractor Evaluation:** The overall Contractor/Consultant performance rating for the current All-Agency Contractor Evaluation (ACE) report for this project is consistent with the IEC's observation of project performance, during this reporting period.

| MTA Agency: New York City Transit | Status as of December 31, 2020 |
|---|---|
| Project Name: New Power Substations – New Dorp & Clifton | Current Budget: $24.3M & $30.7M |
| | Project EAC: $25.4M & $30.7M |
| | Substantial Completion Date at Award: Jul 2020 |
| Project No: S7070106 & S7070107 | Current Substantial Completion Date: Jun 2021 |
| Project Phase: Construction | Phase Complete: 95% |

**Project Description**

This contract involves constructing two new substations at New Dorp and Clifton stations in Staten Island, which will improve the reliability of Staten Island Railroad (SIR) service by providing adequate electrical power along the right of way.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule**

**Schedule:** During the Fourth Quarter 2020, the forecasted Substantial Completion date, for each of these locations, slipped five months, from January 2021 to June 2021, due to delays in the delivery of low tension & high tension (HT) services at both locations from Con Edison

**What is Being Done**

**Schedule:** Phase 2 testing has been completed at both locations.

- Inspections by Con Edison are being scheduled for Clifton Substation, after which we are expecting the release of the Current Transformers & Power Transformers.
- At New Dorp, battery testing is scheduled for March 8, 2021, this will be followed by inspection of the HT switchgear by Con Edison

**IEC Comment**

**Budget and Schedule Performance:** The IEC substantially agrees with the material presented in this report, including the stated problems and actions taken by the Agency.

**All Agency Contractor Evaluation:** The overall Contractor/Consultant performance rating for the current All-Agency Contractor Evaluation (ACE) report for this project is consistent with the IEC's observation of project performance, during this reporting period.

| MTA Agency: New York City Transit | Status as of December 31, 2020 |
|---|---|
| Project Name: Reconstruction & Relocation of the Clifton Car Repair Shop | Current Budget: $9.1M |
| | Project EAC: $9.1M |
| | Substantial Completion Date at Award: Jul 2020 |
| Project No: S7070111 | Current Substantial Completion Date: Dec 2021 |
| Project Phase: Construction | Phase Complete: 80% |

**Project Description**

This project will develop an effective flood mitigation scheme to protect the Clifton Yard and Shop in the Borough of Staten Island. The goal of the project is to repair previous damage from Superstorm Sandy and fortify the shop assets against flooding and storm surges from up to a Category 2 hurricane coupled with high tides. The design-build project also incorporates capital improvements to the Clifton Yard facility which includes the demolition of the existing shop buildings and the construction of a new Clifton Car Repair Shop with new equipment, track realignments in the yard and site drainage improvements. The Sandy Program work, authorized under ES070211 and ES070302 and the Capital Program improvements, under S7070111 are simultaneously in construction at the Clifton Shop and Yard.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule – Impacted this quarter by Covid-19**

**Schedule:** During the Fourth Quarter 2020, the forecasted Substantial Completion date slipped three months, from September to December 2021, due to fabrication and delivery delays from manufacturers and vendors who have been impacted by Covid-19 and the delay in delivery of the 1500 kw Con Edison provided transformer which subsequently delayed the energization of permanent electrical service to 2021.

**What is Being Done**

**Schedule:** Permanent electrical service from Con Edison was obtained January 25, 2021. The project has started pre-functional inspections and continues to plan, coordinate and schedule multiple commissioning related activities within reasonable time frames. It is anticipated that further Covid-19 issues may continue into 2021.

**IEC Comment**

**Budget and Schedule Performance:** The IEC substantially agrees with the material presented in this report, including the stated problems and actions taken by the Agency.

**All Agency Contractor Evaluation:** The overall Contractor/Consultant performance rating for the current All-Agency Contractor Evaluation (ACE) report for this project is consistent with the IEC's observation of project performance, during this reporting period.

| MTA Agency: New York City Transit | Status as of December 31, 2020 |
|---|---|
| Project Name: SIR Clifton Yard Track and Switch Replacement | Current Budget: $17.3M |
| | Project EAC: $17.3M |
| | Substantial Completion Date at Award: Oct 2020 |
| Project No: S7070113 | Current Substantial Completion Date: Sep 2021 |
| Project Phase: Construction | Phase Complete: 70% |

**Project Description**

The scope of work includes the reconfiguration of Clifton Yard to support the new Clifton Shop. The scope of work includes the installation of Type VI tracks, new 84-C type composite contact rails, duct banks and switches.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule**

**Schedule:** During the Fourth Quarter 2020, the forecasted Substantial Completion date slipped 11 months from October 2020 to September 2021, due to coordination required with a portion of the scope of work and the commissioning of the new Clifton Car Repair Shop.

**What is Being Done**

**Schedule:** An AWO to the parent contract T-80280 has established a new Substantial Completion date for this contract of Sept 2021. This time extension is non impactable.
Subsequent to the reporting period, there was an additional slip of three months, to December 2021, due to the same reasons above.

**IEC Comment**

**Budget and Schedule Performance:** The IEC substantially agrees with the material presented in this report, including the stated problems and actions taken by the Agency.

**All Agency Contractor Evaluation:** The overall Contractor/Consultant performance rating for the current All-Agency Contractor Evaluation (ACE) report for this project is consistent with the IEC's observation of project performance during this reporting period.

| MTA Agency: New York City Transit | Status as of December 31, 2020 |
|---|---|
| Project Name: Upgrade A Synchronous Fiber Optic Network to Rings A and C | Current Budget: $31.0M |
| | Project EAC: $31.0M |
| | Substantial Completion Date at Award: Mar 2020 |
| Project No: T7080602 | Current Substantial Completion Date: Mar 2021 |
| Project Phase: Construction | Phase Complete: 96% |

**Project Description**

This project will upgrade the existing fiber optic network equipment to an Asynchronous Optical Network (SONET) on the A and C Rings of the network. This project is part of a broader update of the network to be all SONET rings and the improved technology will allow for continuation of critical communication circuits in the event of a system power outage.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule**

**Schedule:** During the Fourth Quarter 2020, the forecasted Substantial Completion date slipped three months, from December 2020 to March 2021, due to the lack of Electronic Maintenance Division (EMD) support to complete the testing, inspections and migrations.

**What is Being Done**

**Schedule:** The contractor will be granted an extension of time due to the issues highlighted above. Weekly meetings are held with the contractor, EMD and Maintenance of Way. Systems Integrated Testing has been completed for all location's and EMD is preparing for the migration of all sites, with the contractor's support.
Subsequent to the reporting period, the forecast Substantial Completion date has slipped an additional three months to June 2021.

**IEC Comment**

**Budget and Schedule Performance:** The IEC substantially agrees with the material presented in this report, including the stated problems and actions taken by the Agency.

**All Agency Contractor Evaluation:** The overall Contractor/Consultant performance rating for the current All-Agency Contractor Evaluation (ACE) report for this project is consistent with the IEC's observation of project performance, during this reporting period.

| MTA Agency: New York City Transit | Status as of December 31, 2020 |
|---|---|
| Project Name: Consolidated Employee Facilities Component Repairs - 7 Locations in Manhattan | Current Budget: $9.7M |
| | Project EAC: $10.1M |
| | Substantial Completion Date at Award: Mar 2017 |
| Project No: T7160704 | Current Substantial Completion Date: Jun 2021 |
| Project Phase: Construction | Phase Complete: 97% |

**Project Description**

This project provides for the component repairs of various employee facilities, located throughout the borough of Manhattan. The work includes the replacement of flooring, ceiling tiles, Heating Ventilation and Air Conditioning (HVAC) repairs, communication upgrades, electrical upgrades, cleaning, painting and other moderate repairs and updates. The seven locations are: Chambers Street/Nassau Loop, 14th Street/8th Avenue, 47th-50th Streets - Rockefeller Center/6th Avenue, Delancey Street 6th Avenue, 14th Street/Broadway IRT, Grand Central Station/Shuttle and 148th Street/Lenox Avenue.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule**

**Schedule:** During the Fourth Quarter 2020, the forecasted Substantial Completion date slipped six months, from December 2020 to June 2021. This was due to design changes to the 148th Street location, the approvals required to proceed with the design changes and coordinating the work.

**What is Being Done**

**Schedule:** The work at 148th Street is currently scheduled for completion June 2021, which is based on coordinating the work at the tower in adherence to COVID-19 work protocols. Infrastructure Capital Construction (ICC) and the HVAC group will work with the user on scheduling the remaining work while the tower remains in operation.

**IEC Comment**

**Budget and Schedule Performance:** The IEC substantially agrees with the material presented in this report, including the stated problems and actions taken by the Agency.

**All Agency Contractor Evaluation:** An Agency ACE evaluation is not required for this project.

| MTA Agency: New York City Transit | Status as of December 31, 2020 |
|---|---|
| Project Name: 2020 Mainline Track Replacement - Broadway-7th Avenue Line | Current Budget: $35.3M |
| | Project EAC: $35.3M |
| | Substantial Completion Date at Award: Apr 2021 |
| Project No: T8050207 | Current Substantial Completion Date: Aug 2021 |
| Project Phase: Construction | Phase Complete: 39% |

**Project Description**

This project involves the reconstruction of segments of mainline track on the Broadway / 7th Avenue Line that have reached the end of their useful life. The track segments to be reconstructed were determined by the latest condition survey. The scope of work includes the replacement of track and associated equipment and materials, including signals, contact rail, ballast, etc.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule – Impacted this quarter by Covid-19**

**Schedule:** During the Fourth Quarter 2020, the forecasted Substantial Completion date slipped four months, from April 2021 to August 2021, due to the cancellation of General Orders(GOs) for this project. Beginning the second week of March 2020 through June 2020, manpower availability was extremely low due to Covid-19 and affected the entire track program causing other projects to be rescheduled before this one on account of a higher prioritization.

**What is Being Done**

**Schedule:** The Type II Ekki Hilti and Type II-II Track panel reconstruction resumed in the first week of January 2021 and is on course for completion August 2021.

**IEC Comment**

**Budget and Schedule Performance:** The IEC substantially agrees with the material presented in this report, including the stated problems and actions taken by the Agency.

**All Agency Contractor Evaluation:** An Agency ACE evaluation is not required for this project.

| MTA Agency: New York City Transit | Status as of December 31, 2020 |
|---|---|
| Project Name: 2020 Mainline Track Replacement - Lexington Line | Current Budget: $22.0M |
| | Project EAC: $22.0M |
| | Substantial Completion Date at Award: Apr 2021 |
| Project No: T8050209 | Current Substantial Completion Date: Jul 2021 |
| Project Phase: Construction | Phase Complete: 67% |

**Project Description**

This project involves the reconstruction of segments of mainline track on the Lexington Line that have reached the end of their useful life. The track segments were determined by the latest condition survey. The scope of work includes the replacement of track and associated equipment and materials, including signals, contact rail, ballast, etc.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule – Impacted this quarter by Covid-19**

**Schedule:** During the Fourth Quarter 2020, the forecasted Substantial Completion date slipped three months from April 2021 to July 2021, due to the cancellation of General Orders(GOs) for this project. During the second quarter 2020, manpower availability was extremely low due to Covid-19 and affected the entire track program causing other projects to be rescheduled before this one on account of a higher prioritization.

**What is Being Done**

**Schedule:** The installation of track segments resumed in the first week of February 2021 and is on course for completion August 2021.

**IEC Comment**

**Budget and Schedule Performance:** The IEC substantially agrees with the material presented in this report, including the stated problems and actions taken by the Agency.

**All Agency Contractor Evaluation:** An Agency ACE evaluation is not required for this project.

| MTA Agency: New York City Transit | Status as of December 31, 2020 |
|---|---|
| Project Name: 2020 Mainline Track Replacement - Brighton Line | Current Budget: $15.2M |
| | Project EAC: $15.2M |
| | Substantial Completion Date at Award: Nov 2020 |
| Project No: T8050210 | Current Substantial Completion Date: May 2022 |
| Project Phase: Construction | Phase Complete: 13% |

**Project Description**

This project involves the reconstruction of segments of mainline track on the Brighton Line that have reached the end of their useful life. The track segments were determined by the latest condition survey. The scope of work includes the replacement of track and associated equipment and materials, including signals, contact rail, ballast, etc.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule**

**Schedule:** During the Fourth Quarter 2020, the forecasted Substantial Completion date slipped eight months from April 2021 to December 2021, due to the lack of track availability, for the installation of Type III panels in the third and fourth Quarters, while the concurrent work on the Culver line Communications-based train control project transpires.

**What is Being Done**

**Schedule:** This project consists of the installation of 70 Type III panels, of which 9 Type III panels have been installed and the remaining 61 Type III panels are scheduled for installation beginning late July 2021. Subsequent to the reporting quarter, the substantial completion date slipped to May 2022.

**IEC Comment**

**Budget and Schedule Performance:** The IEC substantially agrees with the material presented in this report, including the stated problems and actions taken by the Agency.

**All Agency Contractor Evaluation:** An Agency ACE evaluation is not required for this project.

| MTA Agency: New York City Transit | Status as of December 31, 2020 |
|---|---|
| Project Name: 2020 Mainline Track Switches - Queens Blvd Line | Current Budget: $7.5M |
| | Project EAC: $7.5M |
| | Substantial Completion Date at Award: Aug 2021 |
| Project No: T8050306 | Current Substantial Completion Date: Dec 2021 |
| Project Phase: Construction | Phase Complete: 5% |

**Project Description**

This project will replace the mainline switches on the Queens Blvd Line. Locations will be determined based on the latest condition survey. Work will include, as required, replacement of existing turnouts, track switches, switch valves, connecting rails, contact rails, tires, ballasts, signal cables including positive and negative connection, and any associated signal and equipment work.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule**

**Schedule:** During the Fourth Quarter 2020, the forecasted Substantial Completion date slipped four months from August to December 2021, due to the lack of track availability, the installation of two Type II - II switches while work on the Queens Boulevard line Communications-Based Train Control (CBTC) project transpires. Performing both scopes of work concurrently is not possible due to the higher priority CBTC project not allowing piggybacking opportunities.

**What is Being Done**

**Schedule:** The switches are scheduled for installation in August and September 2021 and is on course for completion December 2021.

**IEC Comment**

**Budget and Schedule Performance:** The IEC substantially agrees with the material presented in this report, including the stated problems and actions taken by the Agency.

**All Agency Contractor Evaluation:** An Agency ACE evaluation is not required for this project.

Long Island Rail Road

| MTA Agency: Long Island Rail Road | Status as of December 31, 2020 |
|---|---|
| Project Name: Diesel Locomotive Shop Improvements | Current Budget: $102.3M |
| | Project EAC: $102.0M |
| | Substantial Completion Date at Award: Mar 2020 |
| Project No: L70601YG | Current Substantial Completion Date: Jan 2021 |
| Project Phase: Construction | Phase Complete: 98% |

**Project Description**

This project includes the Design-Build Construction of the new Morris Park Locomotive Shop containing the Diesel Shop, Bone Yard, Stores Building, and Employee Facilities.
The new facility will accommodate the current and future diesel locomotive fleet. The locomotive shop will include an extensive yard consisting of fourteen turnouts, four storage tracks, four tracks that lead to the shop, and a partial future track 25. An additional track is included in the design for future expansion. The building includes office space, storage, and a locomotive shop.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule**

**Schedule:** During the Fourth Quarter 2020, the forecasted Substantial Completion slipped three months, from October 2020 to January 2021. This was due to the design, fabrication and delivery of a diesel fire pump required due to the inadequate water supply encountered at the new yard. At the time of bid, the original fire sprinkler design utilized a 12" watermain that traversed the 89th Avenue Bridge. After an investigation, the flow from this main was determined to be inadequate to support the new locomotive shop's fire water system. While NYDEP was replacing the 121st St water main, the fire pump design was modified, from an electric powered pump to a diesel powered one, and the pumphouse was relocated to a different location. The Joint Venture notified LIRR of potential additional Covid-19 delays and costs, but to date have only submitted Time & Material (T&M) records for lost productivity for cleaning and disinfection. The T&M reports are under review.
In addition to above, difficulty in obtaining permanent power from Con Edison, due to various discrepancies which required design revisions, delayed the completion of force account work. Also, a delay in shipping and manufacturing of an emergency generator, due to Covid-19, requiring the project to purchase the certain components from another contractor. Both of these further impacted the project's schedule.
Subsequent to the reporting period, Substantial Completion slipped an additional two months, to March 2021, due to contractor-caused delays to the installation, testing, and commissioning of the Fire Alarm System. The contractor had received approval for a Novec Clean Agent Fire System. In October 2020, the contractor proposed using FM-200, stating that it would not delay the completion of the project, but is currently being installed. Unless the FM-200 System can be installed, tested and accepted, it will further impact the March date. LIRR has granted an extension of time due to delays in attaining permanent power.

**What is Being Done**

**Schedule:** The project team is closely monitoring the work and will continue to mitigate all cost and schedule issues while commissioning of the building and various systems are underway.

**IEC Comment**

**Budget and Schedule Performance:** The IEC substantially agrees with the material presented in this report, including the stated problems and actions taken by the Agency.

**All Agency Contractor Evaluation:** The overall Contractor/Consultant Performance rating for the current All-Agency Contractor Evaluation (ACE) Report for this project is consistent with the IEC's observation of project performance, during this reporting period.

Metro-North Railroad

| MTA Agency: Metro-North Railroad | Status as of December 31, 2020 |
|---|---|
| Project Name: West of Hudson Signal Improvements | Current Budget: $67.6M & $21.1M |
| | Project EAC: $63.8M & $21.1M |
| | Substantial Completion Date at Award: Apr 2018 |
| Project No: M6040102 & M7040111 | Current Substantial Completion Date: Dec 2021 |
| Project Phase: Construction | Phase Complete: 95% |

**Project Description**

The project scope of work includes:

- The design, furnish and installation of signal infrastructure equipment including signal and communications houses and cases, snow-melter equipment, power distribution and generator equipment, foundations, signals, cables and troughs, new electric services and communications circuits for five segments along the West of Hudson Port Jervis Line.
- The termination of new equipment, including the Federal Railroad Administration (FRA) testing and commissioning procedures on the line segments, in stages to confirm there is no interfaces to existing signal equipment.
- The installation of Positive Train Control (PTC) equipment on the line segments ensuring interoperability with New Jersey Transit (NJT) and the freight railroads.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule**

**Schedule:** During the Fourth Quarter 2020, the scheduled Substantial Completion date slipped 12 months, from December 2020 to December 2021, due to the re-prioritization of the Harriman Signal Construction crew. They, along with the Signal Construction crew, were needed to support NJT's PTC installation and testing which was providing contractor support for Metro-North's PTC cable project.

**What is Being Done**

**Schedule:** The West of Hudson signal project is substantially complete and all that remains is the installation of new dragging equipment detectors. To mitigate any additional schedule delays, new dragging detectors will be relocated next to the new signal locations to avoid having to dig in long lengths of cable to reach existing locations of equipment.

**IEC Comment**

**Budget and Schedule Performance:** The IEC substantially agrees with the material presented in this report, including the stated problems and actions taken by the Agency.

**All Agency Contractor Evaluation:** The overall Contractor/Consultant performance rating for the current All-Agency Contractor Evaluation (ACE) report for this project is consistent with the IEC's observation of project performance, during this reporting period.

Metro-North Railroad

| MTA Agency: Metro-North Railroad | Status as of December 31, 2020 |
|---|---|
| Project Name: Replace and Upgrade Bridge 23 Substation | Current Budget: $41.7M |
| | Project EAC: $41.5M |
| | Substantial Completion Date at Award: Jul 2014 |
| Project No: M6050101 | Current Substantial Completion Date: Mar 2021 |
| Project Phase: Construction | Phase Complete: 95% |

**Project Description**

Metro-North Railroad (MNR) entered into a joint agreement with the New York Power Authority (NYPA) to design and construct a replacement of the existing Bridge 23 substation. The scope includes a new breaker house at Pelham, new 27 kV feeders, new switchgear at New Rochelle and a new signal power supply station at the C-14 substation. In addition, the existing Bridge 23 substation at Mount Vernon was reconfigured to better utilize the existing 138kV three phase supply.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule**

**Schedule:** During the Fourth Quarter 2020, the forecasted Substantial Completion date slipped five months from October 2020 to March 2021 due to following:

At the end of 2020, the substation was completed and handed over to MNR to put it on-line. However, some of the newly installed electronic relay components failed to work properly. Components which did not work were the 64 and 87 relays. These relays continued to trip making it difficult for operation to continue and the substation was taken off-line.

The construction team was immediately mobilized to assess the problem and took some fast-track action, but problems continued to persist which caused the project completion to slip.

**What is Being Done**

**Schedule:** The construction team has taken the following remedial measures to correct the problem:

- The engineering team from the substation manufacturer is involved with our engineers to find a solution.
- The twice weekly meetings with all the parties involved are scheduled to continuously discuss the findings.
- The corrective action of replacing the faulty relay is in process and the product has been ordered.
- The contractor has been asked to replace parts and test the substation again before putting it on-line.

The contractor and manufacturer's technicians have been asked to be available at the site when the next testing process begins so that any problems can be immediately corrected to prevent further schedule delays.

**IEC Comment**

**Budget and Schedule Performance:** The IEC substantially agrees with the material presented in this report, including the stated problems and actions taken by the Agency.

**All Agency Contractor Evaluation:** An Agency ACE evaluation is not required for this project.

Metro-North Railroad

| MTA Agency: Metro-North Railroad | Status as of December 31, 2020 |
|---|---|
| Project Name: Harlem & Hudson Lines Power Improvements | Current Budget: $42.5M & $11.4M |
| | Project EAC: $46.0M & $11.2M |
| | Substantial Completion Date at Award: Aug 2016 & Jan 2019 |
| Project No: M6050103 & M7050113 | Current Substantial Completion Date: Jun 2021 |
| Project Phase: Construction | Phase Complete: 92% |

**Project Description**

The project involves the replacement and expansion of the 86th Street substation, located within the Park Ave Tunnel. The existing substation is rated at 3.3 megawatts (MW) and is fed from a single Con-Ed source. The new substation will be more robust and redundant to provide 6.6MW of power, utilizing two independent feeds from Con-Ed and two direct current (DC) rectification systems. The project also involves the replacement of existing negative return reactors at the 110th Street substation with larger capacity units and construction of a new substation at Brewster.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule**

**Schedule:** During the Fourth Quarter 2020, the forecasted Substantial Completion date slipped seven months from November 2020 to June 2021 due to the following:

In September 2020, the Power Department made changes to the testing procedure of the new Remote Telemetry Units (RTUs). These changes required the RTU to be removed from the substation and returned to the manufacturer for Factory Acceptance Testing.

Subsequent to the reporting period, costs are being revised to reflect the impact of change orders to the project, contractor and MNR's in-house workforce due to the approved extension of time.

**What is Being Done**

**Schedule:** Multiple tele-conferences among the contractor, manufacturer, and MNR were held to ensure acceptance of the new test procedures and schedule. In addition, MNR supported the contractor's tasks with prioritizing the schedule for inspection of the contractor's Hi-Rail Vehicle and scheduling Track Outages for the equipment removal and return to the 86th Street substation.

**IEC Comment**

**Budget and Schedule Performance:** The IEC substantially agrees with the material presented in this report, including the stated problems and actions taken by the Agency.

**All Agency Contractor Evaluation:** The overall Contractor/Consultant performance rating for the current All-Agency Contractor Evaluation (ACE) report for this project is consistent with the IEC's observation of project performance, during this reporting period.

Metro-North Railroad

| MTA Agency: Metro-North Railroad | Status as of December 31, 2020 |
|---|---|
| Project Name: Purchase MOW Equipment | Current Budget: $19.1M |
| | Project EAC: $19.6M |
| | Substantial Completion Date at Award: Jun 2021 |
| Project No: M7030109 | Current Substantial Completion Date: Dec 2022 |
| Project Phase: Construction | Phase Complete: 64% |

**Project Description**

This project provides for the replacement of MNR's Maintenance of Way (MOW) work equipment that have either obsolete parts or have reached the end of useful life. Metro-North Railroad (MNR) operates a fleet of non-revenue equipment and they assist the Track & Structures Department to maintain track infrastructure and Right of Way (ROW) assets and keep them in a State of Good Repair (SGR). This project supports MNR's efforts to protect the capital investments undertaken between 1983 and 2019, addressing SGR needs to help ensure the physical plant does not deteriorate, requiring unplanned maintenance work.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule**

**Schedule:** During the Fourth Quarter 2020, the scheduled Substantial Completion date slipped 18 months from June 2021 to December 2022 due to the MTA's hold on available funds for the equipment procurements. There was no other reason for the delay. The current schedule forecast is based on a realistic assessment as to when MNR could expect the MTA to be able to issue the funds.

**What is Being Done**

**Schedule:** MNR is waiting for the MTA to take action on issuing funding which is associated with the active procurements. Requisitions that have already been submitted should be progressed first, and those requisitions depend on the MTA prioritizing and releasing the appropriate funds.

**IEC Comment**

**Budget and Schedule Performance:** The IEC substantially agrees with the material presented in this report, including the stated problems and actions taken by the Agency.

**All Agency Contractor Evaluation:** An Agency ACE evaluation is not required for this project.

Metro-North Railroad

| MTA Agency: Metro-North Railroad | Status as of December 31, 2020 |
|---|---|
| Project Name: Harmon to Poughkeepsie Signal System | Current Budget: $100.9M |
| | Project EAC: $155.9M |
| | Substantial Completion Date at Award: Feb 2020 |
| Project No: M7040102 | Current Substantial Completion Date: Jun 2022 |
| Project Phase: Construction | Phase Complete: 52% |

**Project Description**

This project scope is for the replacement of equipment, which has reached the end of its useful life, on the Hudson Line north of the Croton-Harmon passenger station to the northern limits of Metro-North's owned territory in Poughkeepsie, New York. Specifically, it includes the replacement of cables using both troughs and direct burial methods; installation of hand holes, pull boxes, and communication cases; installation of duct banks and conduits under roads and railroad tracks; and conduit and cable trough installations across bridge structures.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule & Cost**

**Schedule:** During the Fourth Quarter 2020, the scheduled Substantial Completion date slipped nine months from September 2021 to June 2022 as a result of upper management prioritizing other projects which require limited track outages.

**Cost:** During the Fourth Quarter 2020, the project had a high cost index due to the following:

A settlement of $5.3M was reached between MNR and the contractor for the time extension. In addition, an analysis has forecast the budget needs to the end of the project. Based on estimated unforeseen field issues and design changes (i.e. additional rock removal, Poughkeepsie station redesign, Bear Mountain design change, Annsville Creek design change, etc.), the EAC was updated accordingly.

**What is Being Done**

**Schedule:** A time extension was reached between MNR and the contractor. The installation of cable line was revised so the contractor could do some off-track pre-ripping to help reduce any further schedule slip.

**Cost:** Additional funding for change orders and pending change orders have been allocated from the Plan Amendment.

**IEC Comment**

**Budget and Schedule Performance:** The IEC substantially agrees with the material presented in this report, including the stated problems and actions taken by the Agency.

**All Agency Contractor Evaluation:** The overall Contractor/Consultant performance rating for the current All-Agency Contractor Evaluation (ACE) report for this project is consistent with the IEC's observation of project performance, during this reporting period.

Metro-North Railroad

| MTA Agency: Metro-North Railroad | Status as of December 31, 2020 |
|---|---|
| Project Name: Harlem Wayside Communication & Signal Improvements | Current Budget: $52.2M |
| | Project EAC: $81.3M |
| | Substantial Completion Date at Award: Mar 2020 |
| Project No: M7040112 | Current Substantial Completion Date: Mar 2021 |
| Project Phase: Construction | Phase Complete: 80% |

**Project Description**

This project consists of the installation and testing of fiber optic and copper cables and related installation materials, enclosures, equipment, conduits, and hardware. The cables that are being installed under this project are 100-pair copper communication cable, and 144-strand fiber optic cable.
Work locations are divided into three segments: Segment 1 - Woodlawn to North White Plains; Segment 2 – North White Plains to Bedford Hills; Segment 3 – Bedford Hills to Southeast Station.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Cost**

**Cost:** During the Fourth Quarter 2020, the project had a high cost Index due in part to the following change orders:

- Quantity adjustments for crushed stones, PVC conduits, etc.
- Technical advisory changes include the relocation of comm cases at Scarsdale station and the installation of a double trough north of Scarsdale station.
- Per diem claims while the contractor is working between the original contract end date and until the contract extension is finalized.
- Segment 2 and 3 contract extensions and the allowance for a Safety Engineer.

**What is Being Done**

**Cost:** Additional funding for the approved and pending change orders have been allocated from the Plan Amendment.

**IEC Comment**

**Budget and Schedule Performance:** The IEC substantially agrees with the material presented in this report, including the stated problems and actions taken by the Agency.

**All Agency Contractor Evaluation:** The overall Contractor/Consultant performance rating for the current All-Agency Contractor Evaluation (ACE) report for this project is consistent with the IEC's observation of project performance, during this reporting period.

Metro-North Railroad

| MTA Agency: Metro-North Railroad | Status as of December 31, 2020 |
|---|---|
| Project Name: M-8 Railcar Purchase - New Haven Line | Current Budget: $116.2M |
| | Project EAC: $113.6M |
| | Substantial Completion Date at Award: Jan 2017 |
| Project No: M7010102 | Current Substantial Completion Date: Feb 2022 |
| Project Phase: Construction | Phase Complete: 80% |

**Project Description**

This project involves the manufacture, testing and delivery of 66 Additional New Haven Line M8 EMU Cars. The M8 Additional Cars contract, executed in January 2017, is an amendment to the original base M8 contract for 405 cars.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule**

**Schedule:** During the Fourth Quarter 2020, the forecasted Substantial Completion date slipped 13 months from January 2021 to February 2022 due to the following:

- Poor quality control of the following sub-supplier parts and workmanship:
  1. Cracked Loop Steps
  2. High rejection of repaired wall panels
  3. Excessive Material Rejection Reports have been submitted for improper workmanship
- Various technical issues discovered during the function testing (Friction Brake Electronic Control Unit, Auxiliary Power Supply, Software)

The manufacturer also reported possible delays due to workforce shortages from the pandemic but has yet to provide details for the delays.

**What is Being Done**

**Schedule:** The Railroad's M8 Project Management Office has implemented bi-weekly calls to discuss and resolve critical issues. Also, for those cars that have been delivered to New Haven already, the open item list is transmitted on a daily basis to both the manufacturer and the Railroad's inspectors daily when inspections are performed allowing those same issues to be addressed on subsequent cars before delivery.

The Railroad performs an expedited review of all proposed corrective actions and schedules additional calls with the manufacturer as needed.

The Railroad has also allowed a shift in inspector schedules to allow inspections on Saturdays and limited off hours during weekdays.

**IEC Comment**

**Budget and Schedule Performance:** The IEC substantially agrees with the material presented in this report, including the stated problems and actions taken by the Agency.

**All Agency Contractor Evaluation:** The overall Contractor/Consultant performance rating for the current All-Agency Contractor Evaluation (ACE) report for this project is consistent with the IEC's observation of project performance, during this reporting period.

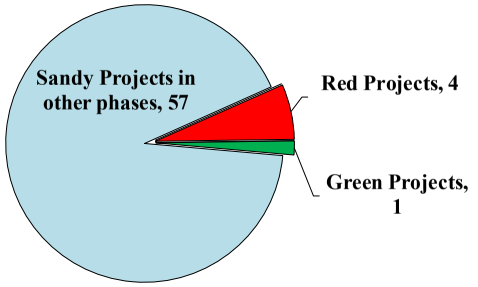
Metropolitan Transportation Authority

# 4th Quarter 2020 Traffic Light Report on MTA SANDY Program

**A total of 62 Active Sandy Projects were Reviewed for the 4th Quarter 2020**

**The 62 active projects include 5 projects in Design, 10 in Post-Design to Construction Award, 47 in Construction**

## 5 of 62 Projects in Design



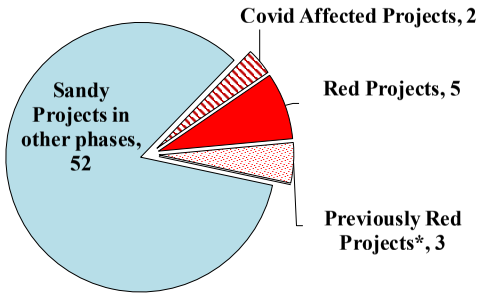

* see Terms and Definitions page

**Fourth Quarter:** 5 projects were reviewed in this phase with 1 (20%) designated green and 4 red. All red projects were for a schedule variance and due to required revisions to specification, scope coordination, and revision of equipment needs.

**Covid Impacts:** No projects in design were impacted by Covid-19 this quarter.

**Third Quarter:** 6 projects were reviewed in this phase with 4 designated green, 1 yellow, and 1 impacted by Covid-19.

## 10 of 62 Projects in Post-Design to Construction Award



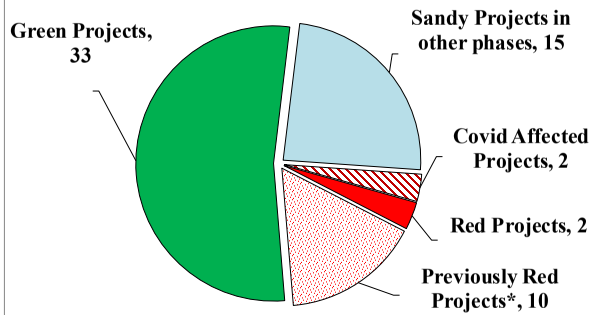

* see Terms and Definitions page

**Fourth Quarter:** 10 projects were reviewed in this phase with 3 (30%) designated as previously red and 5 red. All 5 Red projects were for schedule variances and due to funding needs and addional contract review.

**Covid Impacts:** 2 projects in Post-Design to Construction Award were impacted by Covid-19 for schedule variances. The schedule variances were due to the MTA procurement moratorium.

**Third Quarter:** 11 projects were reviewed in this phase with 3 green, 6 previously red, and 2 impacted by Covid-19.

## 47 of 62 Projects in Construction

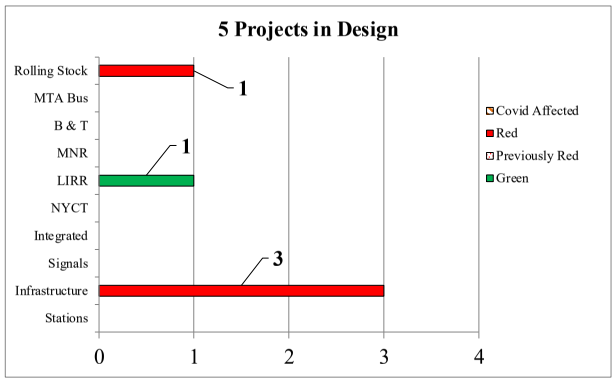


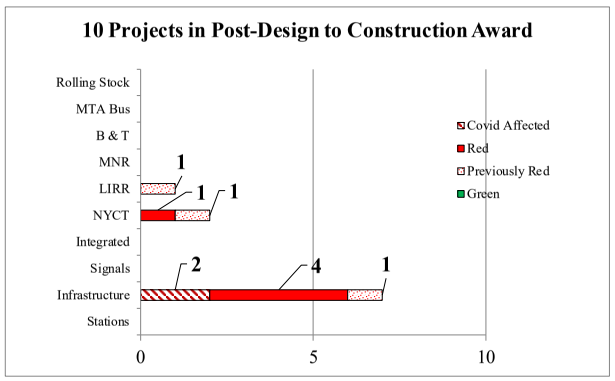

* see Terms and Definitions page

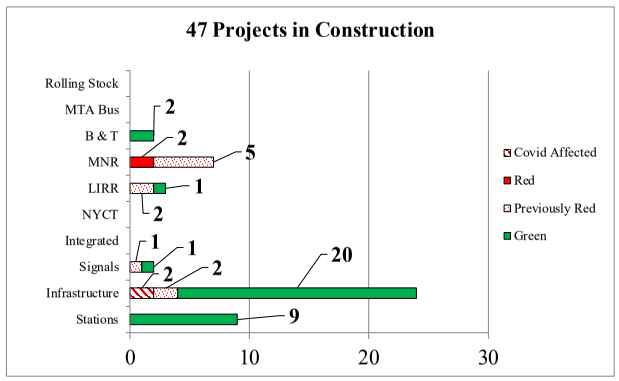
**Fourth Quarter:** 47 projects were reviewed in this phase with 33 (70%) designated green, 10 previously red, and 2 red. The 2 red projects were red for schedule variances due to scope revisions, unforeseen equipment conditions, and coordination with a vendor.

**Covid Impacts:** 2 projects in construction were impacted by Covid-19 and triggered schedule variances due to manufacturer / vendor fabrication and delivery delays.

**Third Quarter:** 49 projects were reviewed in this phase with 32 designated green, 15 previously red, 1 red, and 1 impacted by Covid-19.



# MTA Capital Core Project Terms and Definitions
# 4th Quarter 2020 Traffic Light Report

The following Terms and Definitions are used to identify a project's Traffic Light color designation using variances from quarter to quarter and are based on two performance indicators: cost and schedule. A project is designated a "***green light project***" when no performance indicator has exceeded the Traffic Light Report thresholds. A project is designated a "***red light project***" when one or more of the two indicators exceed a specified threshold. Variance reports are required for all qualified red light projects. Included in these reports are one-page project summaries (on pink paper stock) of issues associated with each project showing a **red** indicator and how the issues are being resolved. *A project is designated a "***previous red project***" after one or more performance indicators had triggered a red in a previous quarter(s). A "***previous red project***" may revert back to green after two consecutive quarters if the performance indicator(s) have not worsened.

## Core Traffic Light Report Project Terms and Definitions

| **Projects in Design: 25** |
|---|
| Green: Indices less than 110% and index movement of less than 10%. |
| Red: Cost Index: An EAC increase of 10% (or index movement of 10% or more since last Traffic Light Report). |
| Red: Schedule Variance: An increase of 3 months or more to substantial completion since last Traffic Light Report. |
| Previous Red: Previously indicated as **red** with no new substantial change since last Traffic Light Report / A project in design that has been designated as Previous Red may be returned to Green when it has been in compliance with the two performance indicators for two consecutive quarters. |

| **Projects in Construction: 258** |
|---|
| Green: Indices less than 110% and index movement of less than 10%. Other indices not exceeding those criteria specified in index formulas and criteria. |
| Red: Cost Index: An increase of 10% (or index movement of 10% or more since last Traffic Light Report). |
| Red: Schedule Variance: An increase of 3 months or more to substantial completion since last Traffic Light Report. |
| Previous Red: Previously indicated as **red** with no new substantial change since the last Traffic Light Report / A project in construction that has been designated as Previous Red may be returned to Green when it has been in compliance with the two performance indicators for two consecutive quarters. |

| **Projects impacted by Covid-19 (Temporary TLR Criteria): 3** |
|---|
| Projects in this category have triggered one or more reporting variances that are impacted by the Covid-19 pandemic. The Key Performance Indicators have exceeded one or more of the Traffic Light reporting thresholds this quarter, however, a project issue has been directly attributed to Covid-19. The issues may include; the implementation of safety protocols, new work rules and occupancy restrictions, travel limitations, reduced personnel availability, funding delays, etc. Covid-19 is a temporary imposition on the MTA's Capital Program and therefore a temporary TL has been developed for these projects. |

| **Projects impacted by Covid-19 (Temporary TLR Criteria) (cont'd):** |
|---|
| Red Lined: Cost Index: An increase of 10% (or index movement of 10% or more since the last Traffic Light Report). |
| Red Lined: Schedule Variance: An increase of 3 months or more to substantial completion since the last Traffic Light Report. |
| Previous Red: Previously indicated as Red Lined with no new substantial change since the last Traffic Light Report. / A project in construction or design that has been designated Previous Red may be returned to Green when it has been in compliance with the two performance indicators for two consecutive quarters. |

| **Report Index Formulas and Criteria:** |
|---|
| ➢ Cost Index = Total Project EAC / Current Approved Budget<br>(Note: Current Budget is not Budget at Award)<br>➢ Cumulative Cost Variance = 3 consecutive quarters with a total cost index increase that cumulatively exceeds the TLR threshold of 10% over 3 quarters. |
| ➢ Schedule Variance = Number of months of change in schedule since last Traffic Light Report<br>➢ Cumulative Schedule Variance = 3 consecutive quarters with a total change in schedule that cumulatively exceeds the TLR threshold of 3 months or more. |
| ➢ The Core TLR includes projects in CPOC's Risk-Based Monitoring Program listed at the end of the report |
| ➢ Only projects with budgets of $7M or greater are included in the report. |

## 4th Quarter 2020 Traffic Light Report - Sandy Projects
## Design, Post-Design to Construction Award, or Construction

▲ = Index increase: Trending indicates condition worsening since last quarterly report
▼ = Index decrease: Trending indicates condition improving since last quarterly report
▬ = No Change since last quarterly report

| ACEP | Description | Phase | Total Project EAC | % Phase Complete | Cost Index | Cost Trend | Schedule Variance (Months) | Schedule Trend | Traffic Light |
|---|---|---|---|---|---|---|---|---|---|
| **Construction & Development** | | | | | | | | | |
| **Stations** | | | | | | | | | |
| **Canarsie Tube** | | | | | | | | | |
| ET040222 | Recovery: Shaft Excavation - 1 Avenue (Canarsie Tube) | Construction | $17,335,502 | 100 | .97 | ▬ | 0 | ▬ | G |
| ET050209 | Recovery: Mainline Track (Canarsie Tube) | Construction | $34,504,672 | 100 | 1.00 | ▬ | 0 | ▬ | G |
| ET060213 | Recovery: Tunnel Lighting (Canarsie Tube) | Construction | $50,423,338 | 100 | 1.00 | ▬ | 0 | ▬ | G |
| ET060219 | Recovery: Pump Room (Canarsie Tube) | Construction | $24,173,895 | 100 | 1.00 | ▬ | 0 | ▬ | G |
| ET080211 | Recovery: Signals (Canarsie Tube) | Construction | $26,109,726 | 100 | .71 | ▬ | 0 | ▬ | G |
| ET090211 | Recovery: 2 Circuit Breaker Houses (Canarsie Tube) | Construction | $36,178,677 | 100 | .99 | ▬ | 0 | ▬ | G |
| ET090212 | Recovery: Power Cable, Communication Cable and Ducts (Canarsie Tube) | Construction | $284,124,776 | 74 | .82 | ▬ | 0 | ▬ | G |
| ET090309 | Mitigation: Power Cable, Communication Cable and Ducts (Canarsie Tube) | Construction | $49,704,193 | 100 | .49 | ▬ | 0 | ▬ | G |
| **All Other Stations Projects** | | | | | | | | | |
| ET060332 | Mitigation: 3 Pump Rooms (53rd St Tube) | Construction | $16,425,223 | 15 | 1.00 | ▬ | 0 | ▬ | G |
| **Infrastructure** | | | | | | | | | |
| **Coney Island Yard Flood Mitigation** | | | | | | | | | |
| ET100211 | Recovery: Power Cable at Coney Island Yard | Construction | $164,562,094 | 46 | .99 | ▬ | 0 | ▬ | G |
| ET100307 | Mitigation: Long Term Perimeter Protection at Coney Island Yard | Construction | $349,769,875 | 46 | .99 | ▬ | 0 | ▬ | G |
| **148th Street Yard** | | | | | | | | | |
| ET100209 | Recovery: Power Cable at 148 Street Yard | Construction | $14,570,909 | 80 | 1.00 | ▬ | 0 | ▬ | G |
| ET100309 | Mitigation: Long Term Perimeter Protection at 148th Street Yard | Construction | $78,014,529 | 85 | 1.00 | ▬ | 0 | ▬ | G |
| **Rutgers Tube** | | | | | | | | | |
| ET050210 | Recovery: Mainline Track (Rutgers Tube) | Construction | $10,763,493 | 21 | 1.00 | ▬ | 0 | ▬ | G |
| ET060214 | Recovery: Tunnel Lighting (Rutgers Tube) | Construction | $7,903,769 | 21 | 1.00 | ▬ | 0 | ▬ | G |
| ET060232 | Recovery: 2 Pump Rooms (Rutgers Tube) | Construction | $20,955,350 | 21 | 1.00 | ▬ | 0 | ▬ | G |
| ET060233 | Recovery: Fan Plant (Rutgers Tube) | Construction | $10,438,868 | 21 | 1.00 | ▬ | 0 | ▬ | G |
| ET080213 | Recovery: Signals (Rutgers Tube) | Construction | $14,068,069 | 21 | 1.00 | ▬ | 0 | ▬ | G |
| ET090219 | Recovery: Power and Communication Cables (Rutgers Tube) | Construction | $47,739,527 | 21 | 1.00 | ▬ | 0 | ▬ | G |

## 4th Quarter 2020 Traffic Light Report - Sandy Projects
## Design, Post-Design to Construction Award, or Construction

▲ = Index increase: Trending indicates condition worsening since last quarterly report
▼ = Index decrease: Trending indicates condition improving since last quarterly report
▬ = No Change since last quarterly report

| ACEP | Description | Phase | Total Project EAC | % Phase Complete | Cost Index | Cost Trend | Schedule Variance (Months) | Schedule Trend | Traffic Light |
|---|---|---|---|---|---|---|---|---|---|
| **Construction & Development** | | | | | | | | | |
| **Infrastructure** | | | | | | | | | |
| **207th Street Yard** | | | | | | | | | |
| ET100210 | Recovery: Power Cable at 207 Street Yard | Construction | $40,779,241 | 49 | 1.05 | ▬ | 0 | ▬ | G |
| ET100219 | Recovery: Yard Track (207 Street Yard) | Construction | $62,722,733 | 49 | 1.03 | ▬ | 0 | ▬ | G |
| ET100220 | Recovery: Yard Switches (207 Street Yard) | Construction | $30,984,884 | 49 | .62 | ▬ | 0 | ▬ | G |
| ET100310 | Mitigation: Long Term Perimeter Protection at 207th Street Yard | Construction | $168,426,766 | 49 | .99 | ▬ | 0 | ▬ | G |
| ET100312 | Mitigation: 207th Street Yard Portal | Construction | $57,681,539 | 49 | 2.12 | ▲ | 0 | ▬ | G |
| ET100314 | Mitigation: 207th Street Yard Sewers | Construction | $141,699,097 | 14 | 1.00 | ▬ | 0 | ▬ | G |
| **All Other Infrastructure Projects** | | | | | | | | | |
| ET040327 | Mitigation: Street Level Openings at 7 Stations and 1 Fan Plant | Construction | $62,369,994 | 90 | 1.19 | ▬ | 0 | ▬ | G |
| ET060321 | Mitigation: 4 Fan Plants | Construction | $34,572,831 | 100 | 1.00 | ▬ | 0 | ▬ | G |
| ET060330 | Mitigation: 1 Fan Plant on the Flushing Line | Construction | $13,626,750 | 100 | .99 | ▬ | -2 | ▼ | G |
| ET090304 | Mitigation: Montague-Furman Substation on the Broadway Line | Construction | $9,140,708 | 0 | .89 | ▼ | 0 | ▬ | G |
| ET120307 | Mitigation: Various Bus Depots | Construction | $26,127,879 | 82 | .99 | ▬ | 1 | ▲ | R |
| ES070211 | Recovery: Reconstruction of Clifton Car Repair Shop | Construction | $34,890,731 | 67 | 1.00 | ▬ | 3 | ▲ | R |
| ES070302 | Mitigation: Reconstruction of Clifton Car Repair Shop | Construction | $167,831,126 | 80 | 1.03 | ▬ | 3 | ▲ | R |
| ES070303 | Mitigation: St. George Terminal Yard | Construction | $51,352,194 | 65 | 1.00 | ▬ | 1 | ▲ | R |
| ET070310 | Mitigation: Washout Protection on the Rockaway Line | Design | $40,351,705 | 77 | 1.68 | ▬ | 6 | ▲ | R |
| ET070311 | Mitigation: Installation of New Crossovers at Beach 105th Street Station on the Rockaway Line | Design | $63,089,295 | 77 | 1.06 | ▬ | 6 | ▲ | R |
| ET070313 | Mitigation: Compressor Room Protection at Rockaway Park Yard | Design | $8,065,445 | 77 | 1.04 | ▬ | 6 | ▲ | R |
| ET070209 | Recovery: Wrap-up Rockaway Line | Post Des to Const Awd | $56,395,934 | 100 | 1.19 | ▬ | 3 | ▲ | R |
| ET070308 | Mitigation: Steinway Portal | Post Des to Const Awd | $15,259,992 | 100 | .76 | ▬ | 7 | ▲ | R |

## 4th Quarter 2020 Traffic Light Report - Sandy Projects
## Design, Post-Design to Construction Award, or Construction

▲ = Index increase: Trending indicates condition worsening since last quarterly report
▼ = Index decrease: Trending indicates condition improving since last quarterly report
▬ = No Change since last quarterly report

| ACEP | Description | Phase | Total Project EAC | % Phase Complete | Cost Index | Cost Trend | Schedule Variance (Months) | Schedule Trend | Traffic Light |
|---|---|---|---|---|---|---|---|---|---|
| **Construction & Development** | | | | | | | | | |
| **Infrastructure** | | | | | | | | | |
| **All Other Infrastructure Projects** | | | | | | | | | |
| ET090306 | Mitigation: Substation Hardening at 9 Locations | Post Des to Const Awd | $45,600,000 | 99 | 1.19 | ▬ | 6 | ▲ | R |
| ET090307 | Mitigation: Substation Hardening at 11 Locations | Post Des to Const Awd | $45,274,061 | 99 | 1.27 | ▬ | 6 | ▲ | R |
| ET090308 | Mitigation Reserve: Deployable Substations | Post Des to Const Awd | $48,328,865 | 100 | 1.02 | ▬ | 0 | ▬ | R |
| ET090310 | Mitigation: Back-up Power Control Center | Post Des to Const Awd | $15,886,545 | 98 | .94 | ▬ | 10 | ▲ | R |
| ET090311 | Mitigation: Substation Hardening at 5 Locations | Post Des to Const Awd | $26,400,000 | 99 | .88 | ▬ | 6 | ▲ | R |
| **Signals / Train Controls** | | | | | | | | | |
| **207th Street Yard** | | | | | | | | | |
| ET100218 | Recovery: 207 Street Yard Signal System | Construction | $294,210,704 | 40 | .98 | ▬ | 0 | ▬ | G |
| **All Other Signals / Train Controls Projects** | | | | | | | | | |
| ET040317 | Mitigation: Upgrade Emergency Booth Communication System | Construction | $78,316,385 | 56 | 1.00 | ▬ | 0 | ▬ | R |
| **New York City Transit** | | | | | | | | | |
| **All Other New York City Transit Projects** | | | | | | | | | |
| ET160310 | Mitigation: Consolidated Revenue Facility | Post Des to Const Awd | $11,576,496 | 100 | .77 | ▬ | 7 | ▲ | R |
| ET160312 | Mitigation: Tiffany Central Warehouse | Post Des to Const Awd | $26,225,217 | 100 | 1.04 | ▬ | 6 | ▲ | R |
| **Long Island Rail Road** | | | | | | | | | |
| EL0303ZH | Flood and Emergency Management Equipment Mitigation | Construction | $24,892,132 | 63 | .82 | ▼ | -2 | ▼ | R |

## 4th Quarter 2020 Traffic Light Report - Sandy Projects
## Design, Post-Design to Construction Award, or Construction

▲ = Index increase: Trending indicates condition worsening since last quarterly report
▼ = Index decrease: Trending indicates condition improving since last quarterly report
▬ = No Change since last quarterly report

| ACEP | Description | Phase | Total Project EAC | % Phase Complete | Cost Index | Cost Trend | Schedule Variance (Months) | Schedule Trend | Traffic Light |
|---|---|---|---|---|---|---|---|---|---|
| **Construction & Development** | | | | | | | | | |
| **Long Island Rail Road** | | | | | | | | | |
| EL0502ZC | Restoration of the Long Beach Branch | Construction | $68,666,958 | 80 | .96 | ▬ | 0 | ▬ | R |
| EL0602ZD | West Side Storage Yard Restoration | Construction | $43,512,962 | 49 | .99 | ▬ | 0 | ▬ | G |
| EL0402ZA | East River Tunnel Restoration of Signal System Reliability | Design | $121,894,902 | 30 | .67 | ▬ | 0 | ▬ | G |
| EL0603ZS | Long Island City Yard Resiliency | Post Des to Const Awd | $37,581,253 | 19 | 1.42 | ▲ | 2 | ▲ | R |
| **Metro-North Railroad** | | | | | | | | | |
| **Hudson Line Ph 1 & 2 Power and C & S Restoration** | | | | | | | | | |
| EM040205 | Communications & Signal Infrastructure Restoration Phase 1 | Construction | $93,995,122 | 76 | .95 | ▬ | 0 | ▬ | R |
| EM040301 | Power and Signals Mitigation | Construction | $49,491,910 | 76 | 1.50 | ▲ | 0 | ▬ | R |
| EM040302 | Hudson Line Power and Signal Resiliency | Construction | $35,152,702 | 76 | 1.00 | ▬ | 0 | ▬ | R |
| EM050206 | Power Infrastructure Restoration Phase 1 | Construction | $175,647,701 | 76 | .99 | ▬ | 0 | ▬ | R |
| **All Other Metro-North Railroad Projects** | | | | | | | | | |
| EM030202 | Right of Way Restoration | Construction | $8,000,000 | 100 | 1.00 | ▬ | 1 | ▲ | R |
| EM050208 | Power Infrastructure Restoration - Substations | Construction | $45,682,805 | 90 | 1.00 | ▬ | 5 | ▲ | R |
| EM050209 | Power Infrastructure Restoration - Harlem River Lift Bridge | Construction | $7,818,047 | 93 | .93 | ▬ | 4 | ▲ | R |
| **Bridges & Tunnels** | | | | | | | | | |
| ED040302 | Raising of revenue control equipment at the Queens Midtown Tunnel Service Building above the 500-year flood elevation. | Construction | $6,989,624 | 84 | .96 | ▬ | 0 | ▬ | G |
| ED040308 | Enhancement of electric power resiliency at RFK bridge | Construction | $35,527,863 | 24 | .95 | ▬ | 0 | ▬ | G |
| **Cross Agency** | | | | | | | | | |
| **Rolling Stock** | | | | | | | | | |
| ET060317 | Mitigation: Conversion of 2 Pump Trains | Design | $19,119,839 | 98 | .71 | ▬ | 5 | ▲ | R |

Metropolitan Transportation Authority

# Summary of Sandy Traffic Light Report Design Exceptions

**(Fourth Quarter 2020 - As of December 31, 2020)**

| ACEP | Project Name | Index Trigger | EAC | Design Completion Date | Reason for Variance Since Last Quarterly Report | What is Being Done | IEC Comment: All Agency Contractor Evaluation |
|---|---|---|---|---|---|---|---|
| **Construction and Development - Infrastructure** | | | | | | | |
| ET070310 | Sandy Mitigation: Washout Protection on the Rockaway Line | Schedule | $40.4M | June 2021 | During the Fourth Quarter 2020, the forecasted design completion slipped six months, from December 2020 to June 2021. This was due to revised Master Project Requirements and Design Criteria (PRDC) not being available for incorporation. | The project made additional requests for the latest Master PRDC. | An Agency ACE evaluation is not required for this project |
| ET070311 | Sandy Mitigation: Installation of New Crossovers at Beach 105th Street Station on the Rockaway Line | Schedule | $63.1M | June 2021 | During the Fourth Quarter 2020, the forecasted design completion slipped six months, from December 2020 to June 2021. This was due to the revised Master Project Requirements and Design Criteria (PRDC) not being available for incorporation into the specifications. Additionally, the project required more time to coordinate the utility scope of work. | The project made an additional request for the latest Master PRDC. Conversations and meetings are ongoing with PSEG and NYCDEP. | An Agency ACE evaluation is not required for this project |
| ET070313 | Sandy Mitigation: Compressor Room Protection at Rockaway Park Yard | Schedule | $8.1M | June 2021 | During the Fourth Quarter 2020, the forecasted design completion slipped six months, from December 2020 to June 2021. This was due to the revised Master Project Requirements and Design Criteria (PRDC) not being available for incorporation into the specifications. Additionally, the project required more time to coordinate the utility scope of work. | The project made an additional request for the latest Master PRDC. Conversations and meetings are ongoing with PSEG and NYCDEP. | An Agency ACE evaluation is not required for this project |
| **Cross Agency - Rolling Stock** | | | | | | | |
| ET060317 | Sandy Mitigation: Conversion of 2 Pump Trains | Schedule | $19.1M | June 2021 | During the Fourth Quarter 2020, the forecasted design completion slipped six months, from December 2020 to May 2021. This was due to the proposed cost of the proposed pump train equipment exceeding the budget. | Negotiations of commercial and technical terms are on-going, with the prospective car builder, to reduce the purchase price to an amount that aligns with the allocated budget for this contract. | An Agency ACE evaluation is not required for this project |

IEC Comment: The IEC substantially agrees with the material presented in this report, including the stated problems and actions taken by the Agency.

| MTA Agency: New York City Transit | Status as of December 31, 2020 |
|---|---|
| Project Name: Sandy Repair and Mitigation – Clifton Shop | Current Budget: $34.9M & $162.8M |
| | Project EAC: $34.9M & $167.8M |
| | Substantial Completion Date at Award: Jul 2020 |
| Project No: ES070211 & ES070302 | Current Substantial Completion Date: Dec 2021 |
| Project Phase: Construction | Phase Complete: 80% |

**Project Description**

This project will develop an effective flood mitigation scheme to protect the Clifton Yard and Shop in the Borough of Staten Island. The goal of the project is to repair previous damage from Superstorm Sandy and fortify the shop assets against flooding and storm surges from up to a Category 2 hurricane coupled with high tides. The design-build project also incorporates capital improvements to the Clifton Yard facility which includes the demolition of the existing shop buildings and the construction of a new Clifton Car Repair Shop with new equipment, track realignments in the yard and site drainage improvements. The Sandy Program work, authorized under ES070211 and ES070302 and the Capital Program improvements, under S7070111 are simultaneously in construction at the Clifton Shop and Yard.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule – Impacted this quarter by Covid-19**

**Schedule:** During the Fourth Quarter 2020, the forecasted Substantial Completion date slipped three months, from September to December 2021, due to fabrication and delivery delays from manufacturers and vendors who have been impacted by Covid-19 and the delay in delivery of the 1500 kw Con Edison provided transformer which subsequently delayed the energization of permanent electrical service to 2021.

**What is Being Done**

**Schedule:** Permanent electrical service from Con Edison was obtained January 25, 2021. The project has started pre-functional inspections and continues to plan, coordinate and schedule multiple commissioning related activities within reasonable time frames. It is anticipated that further Covid-19 issues may continue into 2021.

**IEC Comment**

**Budget and Schedule Performance:** The IEC substantially agrees with the material presented in this report, including the stated problems and actions taken by the Agency.

**All Agency Contractor Evaluation:** The overall Contractor/Consultant performance rating for the current All-Agency Contractor Evaluation (ACE) report for this project is consistent with the IEC's observation of project performance, during this reporting period.

| MTA Agency: New York City Transit | Status as of December 31, 2020 |
|---|---|
| Project Name: Sandy Recovery - Wrap-up Rockaway Line | Current Budget: $47.2M |
| | Project EAC: $56.4M |
| | Original Award Date: Mar 2020 |
| Project No: ET070209 | Current Award Date: Jun 2021 |
| Project Phase: Post-Design to Construction Award | Phase Complete: 0% |

**Project Description**

This project will provide remaining repairs to Superstorm Sandy damage that occurred along the Rockaway Line. Work will include structural repairs on the North Channel Bridge, cable replacement between Howard Beach Station and Hammels Wye, replacement of signal switch heaters at Rockaway Park Yard and replacement of signal cables at various locations along the line.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule**

**Schedule:** During the Fourth Quarter 2020, the forecasted award date slipped three months, from March 2021 to June 2021. This was due to continued funding approval delay.

**What is Being Done**

**Schedule:** Cost saving measures were investigated prior to advertisement. A budget modification is in circulation to allow the project to proceed to award. The funding issues have been resolved and the project is moving forward.

**IEC Comment**

**Budget and Schedule Performance:** The IEC substantially agrees with the material presented in this report, including the stated problems and actions taken by the Agency.

**All Agency Contractor Evaluation:** An Agency ACE evaluation is not required for this project.

| MTA Agency: New York City Transit | Status as of December 31, 2020 |
|---|---|
| Project Name: Sandy Mitigation - Steinway Portal | Current Budget: $20.0M |
| | Project EAC: $15.3M |
| | Original Award Date May 2021 |
| Project No: ET070308 | Current Award Date: Dec 2021 |
| Project Phase: Post-Design to Construction Award | Phase Complete 0% |

**Project Description**

This project will construct flooding mitigation at the Steinway Portal between Hunters Point Avenue and Court Square stations, on the Flushing Line in Queens. The work includes construction of retaining walls on both sides of the tunnel portal to allow for the insertion of a deployable watertight flexgate cover.

The project has been bundled with two other prior existing projects: The Steinway Under River Tube Hardening & Communications Panel relocation.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule – Impacted this quarter by Covid-19**

**Schedule:** During the Fourth Quarter 2020, the forecasted award date slipped seven months, from May 2021 to December 2021, due to the fact that the project has been reconfigured as a triple bundle procurement and a new award target has been established. Also, the new date accounts for unanticipated additional administrative effort and Covid-19 delays.

**What is Being Done**

**Schedule:** The individual designs are completed. Currently, the project is working with the MTA Legal Department on details of merging the specifications for the 3 projects. There is also a Real Estate negotiation nearing completion related to the Portal Project.

**IEC Comment**

**Budget and Schedule Performance:** The IEC substantially agrees with the material presented in this report, including the stated problems and actions taken by the Agency.

**All Agency Contractor Evaluation**: The overall Contractor/Consultant performance rating for the current All-Agency Contractor Evaluation (ACE) report for this project is consistent with the IEC's observation of project performance, during this reporting period.

| MTA Agency: New York City Transit | Status as of December 31, 2020 |
|---|---|
| Project Name: Sandy Mitigation – Substation Hardening at 24 Total Locations | Current Budget: $38.0M, $36.6M, $29.7M |
| | Project EAC: $45.6M, $46.2M, $26.4M |
| | Original Award Date: May 2021 |
| Project No: ET090306, ET0903307, ET0903311 | Current Award Date: Nov 2021 |
| Project Phase: Post Design to Construction Award | Phase Complete: 0% |

**Project Description**

These projects provide flood protection improvements at substations in the Boroughs of Brooklyn, Manhattan and Queens. Work involves the replacement of existing convention doors for personnel access with flood doors, roll up doors for equipment and vehicular access with hydraulic flood gate or erectable logs and personnel access hatch and ventilation

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule**

**Schedule:** During the Fourth Quarter 2020, the forecasted award date slipped six months, from May 2021 to November 2021, due in part to funding issues. MTA Construction & Development (C&D) Contract had not assigned a management lead to review the Design-Build package as they had not received the funding confirmation from MTA C&D Development. These three projects will be bundled and awarded together.

**What is Being Done**

**Schedule:** MTA C&D Contract has assigned a management lead to review the Design-Build package as the project has now received a funding confirmation from MTA C&D Development

**IEC Comment**

**Budget and Schedule Performance:** The IEC substantially agrees with the material presented in this report, including the stated problems and actions taken by the Agency.

**All Agency Contractor Evaluation**: The overall Contractor/Consultant performance rating for the current All-Agency Contractor Evaluation (ACE) report for this project is consistent with the IEC's observation of project performance, during this reporting period.

| MTA Agency: New York City Transit | Status as of December 31, 2020 |
|---|---|
| Project Name: Sandy Mitigation - Back-up Power Control Center | Current Budget: $16.9M |
| | Project EAC: $15.9M |
| | Original Award Date: Sept 2019 |
| Project No: ET090310 | Current Award Date: Dec 2021 |
| Project Phase: Post-Design to Construction Award | Phase Complete: 0% |

**Project Description**

This project will design and build a new back-up Emergency Power Control Center (EPCC), to be located at the Jay Street Substation, to ensure that the EPCC can seamlessly operate as the Power Control Center (PCC) in the event that the main PCC at 53rd Street, Manhattan is not functional or inaccessible.
The main scope of work includes furnishing and installing a new Supervisory Control and Data Acquisition (SCADA) system for the EPCC that is capable of seamless integration with the existing SCADA master software at the PCC which is currently in service.
This project will connect the sixteen zone control rooms for the BMT Division at the EPCC so that the EPCC is operational for the BMT Division. The Design-Build contractor shall perform the work so that MTA can later connect the IRT and IND Divisions to the EPCC.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule – Impacted this quarter by Covid-19**

**Schedule:** During the Fourth Quarter 2020, the forecasted award date slipped ten months, from February to December 2021. This was due to the Step 1 Request for Qualifications (RFQ) advertisement for this contract being placed on-hold under an MTA procurement moratorium as a result of the Covid-19 pandemic and the resultant funding shortfalls. Full FTA funding has been requested for this contract which is anticipated to be available in the Fourth Quarter 2021.

**What is Being Done**

**Schedule:** While awaiting the lifting of the procurement moratorium and funding confirmation, in order to advertise the Step 1 RFQ, the design team continues to revise Step 2 Request for Proposal (RFP) documents such as the Project Requirement and Design Criteria (PRDC) and Division 1 Specifications in coordination with MTA C&D Contracts.

**IEC Comment**

**Budget and Schedule Performance:** The IEC substantially agrees with the material presented in this report, including the stated problems and actions taken by the Agency.

**All Agency Contractor Evaluation:** An Agency ACE evaluation is not required for this project.

| MTA Agency: New York City Transit | Status as of December 31, 2020 |
|---|---|
| Project Name: Sandy Mitigation - Consolidated Revenue Facility | Current Budget: $15.0M |
| | Project EAC: $11.6M |
| | Original Award Date: July 2018 |
| Project No: ET160310 | Current Award Date: July 2021 |
| Project Phase: Post-Design to Construction Award | Phase Complete: 0% |

**Project Description**

This project will provide an effective flood mitigation scheme to protect the Consolidated Revenue Facility located in Maspeth, Queens. The project will design and implement flood mitigation/resiliency measures against a Federal Emergency Management Agency (FEMA) +2 feet flood event: including construction of a new perimeter flood barrier/wall at the property line, installation of stop logs at all access openings (which are stored within the facility), improving drainage and pumping and restoration of the Newtown Creek bank that includes armor with sheeting.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule**

**Schedule:** During the Fourth Quarter 2020, the forecasted award date slipped seven months, from December 2020 to July 2021. This was due to the longer time needed for MTA Construction & Development Contracts Review.

**What is Being Done**

**Schedule:** The design package is at the end of legal review. The project is waiting for the Authorization to Award (ATA) approval. Award is forecast for May 2021.

**IEC Comment**

**Budget and Schedule Performance:** The IEC substantially agrees with the material presented in this report, including the stated problems and actions taken by the Agency.

**All Agency Contractor Evaluation:** An Agency ACE evaluation is not required for this project.

Metro-North Railroad

| MTA Agency: Metro-North Railroad | Status as of December 31, 2020 |
|---|---|
| Project Name: Sandy - Power Infrastructure Restoration of Hudson Line Substations | Current Budget: $45.7M |
| | Project EAC: $45.7M |
| | Substantial Completion Date at Award: Feb 2017 |
| Project No: EM050208 | Current Substantial Completion Date: Jun 2021 |
| Project Phase: Construction | Phase Complete: 90% |

**Project Description**

This project will replace three Hudson Line substations damaged by Superstorm Sandy. While the three substations, located at Tarrytown, Riverdale and Croton-Harmon, were repaired after Sandy and returned to service, their useful lives were reduced and require full replacement in order to provide the functionality and reliability needed to continue running full Hudson Line service. Resiliency will be incorporated by constructing the new substations to Above Base Flood Elevation (ABFE) plus 4 feet. The Base Flood Elevation is the regulatory height requirement in relation to the mean sea level that has a one percent chance or greater of flooding in a given year as determined by the Federal Emergency Management Agency (FEMA). In addition, a fourth substation located in Brewster, New York that is funded under another project, is also a part of this contract's scope of work.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule**

**Schedule:** During the Fourth Quarter 2020, the forecasted Substantial Completion date slipped five months, from January 2021 to June 2021, due to the following reasons:

*Riverdale* - Delay in the completion of the fiber optic communication line to the new crew quarters from the turnover of the Sandy Hudson Line Restoration project. This delay prevented the relocation of user group personnel, in the Power and Communications & Signals groups, to the new crew quarters and therefore, not allowing the demolition of the old substation to proceed (the existing crew quarters reside inside the old substation).
*Tarrytown* - Delay caused by failed cable/insulation during hipot tests in achieving acceptable values after corrections were done by the switchgear manufacturer and contractor for rust condition on one of the DC breakers and new rectifier relay settings.
*Croton Harmon* - Delay caused by a new revision of the relay coordination. There was a study to correct the errors encountered in the relays settings as part of the inspection and testing of the new rectifiers.

**What is Being Done**

**Schedule:** To mitigate further schedule delays to the project, the following actions have been, or are in the process of being taken:

- Verify and confirm that system components are acceptable for a safe and successful substation cutover.
- Request and expedite switchgear manufacturer personnel support to come to the job site to help resolve testing and relay settings issues encountered in the substations.
- Continued coordination with the Power user group for prioritizing support in cutover and commissioning of the new substation(s).

**IEC Comment**

**Budget and Schedule Performance:** The IEC substantially agrees with the material presented in this report, including the stated problems and actions taken by the Agency.

**All Agency Contractor Evaluation:** The overall Contractor/Consultant performance rating for the current All-Agency Contractor Evaluation (ACE) report for this project is consistent with the IEC's observation of project performance, during this reporting period.

Metro-North Railroad

| MTA Agency: Metro-North Railroad | Status as of December 31, 2020 |
|---|---|
| Project Name: Sandy - Power Infrastructure Restoration – Harlem River Lift Bridge | Current Budget: $8.3M |
| | Project EAC: $7.8M |
| | Substantial Completion Date at Award: Jan 2019 |
| Project No: EM050209 | Current Substantial Completion Date: Mar 2021 |
| Project Phase: Construction | Phase Complete: 93% |

**Project Description**

This project provides for a Bronx-Manhattan power cable tie system to provide back-up power between the two sides of the Harlem River Lift Bridge (HRLB). The new power cable tie in will be installed in the existing ductbank/manhole system of the existing micro tunnel that spans under the Harlem River. Two 350KVA transformers and switches will be provided to the AC substations in Manhattan and the Bronx. This project also provides Programmable Logic Controller (PLC) programming for controlling the power between the two sides of the HRLB.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule**

**Schedule:** During the Fourth Quarter 2020, the forecasted Substantial Completion date slipped four months from November 2020 to March 2021 due to the following reasons:

- MNR's Power Department personnel were unavailable last quarter to support the contractor's transformer energization test witnessing due to other higher priority work assignments on the railroad. As a result, the MNR Power department requested that the contractor re-do the transformer witnessed hipot test once MNR personnel were available.
- MNR Power Department states the HRLB is not operational due to its PLC and drives communication issue Due to issues with the drive's password, the replaced drive was not communicating with the bridge's PLC controller. MNR Power department was working on the issues and contacting the manufacture for the drive & PLC to bypass the password issue but was not successful. MNR Power department contracted with the former Link Control engineer who previously programmed the bridge's PLC and drive and is in the process of scheduling a site visit). The commissioning test (last step of completing the project) requires the bridge lift, which can't be performed until the bridge is functional.

**What is Being Done**

**Schedule:** To mitigate any further negative schedule impact, the project is actively and closely monitoring the Covid-19 situation and working with the Force Account department to improve coordination for better support to complete the commissioning test. Also, the project is coordinating with the MNR Power department for any support required to resolve the PLC & Drives communication of HRLB.

**IEC Comment**

**Budget and Schedule Performance:** The IEC substantially agrees with the material presented in this report, including the stated problems and actions taken by the Agency.

**All Agency Contractor Evaluation:** The overall Contractor/Consultant performance rating for the current All-Agency Contractor Evaluation (ACE) report for this project is consistent with the IEC's observation of project performance, during this reporting period.

# Projects in CPOC's Risk-Based Monitoring Program
## (4th Quarter 2020 Traffic Light Report – Period Ending December 31, 2020)

**The following projects in CPOC's Risk-based Monitoring Program are currently reported on by the responsible MTA Business Unit in accordance with the CPOC Work Plan schedule and are continually monitored by the Independent Engineering Consultant. Monitored Capital Program projects are included in the Quarterly Capital Traffic Light Report. Monitored Sandy Program projects are included in the Quarterly Sandy Traffic Light Report. The program/project list is subject to periodic review and adjustment by the MTA.**

| Projects in CPOC's Risk-Based Monitoring Program | | |
|---|---|---|
| **Capital Program** | | **Project** |
| **2010-14** | **2015-19** | |
| **Integrated Capital Projects** | | |
| | X | Second Avenue Subway - Phase 2 |
| X | X | East Side Access & Regional Investments |
| | X | Penn Station Access |
| | X | LIRR Expansion Project – Mainline Third Track - Floral Park to Hicksville |
| **Signals and Communications** | | |
| X | X | Positive Train Control |
| | X | Communications Based Train Control – 8th Ave Line |
| X | | Communications Based Train Control - Queens Blvd. West- Phase 1 |
| | X | Communications Based Train Control - Queens Blvd. West- Phase 2 |
| | X | Communications Based Train Control – Culver Line |
| X | X | Integrated Service Information and Management B Division |
| X | X | Replace Bus Radio System |
| **Subway Car, Bus and Rolling Stock Procurement** | | |
| X | X | New Subway Car Procurement |
| X | X | New Bus Procurement |
| X | X | Commuter Rail Road Rolling Stock Procurement |
| **Passenger Stations Program** | | |
| | X | ADA Reconstruction Times Square Station – 42nd Street Connection Project |
| | X | New Fare Payment System – Phase 2 |
| | X | ADA 149th St/Tremont Ave Stations |
| | X | ADA Accessibility Package A |

# Projects in CPOC's Risk-Based Monitoring Program
## (4th Quarter 2020 Traffic Light Report – Period Ending December 31, 2020)

| Capital Program | | Project |
|---|---|---|
| 2010-14 | 2015-19 | |
| **Shops and Yards** | | |
| | X | Harmon Shop Replacement Phase V, Stage 2 |
| X | | New Mid Suffolk Electric Yard |
| | X | Morris Park Diesel Locomotive Shop |
| **Line Structures and Track** | | |
| X | | Jamaica Capacity Improvements Phase 1 |
| **Bridges and Tunnels** | | |
| | X | Throgs Neck Bridge Replace Suspended Span Deck |
| **Sandy Program** | | |
| Sandy Program | | Rutgers Tube Rehabilitation |
| Sandy Program | | Reconstruct Clifton Repair Shop |
| Sandy Program | | Coney Island Yard Long Term Perimeter Protection |
| Sandy Program | | 207th Street Yard Long Term Perimeter Protection |