



Metropolitan Transportation Authority

Capital Program Committee Meeting

March 2023

Committee Members

J. Lieber, Chair

S. Soliman, Vice Chair

A. Albert

J. Barbas

G. Bringmann

N. Brown

S. Chu

M. Fleischer

R. Glucksman

D. Jones

B. Lopez

D. Mack

H. Mihaltzes

J. Samuelson

V. Tessitore

N. Zuckerman

Capital Program Committee Meeting

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

Monday, 3/27/2023
12:45 - 2:00 PM ET

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**CONSTRUCTION & DEVELOPMENT
COMMITTEE ACTIONS
SUMMARY for MARCH 2023**

Responsible Department	Vendor Name	Total Amount	Summary of Action
Contracts	1. Forte-FOS JV 2. Paul J. Scariano, Inc. 3. Restani Construction Corporation	\$300,000,000 Aggregate	MTA Construction and Development requests Board approval to award six publicly advertised and competitively solicited indefinite quantity contracts to three firms for the design, construction and repairs of structural steel, concrete, masonry, and other miscellaneous components in the five boroughs of New York City. Two contracts will be awarded to each firm, one state-funded and one federally funded. The Contracts are “zero-dollar” based with no minimum guarantee of any assignments.

MINUTES OF MEETING
MTA CAPITAL PROGRAM COMMITTEE
February 21, 2023
New York, New York
12:45 P.M.

CPC members present (*attended remotely):

Hon. Janno Lieber
Hon. Andrew Albert
Hon. Jamey Barbas
Hon. Gerard Bringmann
Hon. Randolph Glucksman*
Hon. Sherif Soliman
Hon. David Jones
Hon. Blanca Lopez
Hon. Haeda Mihaltses

CPC members not present:

Hon. Norman Brown
Hon. Sammy Chu
Hon. Michael Fleischer
Hon. David Mack
Hon. Vinnie Tessitore
Hon. Neal Zuckerman

MTA staff present:

Lew Deara
Evan Eisland
Anthony Febrizio
Michael Jew-Geralds
John McCarthy
Mark Roche
Cathy Sheridan
Jamie Torres-Springer
Michele Woods

Independent Engineering Consultant staff present:

Calvin Gordon
Elizabeth King

* * *

Chairman Lieber called the February 21, 2023 Capital Program Committee Meeting to order at 2:00 P.M.

Public Comments Period

There were five Public Speakers during the Public Comments Period: Lisa Daglian; Jason Anthony; Omar Vera; Aleta Dupree; Charlton D'Souza.

Meeting Minutes

The minutes of the meeting held on January 30, 2023 were approved.

CPC Work Plan

There were no changes to the CPC Work Plan.

Details of the following presentations, and Committee Members' comments and questions with respect thereto, are included in the video recording of the meeting, produced by the MTA and maintained in MTA's records.

President's Report

President Torres-Springer highlighted C&D's latest publication, titled Stronger Infrastructure, Better Service, which comprises a 2022 Year in Review as well as a 2023 Strategic Plan. He then cited the \$10B Commitment Target and the \$10.4B Completion Target that have been established for 2023. In his introduction to today's presentation on the Stations Business Unit (Stations BU), President Torres Springer acknowledged the tremendous contribution made by the former Stations BU leader, Barney Gray, while citing the Acting Stations BU leader, Bill Montanile (represented today by Anthony Febrizio, Deputy Stations BU leader).

Update on C&D's Stations Business Unit

Mr. Febrizio provided a detailed status update on the Stations Business Unit (Stations BU), including 2022 accomplishments, 2023 goals, and an overview of the ADA Program. In light of the historic settlement with ADA advocates that the MTA announced last July, Mr. Febrizio noted that the Stations BU will maintain its current unprecedented pace of project execution to meet its goal of 95% system-wide accessibility. He then pointed out that nearly half (47%, or about \$6B) of Stations Program funding is for accessibility projects, and that the MTA's 2020-2024 Capital Plan includes funding for 67 accessible stations (*more than double the last Capital Plan, and significantly more than the last three Capital Plans combined*). In addition, 17 accessible stations were completed in 2020-2022, which is nearly double the tally of the last 6 years combined. In addition, 34 ADA Stations are currently under construction, with 12 slated to open in 2023 and 17 additional stations are planned for award this year. Mr. Febrizio then pointed out that this unprecedented pace of project execution is made possible by, among other things, employing the following project delivery and contracting techniques: Design-Build, which allows for innovative design and construction approaches, as well as assures appropriate risk allocation between owner and contractor; Project Bundling, in which otherwise relatively small, discrete projects are packaged together into fewer, larger contracts based on type of work and/or geographic proximity, thus providing for efficient use of both in-house and contractor resources; and as announced last year, MTA's use of a Public-Private Partnership (also referred to as P3), which includes not only project design and construction, but also private financing and (elevator) maintenance, whereby the contractor is particularly incentivized "to do the job right and to do it quickly". Mr. Febrizio concluded his presentation by providing highlights of several projects currently underway.

In its Project Review the IEC noted that the Stations BU (which is responsible for station renewals, accessibility upgrades, elevator and escalator replacements, and state of good repair work) is performing very well. As gauged by the Quarterly Traffic Light Report, out of 102 projects, only two triggered schedule variances and none triggered cost variances. Of the four Stations BU projects on which the IEC provides detailed monitoring, two

projects (8 Stations ADA Package 2 project, and 68th Street/Hunter College project) are progressing well, and therefore the IEC offered no further comments on these projects at the CPC meeting. However, the IEC noted some schedule concerns on both the 149th Street/Tremont Avenue and the 8 Stations ADA Package 1 projects. Regarding the 149th Street/Tremont Avenue project, the IEC stated that at 59% complete and on budget at \$163M, the 149th Street Station has a forecast 6-month delay, and the Tremont Avenue Station has a forecast 10-month delay -- primarily due to inadequate subcontractor support, general order scheduling issues, and additional work necessitated by a more stringent code requirement than in past such projects. The IEC noted that the C&D Project Team has directed the contractor to add shifts and manpower to increase productivity, which the IEC finds to be a step in the right direction. With respect to the 8 Stations ADA Package 1 project, which is at 67% complete and on budget (in fact, the IEC stated that the project is seeking savings of up to \$60M), according to the IEC, schedule challenges remain. The project reflected a 6-month delay in the last report (July 2022), and more recently has reported an additional 3-month delay, with a proposed mitigation schedule under review by C&D. While the IEC has observed increases in manpower and work shifts, in the IEC's opinion, the current level of productivity must be maintained to substantially complete at least three stations for beneficial use by the Third Quarter 2023, followed by the completion of the remaining stations in the Fourth Quarter 2023. The IEC concluded its remarks by citing several major challenges impacting the Stations Program -- including the availability of workers to support elevator installation and commissioning, and several cost and schedule issues -- and noting that C&D has put measures into place to address these challenges, but the outcome of which will only be realized after projects are completed, maintenance contracts enforced, and installations monitored for quality, reliability, and performance.

Procurement Actions

Evan Eisland, Executive Vice President and General Counsel of MTA Construction & Development Company ("C&D"), reported that C&D had one procurement action being brought to the Capital Program Committee this month. Executive Vice President Eisland then presented the item.

Upon a motion duly made and seconded, the Capital Program Committee voted to bring the following procurement action before the full MTA Board and recommended the following:

- Award of a modification (No. 228) to the rehabilitation of the Cortlandt Street #1 Line Station contract (CS084) with Judlau Contracting, Inc. to resolve claims for time extension, impact costs and other issues in the total amount of \$8,675,786.35.

Refer to the staff summary and documentation filed with the records of this meeting for the details of this item, and refer to the video recording of the meeting, produced by the MTA and maintained in MTA records, for Board members' and C&D representatives' comments.

Adjournment

Upon motion duly made and seconded, Chairman Lieber adjourned the February 21, 2023 Capital Program Committee Meeting at 2:45 PM.

Respectfully submitted,
Michael Jew-Geralds
Office of Construction Oversight



2023-2024 Capital Program 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

- Infrastructure
- Systems
- OMNY
- Security Projects

May

Overall Capital Program

- Rolling Stock

June

Overall Capital Program

- Signals & Train Control
- Minority, Women and Disadvantaged Business Participation

Quarterly Traffic Light Report

July

Overall Capital Program

- Integrated Megaprojects

September

Overall Capital Program

- Stations

Quarterly Traffic Light Report

October

Overall Capital Program

- Railroads
- OMNY

November

Overall Capital Program

- Infrastructure
- Systems
- Security Projects

December

Overall Capital Program

- B&T
- Small Business Development Program
- Minority, Women and Disadvantaged Business Participation

Quarterly Traffic Light Report

January

Overall Capital Program

- Integrated Megaprojects

February

Overall Capital Program

- Stations

March

Overall Capital Program

- Railroads

Quarterly Traffic Light Report

MTA Capital Program Committee Update

Railroads Business Unit: LIRR Projects

March 2023

MTA Construction & Development's (C&D) last report to the Capital Program Committee (CPC) for Long Island Rail Road (LIRR) projects was September 19, 2022. Since the previous report, C&D has successfully awarded twenty-two (22) projects through February 2023 (including Jamaica Substation, Four SBMP Projects, Hall-Babylon Signal Motor Generators, ADA Stations (9) Package 1, JCI Phase 2 - Hall Interlocking and Fire Protection Improvements), totaling \$337.7 million.

C&D has also completed several LIRR projects since the September meeting, with a value of \$111.5 million. These included the Great Neck Pocket Track Extension, Wreck Lead Bridge Rehabilitation, Ronkonkoma Parking Garage Rehabilitation, the 2022 Annual Track Program, Jamaica Capacity Improvements Phase 1 and Substation Components.

Our overall performance for 2022 was as follows:

- 26 projects valued at \$189 Million were completed.
- \$684 Million in project value was committed.

Jamaica Capacity Improvements Phases 1 & 2

JAMAICA CAPACITY IMPROVEMENTS PROGRAM OF PROJECTS

The Jamaica Capacity Improvements (JCI) Program of Projects represents LIRR's Master Plan for the future of railroad operations through Jamaica. This Plan for Jamaica was developed to address the complex Jamaica infrastructure needed to: (1) support ESA LIRR Service to Grand Central Madison Terminal; (2) increase Jamaica Station/Interlocking(s) capacity/speed for increased train service from all three west end city terminals and future growth; and (3) result in a state of good repair to Jamaica's aged infrastructure. The overall JCI effort is separated into two major phases. A large portion of Phase 1 included new Interlockings on the outskirts of Jamaica Station to provide operational flexibility and enable the construction of Phase 2.

JAMAICA CAPACITY IMPROVEMENTS – PHASE 1

JCI Phase 1 is funded by the 2010-2014 Capital Program. The project includes the construction of a new platform and associated infrastructure required to support shuttle service between Jamaica Station and the Atlantic Branch Stations. The creation of the new Platform "F" at the south side of the station eliminates train routing conflicts in Jay Interlocking. In the past, Manhattan bound trains waited for Atlantic Branch bound trains to cross through the interlocking completely before proceeding west. The new platform enables more frequent Brooklyn-bound train connections.

PROJECT STATUS	Original	Forecast
JCI Phase 1 Program - Substantial Completion	October 2021	January 2023 (A)
Budget	\$301.6 M	\$321.6 M

Current status of the project:

- The project is approximately 96% complete
- \$20M in additional funding was secured in Q4-2022 to complete the remaining Force Account construction work. The need for additional funding was primarily attributed to escalation costs as well as the cost to remobilize LIRR forces as they needed to support other active LIRR projects.
- Work completed includes:
 - Reconfiguration of Johnson Ave Yard
 - Construction of Platform F and associated tracks 11 & 12
 - Reconfiguration of Dunton Interlocking
 - Reconfiguration of Lower Montauk
 - Installation of new 131XO in Met Interlocking
 - Installation of new Beaver Interlocking
 - Installation of new U-87 crossover in Hall Interlocking

JAMAICA CAPACITY IMPROVEMENTS – PHASE 2

JCI Phase 2 construction will span several Capital Programs and will result in a complete realignment/reconstruction of the Jamaica interlockings, tracks, and associated railroad infrastructure. This will vastly improve the track configurations and train throughput in the Jamaica area by providing the following elements/objectives:

- More “parallel routes” into and out of Jamaica
- Universal access to all station platforms from any existing branch approach
- Lengthening of platforms, A – E to fully accommodate 12-car consists
- Higher speed switches and reduced travel time (reducing travel times by 3-4 minutes in each direction)
- Increased train capacity in peak hours
- Higher level of reliability, and improved recovery during a disruption
- Upgraded track (installing 109 new higher speed switches), signal, power, and communications infrastructure to a State of Good Repair (SOGR)

The Hall Interlocking Expansion comprises of Stage 3 and Stage 4 (Hall) and includes the eastward extension of existing E-Yard tracks via the construction of a new bridge over 150th Street. The work also involves replacing/modifying existing retaining walls, modifications to existing Guy Brewer Blvd bridge structures, associated track/3rd rail modifications and SOGR. Ultimately, this project will enable the creation of two additional parallel routes within Hall Interlocking (new tracks E2 and E3) which is critical to the overall master plan of JCI Phase 2.

PROJECT STATUS	Original	Forecast
JCI Phase 2 Hall Expansion - Substantial Completion	Oct. 2026	Oct. 2026
Budget (Hall Interlocking Expansion)	\$168.6 M	\$168.6 M

Current status of the project:

- NOA and NTP issued to MLJT as the Design-Builder on December 22, 2022.
- Initial “Meet the Team” and Project Kickoff Meeting was held January 13, 2023.

- Initial surveys with various F/A Engineering groups were held to facilitate utility relocation. LIRR Signal Dept. is in the process of relocating signal cases within the work zone.
- Initial submittals/deliverables are in process.
- MTA C&D is finalizing the award for a Project Management Consultant to assist with administration of the project. Award pending approval of Staff Summary.

Queens Interlocking

Queens Interlocking is a critical junction point at the west end of the Main Line Third Track and the Hempstead Branch, which is also the location of the new Elmont Station. The interlocking's existing switch arrangement required modification to support the new Elmont Station and the increased traffic flow through the area due to the Main Line Expansion and new Grand Central Madison schedule.

PROJECT STATUS	Original	Forecast
Substantial Completion	January 2025	March 2025
Budget	\$155.0 M	\$155.0 M
The project is approximately 30% complete.		

Current status of the project:

- **Phase 1 and Phase 2:**
 - Phase 1 (completed October '21) and Phase 2 (completed October '22), allows the LIRR to provide full commuter service to the new Elmont Station as well as provide service to UBS Arena events from both the Hempstead and Main Line Branches.
- **Phase 3:**
 - A contract to provide new signal equipment for the 5 interlockings and Belmont Yard was awarded to Hitachi in December 2021.
 - Upgrading old signal systems will increase reliability, redundancy, and expandability.
 - Signal huts for 5 interlockings are in various stages of design and fabrication.
 - The First Signal Hut location, Park 3, is forecast for delivery in July 2023.
 - LIRR Signal, Comm. Power and Track continue construction at various locations, including new Park 3 Interlocking, Queens 2 and the Belmont Wye.
 - The current schedule indicates a March 2025 completion. However, the Project Team is working with the Signal Vendor and LIRR Force Account to recovery the time.

ADA Stations – 9 Stations Design-Build, Package 1

Nine (9) stations are included in the ADA Stations Package 1 D-B bundled scope. These include Amityville, Copiague, Lindenhurst, Massapequa Park, St. Albans, Laurelton, Locust Manor, Valley Stream (escalator replacement & elevator replacement) and Auburndale (elevator replacement).

Work includes the installation of new elevators/escalators, ADA station building amenities including code compliant egress and accessible restrooms, ADA path of travel

amenities such as walkways, lighting and accessories, information, and directional signage in accordance with MTA Sign Manual & ADA requirements.

PROJECT STATUS	Original	Forecast
Substantial Completion	September 2025	September 2025
Budget	\$169.0 M	\$169.0 M

Current status of the project:

- NOA/NTP was issued to Citnalta/Scalamandre, J.V. on 12/15/22.
- Kickoff meeting held on 1/11/23.
- Design development, field surveys and over-the-shoulder review meetings are underway.

MTA Capital Program Committee Update

Railroads Business Unit: Metro-North Projects

March 2023

MTA Construction & Development's (C&D) last report to the Capital Program Committee on Metro-North Railroad (MNR) projects was September 19, 2022.

Our overall performance for 2022 was as follows:

- C&D has reached substantial completion on 13 construction projects and completed 1 inspection and feasibility project. Overall project completions (3rd party and in-house projects) total \$686.6 million.
- C&D has awarded \$689M in commitments.
- Primary factors affecting performance of active projects are: Con-Ed (power/substations), over-prescribed access to ROW, internal resource availability, and material supply chain issues. Mitigation measures to minimize these factors are in place: Con-Ed issues are being mitigated via executive level meetings, access/outages and internal resources availability are being mitigated by prioritizing projects with conflicting demands, and material supply delays are being mitigated, when possible, by buying materials as early as possible and storing on or off site.

This document summarizes the progress on two significant projects: Harmon Shop Replacement and the Park Avenue Viaduct replacement.

Harmon Shop Phase 5 Stage 2

This Design-Build project will replace MNR's 100+ year old maintenance facility in Croton-on-Hudson. The Harmon shop, along with its supporting facilities, are the largest electric car maintenance facility for MNR rolling stock.

PROJECT STATUS	Original	Forecast
Substantial Completion	Apr. 2023	Oct. 2023
Budget	\$435.9 M	\$439.1 M

The project scope is the demolition and reconstructing of the 250,000 square foot Main Shop and its storeroom, as well as replacement of the facility's heavy equipment including truck hoists, railcar hoists, overhead cranes, and lifts.

C&D is consolidating several buildings/structures within the facility to streamline workflow efficiency by allowing materials to be prepped, assembled into components, installed onto the cars, and finally inspected and tested more efficiently. This includes the construction of a new overpass to connect the new Running Repair and Support Shop with the Wheel Shop for more direct transportation of parts and components.

The project also entails replacing shop equipment with newer and more efficient

technology, allowing MNR in-house forces to perform a larger percentage of component overhauls and save on the premium cost of shipping the components out to a third-party vendor for repair and maintenance. Factory acceptance testing of the new equipment is complete with delivery and installations on-going.

Financial forecasts for the project changed minimally to reflect redirected mentoring funds since the last report, and the projected substantial completion date was revised from April 2023 to October 2023 to reflect ongoing material supply chain issues.

Since the last report, the installation and pre-functional testing of six major systems (hoists to lift the railcars for maintenance) have commenced. The installation of the yard tracks on the south side of the Main Shop has been completed with 3rd rail power installations ongoing. The project is approximately 92% complete.

Park Avenue Viaduct Replacement Phase 1

The Park Avenue Viaduct (PAV) replacement project will replace the existing 130-year-old railroad viaduct from 115th Street to 123rd Street (phase 1), along Park Avenue in Harlem. These spans are just to the south of the Harlem-125th Street Metro-North Station. The project encompasses the entire replacement of the existing viaduct including foundations, structure, tracks, and power, as well as communications and signals. As reported at previous CPC meetings, the viaduct has reached the end of its useful life. Extensive and ongoing repairs are currently continuously needed to keep the structure in a state-of-good repair and it has been determined that replacement is the most cost effective long-term alternative for the longevity of the structure.

PROJECT STATUS	Original	Forecast
Substantial Completion	Apr. 2026	Apr. 2026
Budget	\$589 M	\$589 M

This section of the viaduct is an elevated steel structure which carries four third-rail powered tracks over Park Avenue. All trains from the Hudson, Harlem and New Haven Lines use the viaduct to enter Grand Central Terminal. Approximately 750 trains per day traverse the viaduct – it is one of the most critical MNR assets.

While the viaduct is critical for MNR transportation, the space under the viaduct serves as a well utilized space for community and public use, most notably for various tenant purposes, including community events and parking. Initial steps have been taken and agreements have been reached with the City of New York to assist with the temporary relocation of tenants under the viaduct during construction.

The PAV replacement project will also provide multiple improvements to the community, including improving the lighting under the PAV to increase safety in the neighborhood; significantly improving the aesthetics of the community by replacing the existing painted brown structure with a welcoming new, light gray, galvanized steel structure which will brighten the neighborhood; an arts and design component; and will maintain service to the Harlem 125th Street station, which is the 3rd busiest

station for MNR. Since the last report, the Design-Build Contract for the replacement of this segment of the viaduct was awarded to Halmar International for \$381M. Major site construction work is expected to commence in Q3 of 2023 with substantial completion in 2026, almost two years ahead of the initial construction schedule. The selected Design-Builder proposed the best-value to the MTA combining the lowest overall project cost with the shortest construction duration and the least impact to railroad operations and the community. In fact, there are no anticipated impacts to riders as part of this phase of replacement.

The Project Management Consultant (PMC) contract was awarded in December 2021 to WSP to provide services for preliminary engineering, procurement phase support, and construction compliance oversight, project management and construction supervision support. This contract was one of the first that combined substantial preconstruction and construction services, aimed at minimizing project interfaces, and reducing overall project costs. The PMC contract includes performance incentives.

March 2023 CPC Independent Engineering Consultant Project Review

Jamaica Capacity Improvement- Phase 1



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MTA Independent Engineering Consultant

Jamaica Capacity Improvement Phase 1

Scope

The scope of work for the Jamaica Capacity Improvement Phase 1 project is comprised of 3 major third-party contracts along with significant force account work. Major work elements include the following:

- Construction of a new Jamaica Platform (Platform F) for Brooklyn-to-Jamaica Service, the removal / installation of switches and realignment of track and demolition and installation of third rail infrastructure, reconfiguration of Johnson Avenue Train Yard (completed).
- Construction of freight bypass track [south bypass] and modifications to the existing signal system by force account (completed).
- This work is implemented in several stages and once complete it will allow for increased flexibility of train movements around Jamaica station.



MTA Independent Engineering Consultant

Jamaica Capacity Improvement Phase 1

Schedule Review

- The project is now 96% complete and has achieved Substantial completion (SC) of Phase 1, in January 2023, a 1-month delay since last report.
- All critical rail infrastructure modifications to ensure Jamaica station was ready for Grand Central Madison Opening day have been completed.
- The IEC concurs with SC as 19 out of a total of 20 stages for this project is complete. Remaining work by Force Account labor for final completion is as follows:
 - Stage 1.10 (Lower Montauk/Hill) - Complete punch-list work for the Jay Breaker 3rd rail tie-in for future electrification of Westbound Montauk Track which requires NYSDOT completing Van Wyck Bridge structural work.
 - Stage 2.02 (Beaver Interlocking)- Complete installation of 60Hz traction power service and to pull and connect the remaining control cable for electrically operated 3rd rail switches thereby allowing future control from Jamaica Control Center.
 - Stage 2.03 (Union Interlocking) FA to complete the signal cutover for the newly installed switch at Union interlocking which is dependent on obtaining easements for the placement of associated signal equipment.
- In the opinion of the IEC, the signal cutover of the Union Interlocking switch could be pushed out several quarters due to unresolved above mention easements. The lack of completion of this work does not however affect existing service.



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MTA Independent Engineering Consultant

Jamaica Capacity Improvement Phase 1

Budget Review

- The original project Budget of \$301.7M increased by \$20M equaling an Estimate at Completion (EAC) of \$321.7M, and has not changed since last report.
 - The increase is largely due to overruns in force account work associated with the complexity of signal work and escalation costs with a delayed project completion.
- The IEC concurs with the project EAC of \$321.7M to complete the remaining work however, there is a potential risk for the EAC to be impacted further as the resolution of the claim associated with Platform F remains outstanding.



MTA Independent Engineering Consultant

Jamaica Capacity Improvement Phase 1

Risks and Mitigations

The project schedule and cost risks and corresponding mitigations include the following:

- Force account availability for signal installations and cutovers at Union Interlocking which is preceded by obtaining easements to place the signal equipment have not yet been secured.
 - The Project Management Team (PMT) has successfully installed a switch at Union Interlocking, a major step towards completing the FA signal cutover work.
 - In the opinion of the IEC, the probability of this risk remains high as there is no current signal cutover plan dates are uncertain due to the pending real estate acquisitions.
- Resolution of the claim for Platform F.
 - A claim has been submitted by the Platform F contractor and remains under review by LIRR and MTAHQ legal. While there has been no significant change in the status of the resolution of this claim, the PMT continues to anticipate minimum cost impact. All necessary paperwork has been submitted and PMT is supporting all legal efforts.
 - The impact of this mitigation is difficult to assess because of the status of the claim has not changed.



March 2023 CPC Independent Engineering Consultant Project Review

Jamaica Capacity Improvement- Phase 2- Hall Expansion



MTA Independent Engineering Consultant

Jamaica Capacity Improvement- Phase 2- Hall Expansion

Scope of Work

A multi-phased approach across multiple capital programs with the design of Jamaica Capacity Improvements (JCI) Phase II, Jamaica Interlocking(s) infrastructure reconfiguration/modification for improving train throughput, extending the length of existing Jamaica Platforms A-E to accommodate 12-car train consists, and upgrade to a state of good repair. Hall Interlocking Expansion project represents the first of JCI Phase 2 program elements for construction.

- The Hall Interlocking Expansion project extends existing E-Yard tracks towards the east and will provide for parallel routes out of Hall interlocking. The new extending tracks will become Montauk Branch Track #2 and Mainline Branch Track #2.
 - The project also will advance work for the construction of 2 new platforms for material storage, signal equipment and allow for proper work space for employees around the platforms.
 - There is new track, crossovers, 3rd rail, power, signal, and the construction of a new closed deck rail bridge(across Guy R. Brewer Blvd.) and other associated rail infrastructure.



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Jamaica Capacity Improvement- Phase 2- Hall Expansion

Schedule Review

A construction contract award for Hall Interlocking Expansion was awarded in Dec 2022 to MLJT in the amount of \$91.6M with substantial completion forecast as September 2026.

- ▣ The baseline schedule was conditionally accepted, with the formal submission expected in March 2023 and resource loaded by April 2023.
- ▣ The contractor is planning to submit a 90-day Look-Ahead schedule with details that will allow for planning of site surveys and inspections. The first job progress and detail design meetings have occurred.
- ▣ The project is in its early stages and the IEC will provide a detail analysis when the formal submission of the baseline schedule is complete.

Budget Review

- ▣ The C&D project budget and Estimate at Completion for Hall Expansion is \$168.6M. This is an increase from last C&D report and is primarily due to:
 - ▣ Bid price was slightly over the engineer's estimate.
 - ▣ Allowance for a Project Management Consultant (PMC).

Jamaica Capacity Improvement-Phase 2- Hall Expansion

Risks and Mitigations

- There is a risk in obtaining required track outages for the scheduled work.
 - The PMT is taking early action in requesting details for planned activities as long-term track outages require six-month advanced notice.
 - In the opinion of the IEC, the use of the PMC in working with the contractor for early planning for resources required for track outages is a prudent measure.

- There is risk of a lack of Force Account availability and coordination for planned work due to competing projects that are scheduled for similar completion periods.
 - The PMT is working to identify scheduling conflicts and target force account request early for maximum availability.
 - The IEC believes, there should also be careful attention paid to the effect of schedule adjustments on equipment delivery which has the potential to upset the work as planned.

March 2023 CPC Independent Engineering Consultant Project Review

Queens Interlocking



MTA Independent Engineering Consultant

Queens Interlocking

Scope

The scope of work for the Queens Interlocking project addresses the following needs:

- Expanded service needs from Grand Central Madison and LIRR Expansion
 - Support the new UBS Arena service plans, which include service to a new Elmont Station and Belmont Yard (with expanded East and West bound service).
- The track layout between the Main Line and the Hempstead Branch will be modified to:
 - Provide Mainline (ML) access from the East-Bound platform (connecting Track 4 to Track 2).
 - Provide WB platform access from the Hempstead Branch (connecting Track 2 to Track 3).
- The obsolete Signal System will be replaced along with several major scope items including:
 - Replacement/relocation of four (4) high speed crossovers, to allow the installation of 3 new crossovers (known as Elmont ladder) to service the new Elmont Station.
 - Third rail modifications to support the new track and switch layout.
 - New microprocessor-controlled signal system with Reduced-Aspect Signaling.
 - Installation of a new crossover to provide Eastbound ML service.
 - Replacement of all the existing Belmont Yard switches.
- This project is largely performed by FA labor (FA) with 3rd party signal design, fabrication and delivery of signal equipment.



MTA Independent Engineering Consultant

Queens Interlocking

Schedule Review

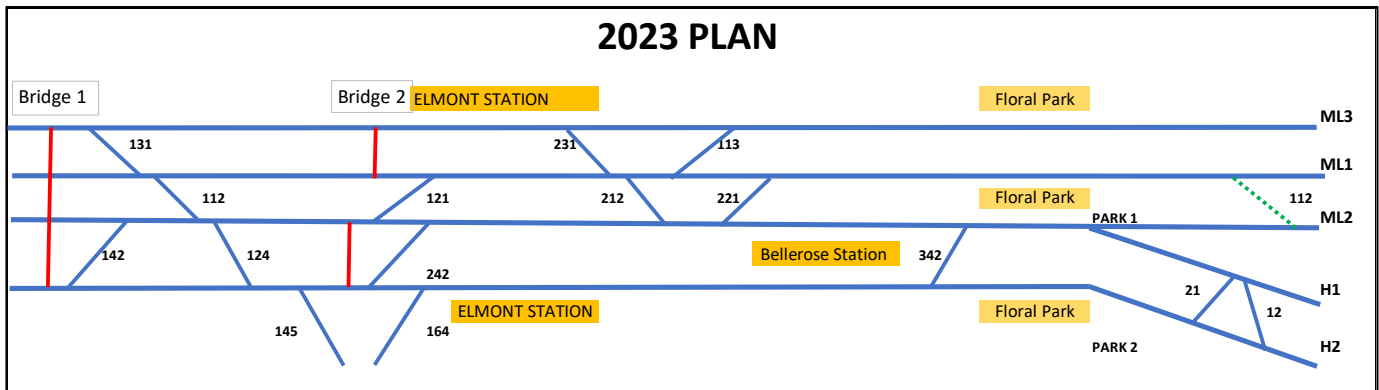
Milestone	Plan	Forecast	IEC Forecast
Construction Start	11/2020	11/2020(A)	
Substantial Completion	01/2025	March 2025	April 2025

- The project Substantial Completion (SC), which includes the completing the remaining track, switch and signal work, is forecast for 1st quarter 2025.
- Since last report, the project is now 30% complete, based on invoice to date, with all the major milestones for 2022 completed as planned. The following major work is planned for 2023 and is on schedule:
 - Installation of 112 crossover East of Park 1 Interlocking (near Floral Park Station) in 3rd quarter 2023.
 - Remaining Belmont Yard field work which allows for the automatic operation from Jamaica Control Center (JCC).
- Based on the review of the remaining critical activities, the IEC finds a potential delay to SC to April 2025 partially due to the need to install a temporary signal system. This has impacted the design, fabrication, installation, testing and commissioning of the permanent signal system starting in early 2024, which is on the critical path.
 - The IEC believes there are opportunities for schedule recovery through resequencing activities which precede the testing and commissioning work in the schedule.

Queens Interlocking

Schedule Review(continued)

Mainline Track Layout of existing switches and scheduled major track and switch work.



PLANNED 2023 WORK

Deliver and set Park 3 Signal Hut , Forecast July '23.

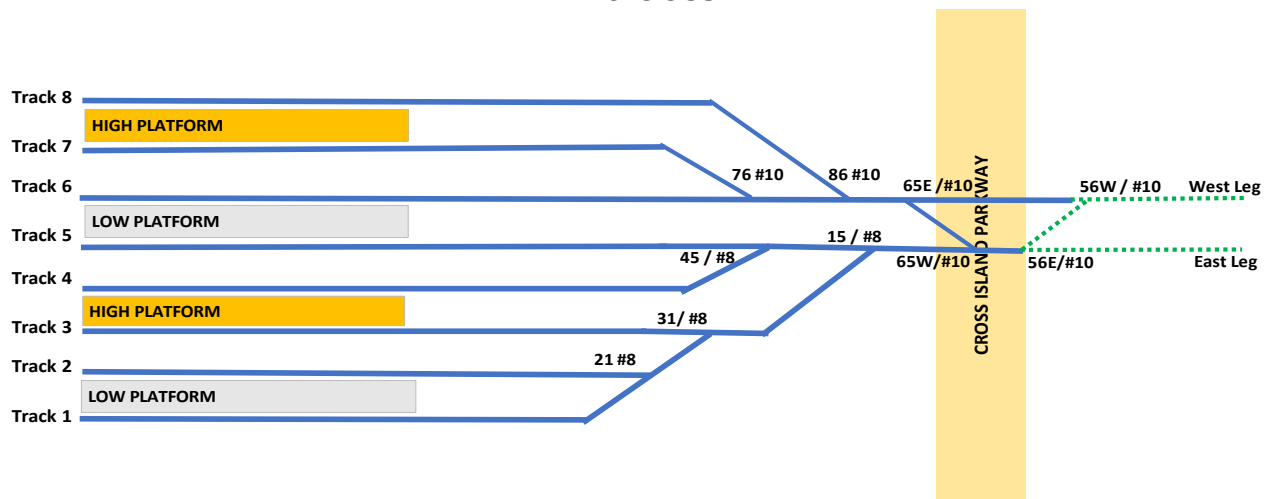
Install new Park 3 - 112 Crossover east of Park 1 Interlocking, TBD

Queens Interlocking

Schedule Review(continued)

Track Layout of existing switches and major new track and switch work scheduled at Belmont Yard as per below dates.

2023 SCOPE



- 1) East Leg - 95% Complete
- 2) West Leg - Start 3/6/2023 must complete before June 10, 2023
- 3) Replace 56 crossover, 3/17/2023
- 4) Signal Hut Delivery 9/24/2023
- 5) Remote Control yard in Service 1st Qtr 2024

Queens Interlocking

Budget Review

- ▣ C&D's Project Budget and EAC is \$155M.
- ▣ The IEC performed an analysis of completed work, change orders, Force Account (FA) Labor, remaining contingency and other cost categories and agrees the project budget and Estimate at Completion (EAC) is \$155M, and it is our opinion that this is sufficient to complete the current scope of work.



MTA Independent Engineering Consultant

Queens Interlocking

Risks and Mitigations

The project risks and corresponding mitigations include the following:

- ▣ Force account resources for Mainline and Yard track and signal work competes with other major LIRR projects.
 - ▣ FA work is coordinated with internal and external groups in order to maximize their availability and achieve timely completion.
 - ▣ The PMT along with Operations planning has identified an opportunity to complete the remaining Belmont Wye work thereby using force account personal more efficiently.
- ▣ The timely completion of track and signal installation.
 - ▣ The Project Management Team (PMT) has advanced the purchase of equipment and many switches are on-site.
 - ▣ Prioritized the delivery and installation of retaining wall blocks for required signal equipment locations.
- ▣ While the project has successfully scheduled many of the switch installations to date, future switch installations may be at risk due to the work associated with Jamaica Capacity Improvement Phase 2, as the required outages may be unavailable when necessary.
 - ▣ Continue to take advantage of all piggyback track outage opportunities associated with other major LIRR projects.
 - ▣ Continuous review of contract schedules with competing projects.
- ▣ Successful cutover of new signal system.
 - ▣ Increase the frequency of technical meetings with the signal contractor and ensure they maintain signal equipment delivery dates.
- ▣ In the opinion of the IEC, the risks continue to be well managed and mitigations have proved to be effective to date.

Queens Interlocking

Observations

- The re-signalization of Belmont Yard and associated track work which allows for automatic operation at JCC will provide operational efficiencies and overall public benefits during events.
- The PMT is processing a change order that allows for time extension on milestones for the delivery of signal huts due to owner-driven changes for temporary signal changes.
 - The IEC believes careful attention by the PMT is required in managing the force account work and 3rd Party signal contractor in order to maintain schedule.
 - In the opinion of the IEC, the owner driven changes provided maximum flexibility for support of regular commuter service to Elmont station and service operation for Grand Central Madison, a significant customer benefit.

March 2023 CPC Independent Engineering Consultant Project Review

Harmon Shop Replacement Phase V Stage 2 Metro North Railroad



MNR Harmon Shop Replacement

Phase V Stage 2

Scope

The Harmon Shop Replacement project is a 20-year, multi-phase upgrade and modernization program for the shop and yard. The final phase (Phase V) was awarded to the design-build team Skanska-ECCO III (SE3) as two separate contracts – Stage 1 and Stage 2, which is in the final stage (Stage 2), awarded October 2018 with Substantial Completion (SC) April 2023.

Completed Phases and Stages

Phase I	(2001-2021)	Yard Infrastructure
Phase II		MoW Bldg, Communication Building, Material Distribution Center
Phase III		Wheel True Facility, Coach and Locomotive Shops
Phase IV		Priority roof repairs to Building #6
Phase V (Stage 1)		Design and construction of Consist Shop and EMU Annex Building

Current Phase and Stage

Phase V, Stage 2 consists of the demolition of Building 6 maintenance facility, construction of a state-of-the-art Running Repair and Support Shop (RRSS) and second floor connector bridge between RRSS and Electrical Multi Units (EMU) Annex.

MNR Harmon Shop Replacement Phase V Stage 2

Schedule Review

- ▣ The project is 92% complete based on invoicing.
- ▣ Due to a delay in finalizing design of the Bug and Stinger control relay, a non-compensable Extension of Time is being negotiated and results in a forecasted 6-month delay from April to October 2023 SC.

Contractual SC	MNR September 2022 SC	IEC September 2022 SC	IEC Current SC	MNR Current SC
April 2023	June 2023	July 2023	October 2023	October 2023

The above table reflects the additional delay resulting from the Bug and Stinger System's later completion.

MNR Harmon Shop Replacement

Phase V Stage 2

Budget Review

- ▣ The C&D EAC and Budget are \$435.9M and \$439.1M, respectively.
- ▣ The IEC's review of the project expenditures, executed, negotiated, pending change orders and remaining contingency, results in a forecasted EAC of \$437.7M, which is within the project budget.

MNR Harmon Shop Replacement

Phase V Stage 2

Risk and Mitigation

There is risk to the project schedule that:

- The major shop equipment may be completed later than planned due to the significant preparation, installation, electrical hookup and testing time needed.
 - C&D is coordinating with the subcontractors to finalize the fabrication, delivery and installation of the equipment to maximize the time to meet October 2023 SC.
- It is the IEC's opinion, the number of outstanding activities makes achieving October SC challenging, but the mitigation should be effective given that work is scheduled on a single shift and additional shifts are available.

Observation

- In order to minimize the impact of the delay in opening the facility, C&D is implementing a 3-phase approach to occupancy; placing in service - 1st floor storage area in May 2023, 2nd floor office space in July 2023 and 1st floor shop repair space in October 2023. The IEC find this a prudent act.

March 2022 CPC Independent Engineering Consultant Project Review

Metro North Railroad – Park Avenue Viaduct Replacement - Phase I



MTA Independent Engineering Consultant

MNR – Park Avenue Viaduct Replacement – Phase I

Project Details

- The Park Avenue Viaduct is an elevated steel structure built in 1893 which carries four Metro-North Railroad which carries four-third rail powered tracks above Park Avenue in East Harlem.
- 98% of the trains which use East of Hudson lines must pass over the Viaduct to reach Harlem-125th Street Station and Grand Central Terminal – there are no alternate routes.
- Approximately 750 trains per day traverse the Viaduct and the daily ridership from the three East of Hudson lines over the Viaduct is in the several hundreds of thousands of customers per day.
- The project program employs a phased approach prioritizing critical areas that need to be replaced.



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MNR – Park Avenue Viaduct Replacement – Phase 1

Scope of Work – Phase I

- A design-builder has been retained to replace the existing Metro North Railroad - Park Avenue Viaduct (MNR - PAV) Replacement Phase I commencing from East 115th Street and continuing north to East 123rd Street. The Design Build (D-B) project scope elements include:
 - Staged demolition of the existing structure and all ancillary components.
 - Design and construction of all Project components including, but not limited to, foundations, substructure, superstructure, drainage, track and systems (including direct fixation fastener system), communication and signals, traction power, and utility relocations.
 - Additional investigations, permitting and monitoring associated with or resulting from the D-B's actions, including but not limited to staging areas, haul routes and other activities necessary for construction
 - Work zone traffic control, including the design and construction of temporary traffic signals and maintenance of access to properties.
 - Environmental mitigation and compliance, including monitoring, and securing permits and approvals necessary for the work.
 - Option Scope - Option 1 Raised Concrete Sidewalks and/or Option 2 Accessible Pedestrian Signal (APS) System; which the MTA may exercise a Notice To Proceed date of January 2025.
 - Public outreach keeping Project Stakeholders and local community Interest groups informed.

MNR – Park Avenue Viaduct Replacement – Phase 1

Schedule

- ▣ MTA C&D awarded the D-B contract in December 2022, with a construction duration of 39 months* to Halmar International, LLC (HI).
 - ▣ Base Contract NTP - January 2023.
 - ▣ Contractual Substantial Completion (SC) – April 2026

* During the RFP phase, the D-B proposed reducing the contract schedule by 21 months from 60 months to 39 months utilizing an innovative Gantry system with a plan of replacing up to 4 spans during each weekend closure.

- ▣ The IEC review of the D-B Preliminary Base Line Schedule submitted, finds that the SC date noted is attainable.

MNR – Park Avenue Viaduct Replacement – Phase 1

Budget

- ▣ C&D Project Budget and Estimate at Completion (EAC) \$589M.
- ▣ The Base Contract amount is \$381M.
 - ▣ Federal DBE participation requirement goal, 22.5% of the contract amount.
- ▣ IEC performed a review of the total project cost, inclusive of contingency, and the project budget is sufficient to complete PAV Replacement Phase I within the project EAC of \$589M.



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MNR – Park Avenue Viaduct Replacement – Phase 1

Risks and mitigations

- Equipment failure during Bridge Replacement Outages (BRO) and other outages could delay on-time completion.
 - Contractor utilizes redundant equipment during outages; utilizing hour-by-hour schedule to facilitate progress tracking and manages mitigation strategies during every BRO; and deploying a proactive equipment mitigation program with spare parts on-hand.
- Failure to relocate Tenants below PAV could impact the construction schedule.
 - MTA C&D has identified the swing spaces for tenant relocation. MTA Real Estate has retained assistance for relocation services. D-B has commenced NYCDOB permitting for tenant relocations.
- Restrictive requirements by NYCDOT OCMC for Maintenance and Protection of Traffic (MPT) could impede construction progress.
 - D-B to prepare MPT plans for submittal to OCMC for review and approval in obtaining roadway use permits in a timely manner. Upon commencement of construction, D-B involvement will be more interactive day-to-day.
- Failure to provide required Track Outages/Force Account Support could delay completion of construction.
 - MNR Staff is engaged and understand importance of providing requisite Track Outages/Force Account Support.

MNR – Park Avenue Viaduct Replacement – Phase 1

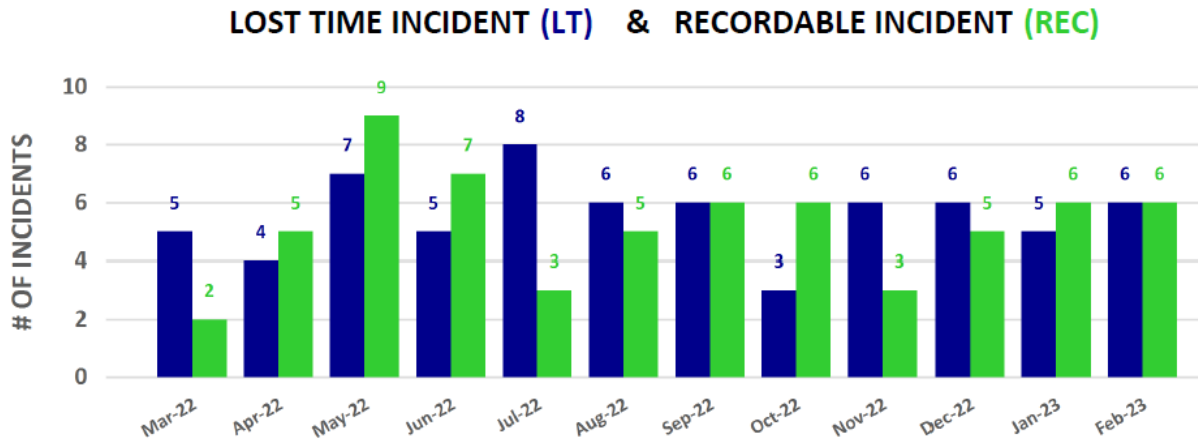
Risks and mitigations continued

- Delay in procuring long lead items including Gantry Crane equipment could delay construction activities.
 - D-B has identified critical long lead items that require MTA early approvals as well as having issued a Purchase Order for the procurement of the Gantry Crane equipment.
- Differing site conditions and identifying existing utilities that may need to be protected due to heavy equipment loading.
 - D-B required to perform investigation identifying existing utilities that may need to be protected and temporarily supported.
- The IEC finds the MTA Program Management Team (PMT) comprised of MTA/PMC/MNR and D-B are effectively mitigating the noted risks and it's the IEC's opinion that the mitigation strategies are reasonable.

MNR – Park Avenue Viaduct Replacement – Phase 1

Observations

- ❑ MTA PMT has been collaboratively working on the project and effectively managing this D-B project day-to-day interactively applying best practices as mandated by contractual requirements.
- ❑ Contractual requirements mandate the D-B establish a Project Field Office in which the MTA PMT and the D-B will be co-located, anticipated occupancy 1st Quarter 2023, to be in proximity to PAV/125th Street, NYC. By both MTA PMT and D-B being co-located in the building permits best practice program management and effective communication between project team members.
- ❑ PAV team continues its Public Outreach engagement with internal and external stakeholders, Public Officials and Harlem Community action groups having hosted numerous public information and briefing sessions. In addition, science, technology, engineering, and mathematics (STEM) sessions have been held with local area schools as well as Job Career events and project information sessions.



SAFETY NARRATIVE

YEAR-TO-DATE TRENDS FOR MTAC&D:

- **REPORTED LOST TIME INCIDENTS** – 6 (FEBRUARY)
- **REPORTED RECORDABLE INCIDENTS** – 5 (FEBRUARY)
- **REPORTED YTD LOST TIME INCIDENTS** – 11
- **REPORTED YTD RECORDABLE INCIDENTS** – 12

Hazards 2023	Lost Time	Recordable	First Aid	Notification Only	Grand Total	% to Grand Total
Struck By/Against	1	6	3	3	13	29.5%
Slip, Trip, Fall	3	3	2	3	11	25.0%
Sprain/Strain	3	1	1	3	8	18.2%
Other	2	0	1	4	7	15.9%
Caught in Between	1	2	0	1	4	9.1%
Electrical	1	0	0	0	1	2.3%
Totals	11	12	7	14	44	100.0%

- **LOST TIME TRENDS:** Reported Lost Time incidents YTD are currently at 17% of the total Lost Time Incidents reported in 2022. The top injury types associated with Lost Time incidents YTD are Slip/Trip & Falls, Strain/Sprains.
- **RECORDABLE TRENDS:** Reported Recordable incidents YTD are currently at 21% of the total Recordable Incidents reported in 2022. The top injury type associated with the YTD Recordable incidents is Struck By/Against and Slips, Trips & Falls.
- **SERIOUS INCIDENTS:** 2023 Total – 1
 - **ELECTRICAL SHOCK** – 1
- **LONG-TERM TRENDS:**
 - For February, the leading incident types were Struck By/Against (36%), Other (Lacerations, Cuts, Frostbite...) (23%), and Slip Trip & Fall (23%). Strains/Sprains, Caught Between, and Electrical type incidents accounted for the remaining 18% of reported incidents.
 - The number of reported Lost Time incidents in February increased by 20% from the reported January Lost Time incidents.
 - Reported internal total safety inspections are currently at 32% of the total internal inspections conducted in 2022.
 - The updated 2023 BLS LTIR remains at 1.30, while the 2023 TRIR has increased to 2.10.

INSPECTIONS & AUDITS:

- **FEBRUARY INSPECTIONS:**
 - **INTERNAL – 179**
 - **EXTERNAL – 509** (58 Third-Party Safety Consultants; 451 OCIP Visits)
- **YTD TOTAL # OF INSPECTIONS:**
 - **INTERNAL – 376**
 - **EXTERNAL – 1,014** (119 Third-Party Safety Consultants; 895 OCIP Visits)
- **FEBRUARY NEGATIVE OBSERVATION(S)** – Negative Findings identified through the various inspections include Housekeeping, Site/Public Protection, Stairs & Ladders, and Fall Protection.
- **FEBRUARY POSITIVE OBSERVATION(S)** - Positive Findings identified through the various inspections include Supervision/Organization, Tools (Hand & Power), Electrical, Vehicle & Equipment Safety, and Barricades/Enclosures.

INVESTIGATIONS & LESSONS LEARNED:

- **NUMBER OF INVESTIGATIONS for FEBRUARY– 1**
 - **Contract 3308 –Penn East End Gateway – 2/18/2023** – An Electrician received a serious electrical shock when contact was made with a live 277-volt wire in an overhead junction box on the Penn Station concourse. The electrical shock caused burns to the hands and wrist. The worker sustained additional lacerations to the arms due to contact with the above ceiling framing components. A full investigation by the PMT and GC resulted in a job-wide Safety Stand-Down, Re-training for all workers who use/may use LO/TO, and project management oversight for those activities.

MTA C&D SAFETY STRATEGIC INITIATIVES:

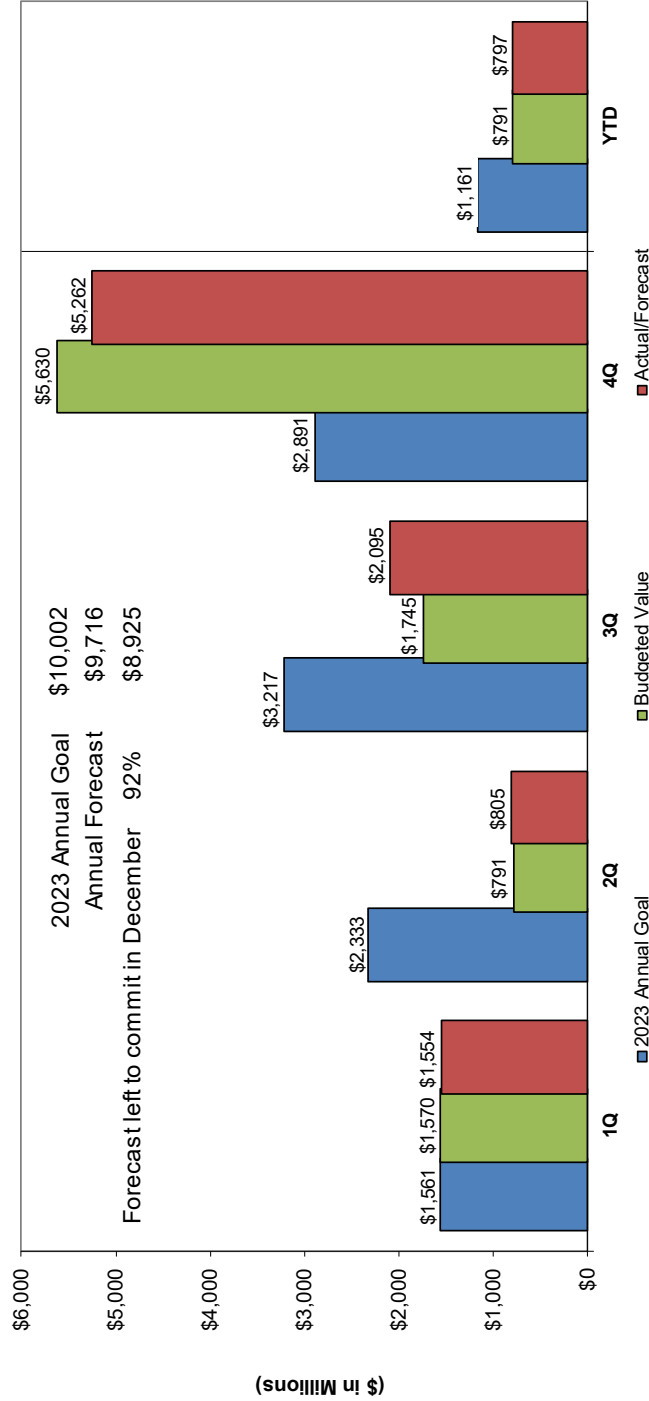
- Safety – Staffing remains a high priority in filling critical organizational roles within Safety Oversight and the Business Units. CD Safety Oversight continues to support the Business Units in reviewing and selecting qualified candidates to fill these critical roles/positions. The availability of suitable candidates continues to be challenging as Contractors and PMCs also need qualified personnel to staff their projects.
- Safety - The Independent 3rd party Safety Inspectors continue to move forward. The Consultant teams have been identified, and C&D Safety Oversight continues to coordinate to ensure all team members have the appropriate clearances for accessing MTA worksites. The inspections of C&D projects are expected to begin during the latter part of March.
- Safety – VP Safety Oversight has been conducting Monthly & Quarterly Outreach meetings with the various PMC/CCM consultant companies as part of the performance assessment initiative.
- AECOM Safety Assessment Initiative – The initiative continues to progress. CD Safety Oversight has provided AECOM with the information necessary to ensure all items align with the proposed implementation phasing plan. The DRAFT Safety Management System document has been reviewed and is being finalized by AECOM. Meetings have been scheduled with the BU Leads to have AECOM present the system and allow the BUs to review and comment. The Digital Solution component of the initiative continues moving forward. The final DRAFT of the SOW and supporting documents/appendices have been provided to the stakeholders for review and comment prior to finalizing the RFP.

MTA Capital Program Commitments & Completions

**through
February 28, 2023**

Capital Projects – Commitments – February 2023

MTA-wide 2023 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

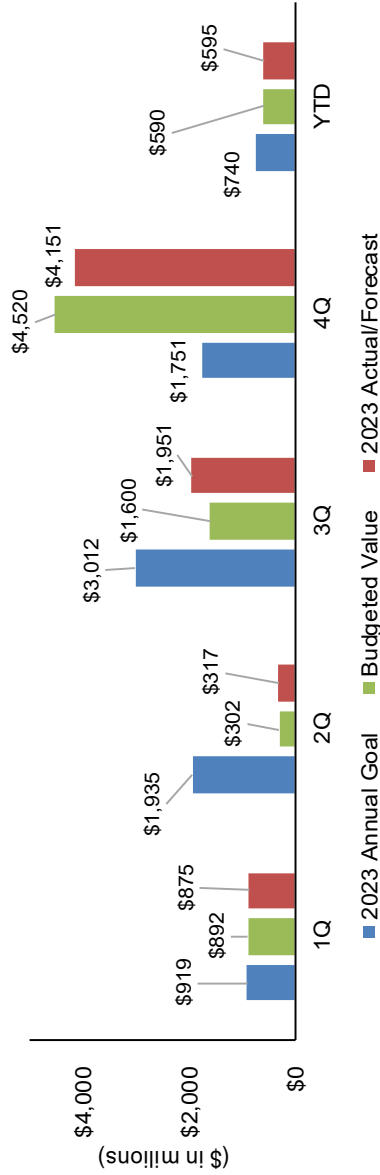
In 2023 the MTA plans to commit \$10.0 billion worth of capital projects. Through February, the MTA has committed \$791 million versus a \$1,161 million YTD goal.

In 2023 the MTA is tracking 38 "major" commitments across the agencies and business units. At the end of each quarter in 2023 any schedule variances will be reported on the following pages. The MTA currently projects achieving 97% of its commitment goal by year end. The nearly \$300 million year-end shortfall is primarily due to the Battery Electric Charging Infrastructure Phase 3 project being moved out of this year's commitments for both NYCT and MTA Bus resulting in a loss of \$208 million of commitments.

NYCT/MTA Bus Capital Projects – Commitments – February 2023 – Budget Analysis and Schedule Variances

NYCT and MTA Bus Budget Analysis

Summary Chart Data	1Q	2Q	3Q	4Q	YTD
2023 Annual Goal	\$919	\$1,935	\$3,012	\$1,751	\$740
2023 Actual/Forecast	\$875	\$317	\$1,951	\$4,151	\$595
Budgeted Value	\$892	\$302	\$1,600	\$4,520	\$590



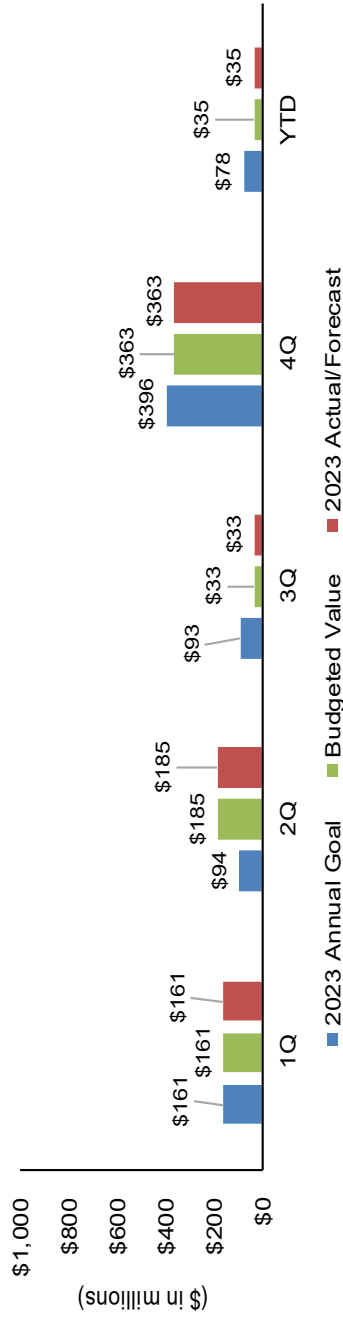
Q1 Schedule Variances

There are no major schedule slippages to report for NYCT and MTA Bus.

LIRR Capital Projects – Commitments – February 2023 – Budget Analysis and Schedule Variances

LIRR Budget Analysis

Summary Chart Data	1Q	2Q	3Q	4Q	YTD
2023 Annual Goal	\$161	\$94	\$93	\$396	\$78
2023 Actual/Forecast	\$161	\$185	\$33	\$363	\$35
Budgeted Value	\$161	\$185	\$33	\$363	\$35



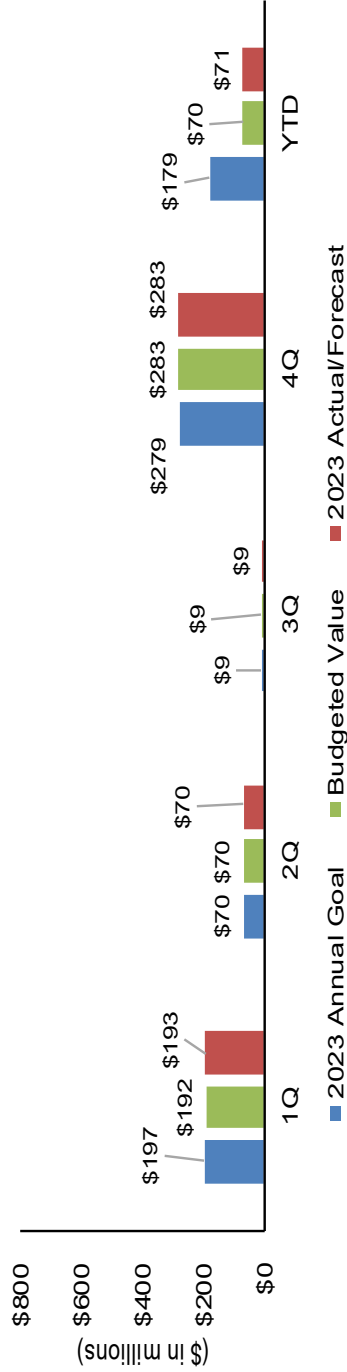
Q1 Schedule Variances

There are no major schedule slippages to report for the Long Island Rail Road.

MNR Capital Projects – Commitments – February 2023 – Budget Analysis and Schedule Variances

MNR Budget Analysis

Summary Chart Data	1Q	2Q	3Q	4Q	YTD
2023 Annual Goal	\$197	\$70	\$9	\$279	\$179
2023 Actual/Forecast	\$193	\$70	\$9	\$283	\$71
Budgeted Value	\$192	\$70	\$9	\$283	\$70



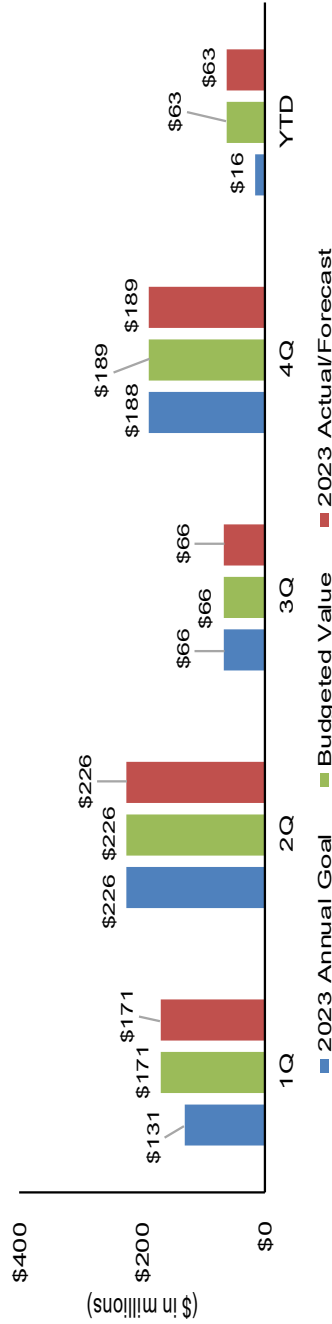
Q1 Schedule Variances

There are no major schedule slippages to report for Metro-North Railroad.

MTA Network Expansion Projects – Commitments – February 2023 – Budget Analysis and Schedule Variances

MTA Network Expansion Budget Analysis

Summary Chart Data	1Q	2Q	3Q	4Q	YTD
2023 Annual Goal	\$131	\$226	\$66	\$188	\$16
2023 Actual/Forecast	\$171	\$226	\$66	\$189	\$63
Budgeted Value	\$171	\$226	\$66	\$189	\$63



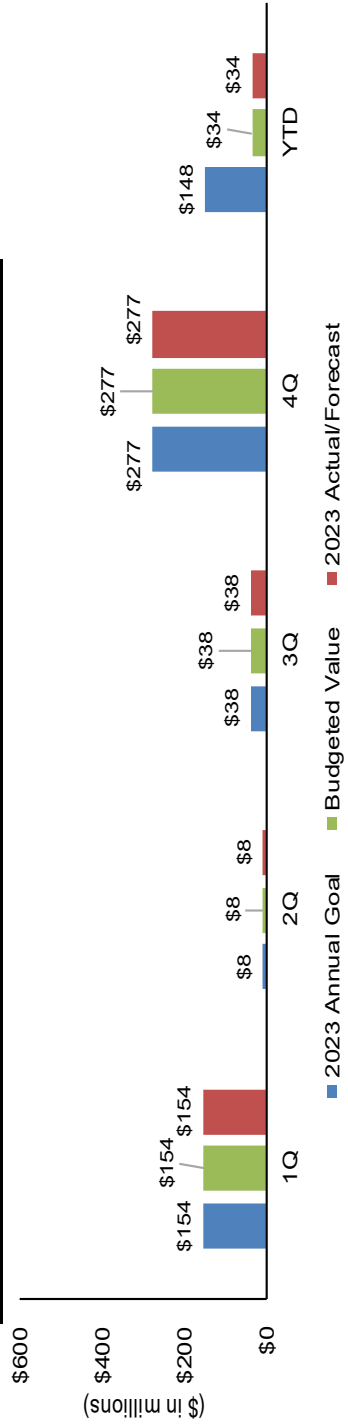
Q1 Schedule Variances

There are no major schedule slippages to report for Network Expansion.

B&T Capital Projects – Commitments – February 2023 – Budget Analysis and Schedule Variances

B&T Budget Analysis

Summary Chart Data	1Q	2Q	3Q	4Q	YTD
2023 Annual Goal	\$154	\$8	\$38	\$277	\$148
2023 Actual/Forecast	\$154	\$8	\$38	\$277	\$34
Budgeted Value	\$154	\$8	\$38	\$277	\$34



Q1 Schedule Variances

There are no major schedule slippages to report for the MTA Bridges & Tunnels.

Capital Projects – Completions – February 2023

Forecast	MTA-wide 2023 Major Completions												Post 2023
	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	
Goal	3	1	4	4	3	4	1	1	3	3	2	13	0
Total	42	3	1	7	6	2	2	1	3	3	2	10	
Jan-23	3												
Feb-23		1											
Mar-23		1	4		1							1	
Apr-23				4		1						1	
May-23					2								
Jun-23						2							
Jul-23							1						
Aug-23								1					
Sep-23									3				
Oct-23										3			
Nov-23											2		
Dec-23												10	

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

Completions Summary

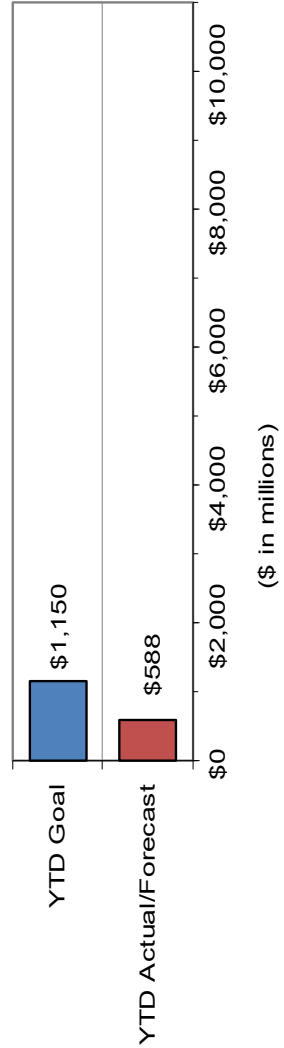
In 2023 the MTA plans to complete \$10.4 billion of projects. 42 Major completions are being tracked throughout the year.

Through February, the MTA has completed \$588 million versus its year to date goal of \$1,150 million. The shortfall is due mainly to the impact of a delayed East Side Access contract completion which is expected to be achieved in late Spring. Overall, there are six delayed major completions which are all expected to be achieved later in the year. Each is identified on the following pages.

By year end the MTA forecasts achieving its \$10.4 billion completions goal.

Budget Analysis

2023 Annual Goal \$10,408
 Annual Forecast \$10,443

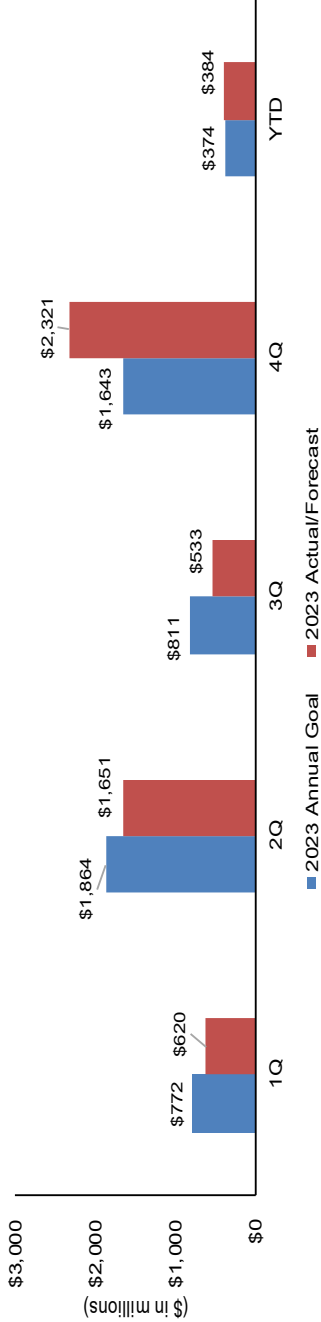


NYCT/MTA Bus Capital Projects – Completions – February 2023 – Budget Analysis and Schedule Variances

NYCT and MTA Bus Budget Analysis

Summary Chart Data	1Q	2Q	3Q	4Q	YTD
2023 Annual Goal	\$772	\$1,864	\$811	\$1,643	\$374
2023 Actual/Forecast	\$620	\$1,651	\$533	\$2,321	\$384

2023 Goal (Rolling Stock)	\$276	\$249	\$0	\$96	\$245
2023 Actual/Forecast (Rolling Stock)	\$276	\$249	\$0	\$964	\$276



Schedule Variances

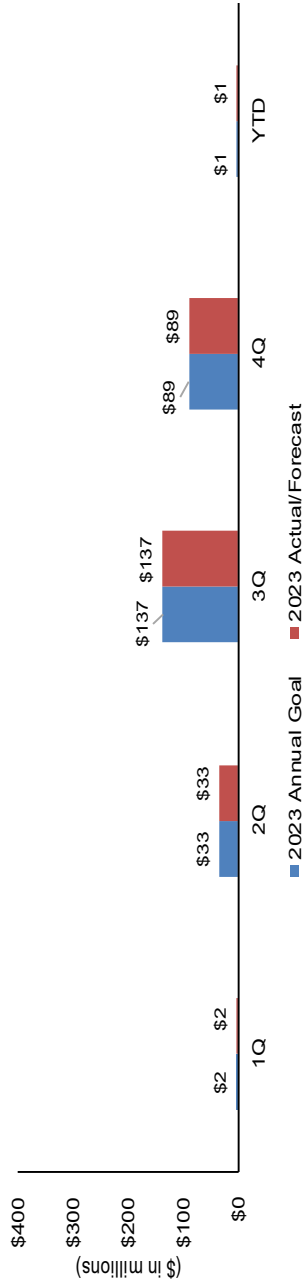
Project	Completion	Goal	Act./Forec.
4 NYCT/MTA Bus Red Completions (4 new this month) Red delays are beyond 2 months of goal. <i>Superstorm Sandy</i>			
Upgrade Emergency Booth	Construction	Mar-23	Dec-23
Comm System (New Item)		\$74.1	\$74.1
Change in project schedule reflects ongoing migration/integration work of the communication system and in-service durability testing.			
Signals & Communications			
CBTC QBL West Ph.1 /Siemens (New Item)	Construction	Apr-23	Dec-23
		\$221.7	\$221.7
Change in project schedule due to the vendor's softw are-related reliability issues.			
Stations			
ADA: 8 Stations - Package A (New Item)	Construction	Jul-23	Dec-23
		\$276.2	\$276.2
Change in project schedule reflects delays in establishing utility relocation agreements, property access and easement agreements.			
NYCT/MTA Bus Red Completions (continued)			
MTA Bus			
Storeroom Expansion - LaGuardia (New Item)	Construction	Mar-23	Jun-23
		\$7.4	\$7.4
The project's revised completion date reflects the delivery delay of a critical disconnect switch.			
1 NYCT/MTA Bus Amber Completions (1 new this month) Amber delays are within 2 months of goal.			
Staten Island Railway			
ML Track Rehab & Clifton Yard Switches (New Item)	Construction	Apr-23	Jun-23
		\$111.8	\$111.8
Change in project schedule reflects ongoing impact of track access and shuttle bus services.			

LIRR Capital Projects – Completions – February 2023 – Budget Analysis and Schedule Variances

LIRR Budget Analysis

Summary Chart Data	1Q	2Q	3Q	4Q	YTD
2023 Annual Goal	\$2	\$33	\$137	\$89	\$1
2023 Actual/Forecast	\$2	\$33	\$137	\$89	\$1

2023 Goal (Rolling Stock)	\$0	\$0	\$115	\$0	\$0
2023 Actual/Forecast (Rolling Stock)	\$0	\$0	\$115	\$0	\$0



Schedule Variances

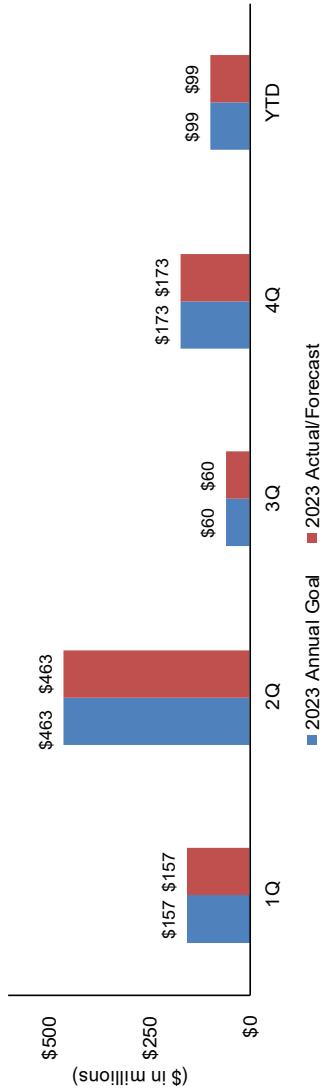
There are no major schedule slippages to report for the Long Island Rail Road.

MNR Capital Projects – Completions – February 2023 – Budget Analysis and Schedule Variances

MNR Budget Analysis

Summary Chart Data	1Q	2Q	3Q	4Q	YTD
2023 Annual Goal	\$157	\$463	\$60	\$173	\$99
2023 Actual/Forecast	\$157	\$463	\$60	\$173	\$99

2023 Goal (Rolling Stock)	\$0	\$0	\$0	\$115	\$0
2023 Actual/Forecast (Rolling Stock)	\$0	\$0	\$0	\$115	\$0



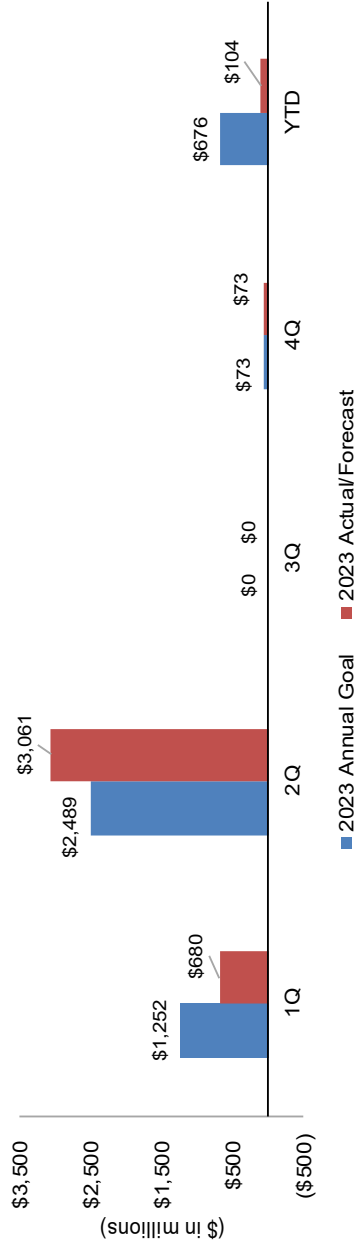
Schedule Variances

There are no major schedule slippages to report for Metro-North Railroad.

MTA Network Expansion Projects – Completions – February 2023 – Budget Analysis and Schedule Variances

MTA Network Expansion Budget Analysis

Summary Chart Data	1Q	2Q	3Q	4Q	YTD
2023 Annual Goal	\$1,252	\$2,489	\$0	\$73	\$676
2023 Actual/Forecast	\$680	\$3,061	\$0	\$73	\$104



Schedule Variances

Project	Completion	Goal	Act./Forec.
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1 Network Expansion Completion (1 new this month)

Red delays are delayed more than 2 months of goal.

East Side Access

GCT Concourse & Facilities (New Item)

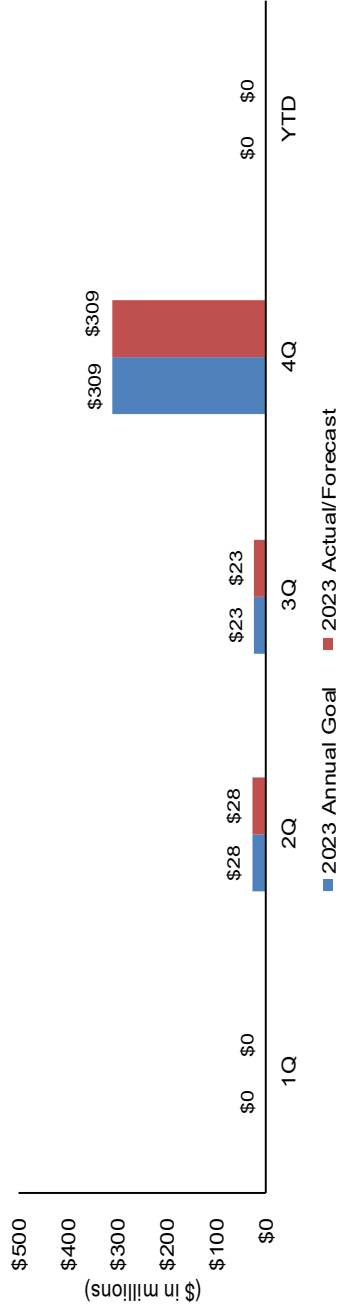
Construction	Feb-23	May-23
	\$572.0	\$572.0

Delay to CM014B is driven by the completion and testing of a freight elevator followed by ceiling/flooring finishes. This delayed scope is not required for revenue service and has no impact on the riding public.

B&T Capital Projects – Completions – February 2023 – Budget Analysis and Schedule Variances

B&T Budget Analysis

Summary Chart Data	1Q	2Q	3Q	4Q	YTD
2023 Annual Goal	\$0	\$28	\$23	\$309	\$0
2023 Actual/Forecast	\$0	\$28	\$23	\$309	\$0



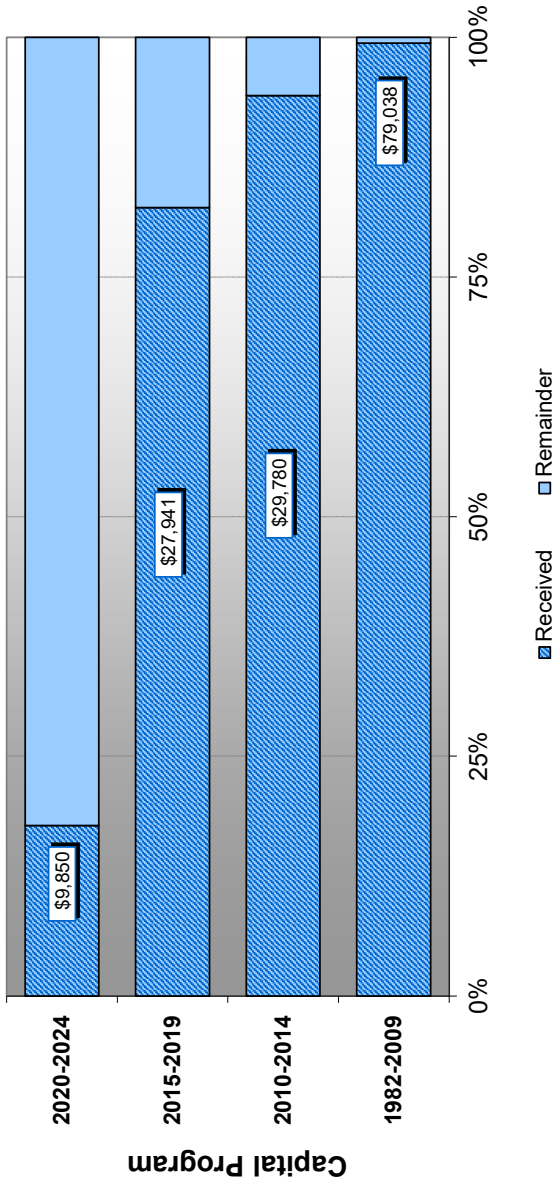
Schedule Variances

There are no major schedule slippages to report for MTA Bridges and Tunnels.

Status of MTA Capital Program Funding

Capital Funding (February 2023)

\$ in millions



Capital Funding Detail (February 2023)

\$ in millions

	Funding Plan		Receipts	
	Current	Thru January	February	Received to date
2010-2014 Program				
Federal Formula, Flexible, Misc	\$5,794	\$5,790	\$ -	\$5,790
Federal High Speed Rail	173	173	-	173
Federal New Start	1,271	1,271	-	1,271
Federal Security	89	89	-	89
Federal RRIF Loan				
City Capital Funds	628	608	-	608
State Assistance	770	770	-	770
MTA Bus Federal and City Match	132	113	-	113
MTA Bonds (Payroll Mobility Tax)	11,701	10,698	-	10,698
Other (Including Operating to Capital)**	1,361	1,288	-	1,288
B&T Bonds	2,025	1,864	-	1,864
Hurricane Sandy Recovery				
<i>Insurance Proceeds/Federal Reimbursement</i>	6,698	6,697	-	6,697
<i>PAYGO</i>	171	171	-	171
<i>Sandy Recovery MTA Bonds</i>	658	225	-	225
<i>Sandy Recovery B&T Bonds</i>	229	23	-	23
Total	31,701	29,780	-	29,780

	Funding Plan		Receipts	
	Current	Thru January	February	Received to date
2015-2019 Program				
Federal Formula, Flexible, Misc	\$6,898	\$5,724	\$ -	\$5,724
Federal High Speed Rail	122	122	-	\$122
Federal Core Capacity	100	-	-	\$ -
Federal New Start	500	-	-	\$ -
Federal Security	18	15	-	\$15
State Assistance	9,196	7,445	-	\$7,445
City Capital Funds	2,669	2,060	-	\$2,060
MTA Bonds	8,398	8,308	-	\$8,308
Asset Sales/Leases	806	315	-	\$315
Pay-as-you-go (PAYGO)**	2,156	1,961	-	\$1,961
Other	163	68	-	\$68
B&T Bonds & PAYGO/Asset Sale	2,942	1,925	-	\$1,925
Total	33,969	27,941	-	27,941

	Funding Plan		Receipts	
	Current	Thru January	February	Received to date
2020-2024 Program				
Capital from Central Business District Tolling	\$15,000	\$ -	\$ -	\$ -
Capital from New Revenue Sources	10,000	1,648	-	\$1,648
MTA Bonds and PAYGO	8,041	449	-	\$449
Other Contribution	542	-	-	\$ -
Federal Formula	8,865	6,226	-	\$6,226
State of New York	3,101	101	-	\$101
City of New York	3,007	887	200	\$1,087
Federal New Start (SAS Ph2)	2,905	-	-	\$ -
Federal Flexible	581	54	-	\$54
Federal Other	48	28	-	\$28
Federal Security	26	10	-	\$10
B&T Bonds	3,327	248	-	\$248
Total	55,442	9,650	200	9,850



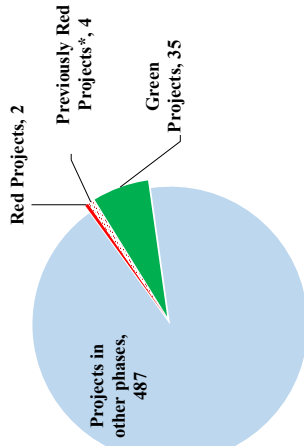
Metropolitan Transportation Authority

4th Quarter 2022 Traffic Light Report on the MTA Capital Program

A total of 528 Projects were Reviewed for the 4th Quarter 2022

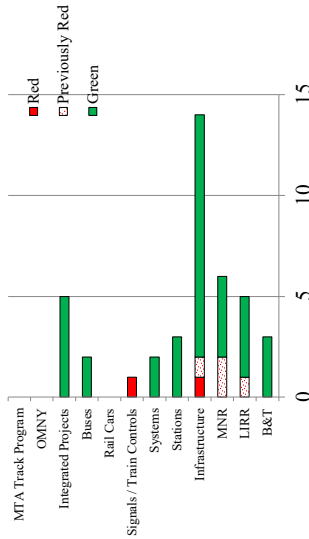
The 528 active projects include 41 projects in Design, 0 in Post-Design to Construction Award, 487 in Construction

41 of 528 Projects in Design



* see Terms and Definitions page

41 Projects in Design



Fourth Quarter 2022: 41 projects were reviewed in this phase with 35 designated green, 4 as previously red, and 2 red. The root causes of the 2 red projects were MTA resource support and design change.

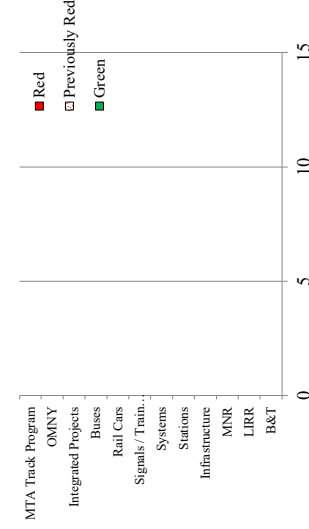
Third Quarter 2022: 55 projects were reviewed in this phase with 46 designated green, 7 as previously red, and 2 red.

0 of 528 Projects in Post-Design to Construction Award



* see Terms and Definitions page

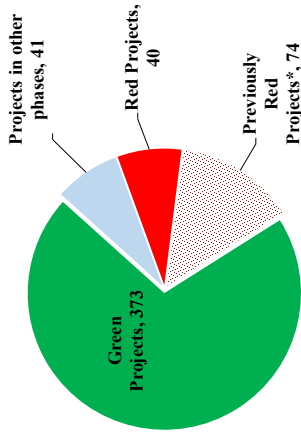
0 Projects in Post-Design to Construction Award



Fourth Quarter 2022: None of the projects in this phase met the TLR criteria this quarter

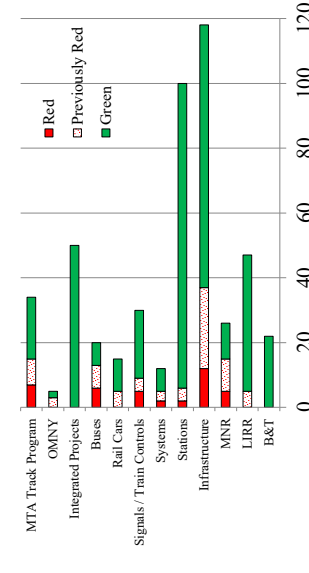
Third Quarter 2022: 12 projects were reviewed in this phase with 2 designated as green, 6 previously red, and 4 red.

487 of 528 Projects in Construction



* see Terms and Definitions page

487 Projects in Construction







Fourth Quarter 2022: 487 projects were reviewed in this phase with 373 designated green, 74 previously red, and 40 red. The 40 red projects had root causes of contractor performance, scope change, design omission, track access, unforeseen site conditions, coordination with outside agencies, and MTA resource support.




Third Quarter 2022: 397 projects were reviewed in this phase with 294 designated green, 66 previously red, and 37 red.





Project Terms and Definitions 4th Quarter 2022 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.

Project Terms and Definitions

Projects in Design: 41
 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 the last Traffic Light Report).
 Red: Schedule Variance - An increase of 3 months or more to substantial completion since the last Traffic Light Report.
 Previous Red: Previously indicated as red with no new substantial change since the last TLR / 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 Post Design to Construction Award Phase: 0
 Green: Phase Duration less than either the default of 128 calendar days for all agencies or the agency entered duration.
 Red: Phase Duration is greater than either the default 128 calendar days or the agency entered duration.
 Previous Red: Previously indicated as red with no new substantial change since the last TLR. Project may be returned to Green when it has been in compliance with two performance indicators for two consecutive quarters.


Projects in Construction: 487
 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 the last TLR).
 Red: Schedule Variance - An increase of 3 months or more to substantial completion since the last TLR.
 Previous Red: Previously indicated as red with no new substantial change since the last TLR / 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.


Project Terms and Definitions


4th Quarter 2022 Traffic Light Report

Projects impacted by Covid-19 (Temporary TLR Criteria): 0

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 TLR 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.

 Red Lined: Cost Index - An increase of 10% (or index movement of 10% or more since the last TLR).

 Red Lined: Schedule Variance - An increase of 3 months or more to substantial completion since the last TLR.

 Previous Red: Previously indicated as Red Lined with no new substantial change since the last TLR / A project in design, procurement or construction 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.

Projects in Planning:

➤ Projects in Planning are reviewed but not displayed in the TLR until the project reaches the design phase but continue to be maintained in the TLR project database for reporting purposes.

Completed Projects:

➤ Completed projects are removed from the TLR the quarter AFTER Substantial Completion is achieved.

Report Index Formulas and Criteria:

➤ Cost Index = Total Project EAC / Current Approved Budget.
(Note: Current Budget is not Budget at Award)

➤ 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 the last TLR.

➤ Cumulative Schedule Variance = 3 consecutive quarters with a total change in schedule that cumulatively exceeds the TLR threshold of 3 months or more.

➤ The TLR includes projects in CPOC's Risk-Based Monitoring Program which are listed at the end of the report.

➤ Only projects with budgets of \$7M or greater are included in the current quarter's TLR. Projects with budgets below \$7M are not displayed in the current report but will be maintained in the TLR database. If the current budget increases above the \$7M minimum threshold, the projects will return to an active status.

4th Quarter 2022 Traffic Light Report
Projects in 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
Stations - ADA Accessibility Program - Projects in Construction									
Borough Hall Station Bundle									
T8041224	Renewal: Borough Hall LEX	Construction	\$125,056,592	0	1.00	▼	0	▬	G
T8041311	ADA: Borough Hall LEX	Construction	\$39,980,570	0	.93	▲	0	▬	G
ADA 14th St Complex									
T7041251	Platform Components: 5 Locs CNR	Construction	\$3,781,498	15	1.00	▬	0	▬	G
T70412L2	Platform Components: 14 St 6 AV	Construction	\$8,079,176	15	1.00	▬	0	▬	G
T7041330	ADA: 14th St 6th AV/7th Av Complex DES	Construction	\$4,758,542	15	1.10	▬	0	▬	G
T7041346	ADA: 6 Av CNR	Construction	\$54,762,315	15	.99	▲	0	▬	G
T7041347	ADA: 14 St 6AV	Construction	\$28,339,956	15	1.00	▬	0	▬	G
T7041348	ADA: 14 St BW7	Construction	\$51,140,498	15	.99	▬	0	▬	G
T8041221	Station Ventilators CNR	Construction	\$2,107,462	15	1.02	▬	0	▬	G
T8041229	Platform Components: 6 Avenue / Canarsie	Construction	\$32,806,122	15	1.00	▬	0	▬	G
T8041230	Platform Components: 14th Street / 6 Ave	Construction	\$5,042,631	15	1.00	▬	0	▬	G
T8041304	ADA: 6 Ave / Canarsie	Construction	\$33,373,926	15	1.00	▬	0	▬	G
T8041305	ADA: 14 St / Broadway/ 7th Ave	Construction	\$29,873,986	15	1.00	▬	0	▬	G
T8070312	LSCR 8th Ave CNR	Construction	\$34,975,533	15	1.00	▬	0	▬	G
ADA 149th Street									
T7041315	ADA: 149 Street-Grand Concourse Complex	Construction	\$110,353,809	46	1.00	▬	6	▲	R
T7041338	ADA: Tremont Ave - Concourse Line	Construction	\$52,469,753	74	1.00	▬	6	▲	R
68th St-Hunter College									
T7041324	ADA: 68 St-Hunter College LEX	Construction	\$145,243,219	18	1.00	▬	0	▬	G

4th Quarter 2022 Traffic Light Report
Projects in 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
Stations - ADA Accessibility Program - Projects in Construction									
68th St-Hunter College									
T8041225	Platform Components: 68 St. - Hunter College LEX	Construction	\$6,231,878	0	1.00	■	0	■	G
T8050244	Mainline Track Replacement 2021 / Hunter College	Construction	\$4,014,497	0	1.00	■	0	■	G
ADA Package A									
S8070101	Station Components: New Dorp / SIR	Construction	\$2,316,923	64	1.00	■	0	■	G
S8070108	ADA: New Dorp SIR	Construction	\$34,715,249	64	1.00	■	0	■	G
S8070110	Components: New Dorp SIR	Construction	\$1,361,809	64	.97	■	0	■	G
T8041215	Design: Station Components DES	Construction	\$4,508,239	64	1.16	■	0	■	G
T8041231	Components: Metropolitan Ave XTN	Construction	\$2,423,404	64	.79	■	0	■	G
T8041303	ADA: Dyckman St (NB) BW7	Construction	\$20,283,883	62	1.00	■	0	■	G
T8041317	ADA: Grand St CNR	Construction	\$27,221,551	64	1.00	■	0	■	G
T8041319	ADA: 7th Ave CUL	Construction	\$44,727,413	64	1.00	■	0	■	G
T8041327	ADA: Lorimer St CNR	Construction	\$59,131,049	64	.99	■	0	■	G
T8041328	ADA: Metropolitan Ave XTN	Construction	\$47,004,005	64	1.00	■	0	■	G
T8041332	ADA: East 149th St PEL	Construction	\$38,676,891	64	1.00	■	0	■	G
T8041337	ADA: Beach 67th St FAR	Construction	\$41,662,144	64	1.00	■	0	■	G
ADA Package 2									
T6041323	ADA: 8th Ave/Sea Beach (Southbnd Ph2)	Construction	\$9,982,144	50	1.00	■	0	■	G
T7041213	Renewal: Woodhaven Blvd JAM	Construction	\$56,874,701	6	1.00	■	0	■	G
T7041314	ADA: Court Square XTN (Elevator Phase)	Construction	\$24,576,717	50	1.02	■	0	■	G
T7041316	ADA: Woodhaven Boulevard JAM	Construction	\$39,075,927	23	1.00	■	0	■	G

4th Quarter 2022 Traffic Light Report
Projects in Design, Post-Design to Construction Award or 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
Stations - ADA Accessibility Program - Projects in Construction									
ADA Package 2									
T7041327	ADA & Station Improvements: Westchester Sq PEL	Construction	\$90,053,940	18	1.00	▬	0	▬	G
T7041335	ADA: Queensboro Plaza FLS	Construction	\$74,204,872	15	.99	▬	0	▬	G
T8040708	Replace 5 Elevators at 2 Locations JAM	Construction	\$39,582,746	15	.96	▬	0	▬	G
T8041232	Station Renewal: Woodhaven Boulevard/PEL	Construction	\$24,396,207	6	1.00	▬	0	▬	G
T8041329	ADA: Woodhaven Blvd/JAM	Construction	\$27,496,852	23	1.00	▬	0	▬	G
T8041330	ADA & Station Improvements: Westchester Sq/PEL	Construction	\$32,417,241	18	1.00	▬	0	▬	G
T8041345	ADA: 181 St 8AV	Construction	\$47,232,339	28	.96	▬	0	▬	G
T8050246	ML Track Replacement: Westchester Square /Pelham	Construction	\$1,192,000	0	1.00	▬	0	▬	G
ADA Package 4									
T7041322	ADA: 95 St 4AV	Construction	\$35,000,000	0	1.00	▼	0	▬	G
T8040718	Replace 1 Escalator at Parkchester/PEL	Construction	\$13,840,841	0	1.00	▬	0	▬	G
T8041227	Platform Components: 137th St/Bwy7	Construction	\$8,188,332	0	1.00	▲	0	▬	G
T8041331	ADA Parkchester E. 177 St PEL	Construction	\$77,384,672	0	.96	▲	0	▬	G
T8041347	ADA: Northern Blvd/QBL	Construction	\$39,646,509	0	.96	▲	0	▬	G
T8041371	ADA: 137 St BW7	Construction	\$39,222,993	0	1.00	▲	0	▬	G
T8041375	ADA: 95th St / 4th Ave (Additional Support)	Construction	\$13,931,258	0	.88	▬	0	▬	G
All Other Stations Projects									
Component Repairs - 8th Ave Line									
T8060518	Tunnel Lighting, 8 Ave	Construction	\$18,399,742	12	1.00	▬	-7	▼	G

4th Quarter 2022 Traffic Light Report
Projects in 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									
All Other Stations Projects									
Component Repairs - 8th Ave Line									
T8060519	Fan Fiber, 8 Ave	Construction	\$17,378,521	12	1.00	▬	-7	▼	G
T8070329	Line Structure Repairs, 8 Ave	Construction	\$86,679,080	12	1.07	▲	-7	▼	G
Replacement of 8 Escalators									
T7040708	Replace 2 Escalators: Pelham Pkwy WPR	Construction	\$15,659,875	78	.99	▬	0	▬	G
T7040709	Replace 6 Escalators / Various	Construction	\$46,485,326	95	1.00	▬	0	▬	G
Station Renewal - Flushing Line - Bundle 1									
T7041218	Renewal: 61 St-Woodside FLS	Construction	\$48,858,147	7	1.00	▬	0	▬	G
T7070343	Struct Repair: 61st-Woodside FLS DES	Construction	\$3,219,411	4	1.00	▬	0	▬	G
T8040709	Replace 4 Escalators at 2 Locations FLS	Construction	\$42,530,808	4	1.00	▬	0	▬	G
T8041258	Station Renewal: Woodside 61st Station	Construction	\$78,972,236	7	.99	▬	0	▬	G
T8070317	Overcoat Painting: 48 St - 72 St FLS	Construction	\$15,579,565	4	1.00	▬	0	▬	G
T8070331	Repair Track/Structure Supporting Steel 61st-Woodside FLS	Construction	\$129,137,701	4	1.00	▬	0	▬	G
Escalator Replacement Bundle									
T7040707	Replace 6 Escalators / Various (Bx/M)	Construction	\$47,744,503	19	.99	▬	0	▬	G
T7040707	Replace 1 Escalator at Intervale / WPR	Construction	\$7,484,500	14	1.00	▬	0	▬	G
T7040713	Replace 5 Escalators / Various (Bk/M)	Construction	\$33,805,576	27	1.00	▬	0	▬	G
Station Renewal - Jamaica Line									
T7041214	Renewal: 85 St-Forest Parkway JAM	Construction	\$45,783,641	0	1.00	▼	0	▬	G
T7041215	Renewal: 75 St-Elderts Lane JAM	Construction	\$45,021,572	0	1.00	▼	0	▬	G
T7041216	Renewal: Cypress Hills JAM	Construction	\$49,984,641	0	1.00	▼	0	▬	G

4th Quarter 2022 Traffic Light Report
Projects in 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									
All Other Stations Projects									
Station Renewal - Jamaica Line									
T8041249	Platform Edges Wrap-Up: 104St & 121St/JAM	Construction	\$242,529	0	1.00	▲	0	▬	G
T8041250	Station Renewal at 85 St - Forest Pkwy / JAM	Construction	\$11,002,525	0	1.00	▲	0	▬	G
T8041251	Station Renewal at 75 St Elderts Lane / JAM	Construction	\$10,748,186	0	.10	▲	0	▬	G
T8041252	Station Renewal at Cypress Hills / JAM	Construction	\$12,045,438	0	1.00	▲	0	▬	G
T8070342	Demolition of Abandoned Structures: 97th CBH/JAM	Construction	\$265,315	0	1.00	▲	0	▬	G
T8080649	PSLAN: Expand Partial to Full at 75 St / JAM	Construction	\$655,672	0	1.00	▲	0	▬	G
Grand Central Bundle									
T7041402	Access Improvements: Grand Central, Phase 2	Construction	\$21,198,510	14	.92	▼	0	▬	G
T8040713	Replace 8 Escalators: Grand Central - 42 St / FLS	Construction	\$86,793,005	14	1.00	▬	0	▬	G
T8041226	Station Ventilators: Grand Central / FLS	Construction	\$17,617,057	20	1.00	▬	0	▬	G
Circulation Enhancements - Flushing-Main St									
T7041422	Station Capacity Enhancements: Main St FLS	Construction	\$54,568,753	40	1.00	▬	0	▬	G
T8041213	Station Components: Main St / FLS	Construction	\$3,787,559	40	1.00	▬	0	▬	G
ADA Package 3									
T8040715	Replace 14 Elevators: 5 Stations	Construction	\$74,874,726	0	1.00	▲	0	▬	G
T8041209	Livonia Av-Junius St Station Connector	Construction	\$28,699,079	0	.99	▬	0	▬	G
T8041312	ADA: Junius St / NLT	Construction	\$89,501,681	0	1.00	▲	0	▬	G
T8041314	ADA: Sheepshead Bay/BRT	Construction	\$49,238,743	0	1.00	▲	0	▬	G
T8041321	ADA: Kings Hwy / Culver	Construction	\$63,847,491	0	1.00	▲	0	▬	G
T8041333	ADA: Mosholu Pk/Jerome	Construction	\$53,410,562	0	1.00	▲	0	▬	G

4th Quarter 2022 Traffic Light Report
Projects in 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									
All Other Stations Projects									
ADA Package 3									
T8041336	ADA: Rockaway Blvd / Liberty Ave	Construction	\$60,185,049	0	1.00	▲	0	▬	G
T8041338	Woodhaven Blvd/Queens	Construction	\$73,241,565	0	1.00	▲	0	▬	G
T8041339	ADA: Steinway St/ Queens	Construction	\$119,785,816	0	1.00	▲	0	▬	G
T8041348	ADA: Church Avenue Brighton	Construction	\$53,383,015	0	1.00	▲	0	▬	G
Grand Central Circulation Improvements									
T8041239	Grand Central: Center Core East / Flushing	Construction	\$108,117,941	0	.99	▲	0	▬	G
T8041240	Grand Central: Widening Stairs U2/U6 / Lexington	Construction	\$3,447,535	0	.99	▲	0	▬	G
Bundle BL01-8868									
T8040716	Replace 6 Esc and 2 Stairs (Sut Blvd ARC/A4 8A VE)	Construction	\$81,130,897	0	.00	▬	0	▬	G
Bundle BL01-8898									
T8040717	Replace 19 Elevators at Various Locations	Construction	\$165,221,037	0	.00	▬	0	▬	G
Bundle BL01-9451									
T8041202	Station Renewals at Chambers St - Nassau Line	Design	\$90,391,191	10	1.00	▬	0	▬	G
T8041202	Station Renewal at 190th St - 8th Ave Line	Design	\$51,691,011	10	1.00	▬	0	▬	G
All Other Stations Projects									
ET060332	Sandy Resiliency: 3 Pump Rooms (53rd St Tube)	Construction	\$27,954,817	83	1.69	▬	0	▬	R
T7040703	Replace 8 Traction Elevators / Various	Construction	\$56,071,874	77	1.01	▬	0	▬	R
T7160729	RTO Facility Repair: 3 Avenue-138 Street PEL	Construction	\$15,328,898	100	1.00	▬	1	▲	R
T8040711	4 Escalators at 2 Locs Dekalb 4Av & 181 St BXC	Construction	\$49,523,947	18	1.00	▬	0	▬	G
T8040712	18 Escalators at 7 Locations	Construction	\$207,782,311	6	1.00	▬	0	▬	G
T8041210	Water Condition Remedy: Various Locations	Construction	\$7,554,166	29	1.00	▬	0	▬	G

4th Quarter 2022 Traffic Light Report
Projects in Design, Post-Design to Construction Award or 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									
All Other Stations Projects									
All Other Stations Projects									
T8041217	Platform Components: 3 Locs QBL/ARC	Construction	\$31,484,972	1	1.00	▼	0	▬	G
T8160711	EFR Consolidation: 2 Ave / 6Ave	Construction	\$20,054,641	22	1.08	▲	-6	▼	R
T8041253	Stormwater Mitigation: Various Stations	Design	\$20,000,000	3	1.00	▬	0	▬	G
Infrastructure									
207th St Yard Rehab									
ET100210	Power Cable Replacement- 207th Street Yard	Construction	\$42,710,741	98	1.00	▬	0	▬	R
ET100218	Sandy Repairs: 207th St Yard Signals	Construction	\$298,232,916	81	1.00	▬	0	▬	G
ET100219	Sandy Repairs: 207 St Yard Track	Construction	\$62,722,733	99	1.03	▬	0	▬	G
ET100220	Sandy Repairs: 207 St Yard Switches	Construction	\$30,984,884	97	.62	▬	0	▬	G
ET100310	Long Term Perimeter Protection: 207th St Yard	Construction	\$171,940,945	87	1.04	▬	0	▬	G
ET100312	Sandy Mitigation: 207th Street Yard Portal	Construction	\$54,881,539	87	2.02	▬	0	▬	G
Tiffany Warehouse Mitigation									
ET160312	Sandy Mitigation: Tiffany Central Warehouse	Construction	\$25,027,469	72	1.00	▬	0	▬	G
T7160723	Tiffany Warehouse Exterior Wall Structural Repair	Construction	\$18,652,541	2	1.00	▬	0	▬	G
T7160727	Roof Replacement: Tiffany Central Warehouse	Construction	\$18,881,566	15	1.02	▬	0	▬	G
Structural Repairs - Eastern Parkway Line									
T7070323	LSCR: Brooklyn (EPK)	Construction	\$80,508,497	93	.99	▬	0	▬	G
T8070311	Plenum Plate Demo & Struct. Rehab EPK	Construction	\$497,251	100	1.00	▬	0	▬	G
Structural Rehab and Overcoat Painting at 180th St									
T6080337	Walkway for 8 Bridges/Dyre	Construction	\$2,173,289	0	1.00	▬	0	▬	G

4th Quarter 2022 Traffic Light Report
Projects in Design, Post-Design to Construction Award or 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 Infrastructure									
Structural Rehab and Overcoat Painting at 180th St									
T7070301	Struct Rehab/Overcoating - E 180 St Abut WPR	Construction	\$71,108,920	2	1.01	▬	0	▬	G
T7070310	Overcoat: 17 Bridges & Flyover at E 180 St DYR	Construction	\$64,271,432	2	1.00	▬	0	▬	G
T7070357	East 180 Street Flyover / Dyre Av	Construction	\$5,017,221	2	1.00	▬	0	▬	G
T8070341	Demolition of Abandoned Structures	Construction	\$774,323	2	1.00	▬	0	▬	G
Overcoat Painting - Jamaica Line									
T8070335	Overcoating: Myrtle Avenue - DeSales Place/JAM	Construction	\$80,420,203	0	1.00	▲	0	▬	G
T8070336	Overcoating: Williamsburg Bridge - Myrtle Ave/JAM	Construction	\$72,140,187	0	1.00	▲	0	▬	G
T8070337	Overcoating: E New York Yard & Shop Leads/Loops	Construction	\$57,873,073	0	1.00	▲	0	▬	G
Component Repairs - Concourse Line									
T8060512	Fan Plants Component Repairs - BXC Line	Construction	\$237,910	10	1.00	▼	0	▬	G
T8070318	LSCR 161 - 192 Sts BXC	Construction	\$129,872,200	33	1.02	▬	0	▬	G
T8070319	Vents 161 - 192 Sts BXC	Construction	\$11,820,189	13	1.00	▬	0	▬	G
T8080640	Antenna Cable Concourse Line (IND)	Construction	\$9,863,092	46	1.01	▬	0	▬	G
Steinway Tunnel Portal Resiliency									
ET060338	Sandy Resiliency: 2 Pump Rooms (Steinway Tube)	Construction	\$12,681,940	0	1.00	▲	0	▬	G
ET070308	Sandy Mitigation: Steinway Portal	Construction	\$20,656,957	0	.99	▼	0	▬	G
T6070343	Steinway Portal Mitigation	Construction	\$10,874,666	0	1.00	▬	0	▬	G
T6080336	Catholic Protection, Steinway Tube	Construction	\$1,499,222	0	1.01	▲	0	▬	G
T7080648	Police Radio System: Enhance Coverage-SteinwayTube	Construction	\$5,467,026	0	1.00	▬	0	▬	G
Hardening of 26 Substations									
ET090307	Hardening of Substations at 24 Locations	Construction	\$98,514,641	0	1.00	▬	0	▬	G

**4th Quarter 2022 Traffic Light Report
Projects in Design, Post-Design to Construction Award or 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 Infrastructure									
Hardening of 26 Substations									
ET090313	Hardening Substations: W. Broadway & Murray St.	Construction	\$2,834,576	0	1.09	▼	0	▬	G
ET090314	Hardening Substations: Tudor City	Construction	\$6,478,398	0	1.03	▼	0	▬	G
T60412J3	Sandy Mitigation: 26 Substations	Construction	\$23,971,377	0	1.00	▬	0	▬	G
T6090219	Sandy Mitigation: 26 Substations	Construction	\$6,000,000	0	1.00	▬	0	▬	G
T6090417	Sandy Mitigation: 26 Substations	Construction	\$7,500,000	0	1.00	▬	0	▬	G
T6160730	Sandy Mitigation: 26 Substations	Construction	\$19,000,000	0	1.00	▬	0	▬	G
Jamaica Bus Depot Reconstruction									
T8030219	Jamaica Gantries BEB (Charging)	Construction	\$14,395,148	0	1.00	▼	0	▬	G
T8120303	Jamaica Depot Reconstruction	Construction	\$575,927,156	0	1.00	▬	0	▬	G
T8120307	Bus Parking Lot at York College	Construction	\$26,980,186	0	1.00	▲	0	▬	G
Line Structure Overcoat Painting - West End Line									
T7070322	Overcoat: 9 Av Portal to 79 Street WST DES	Design	\$1,209,847	70	1.00	▬	2	▲	G
T7070348	Overcoat: 79 St - 24 Ave / West End DES	Design	\$351,150	70	1.00	▬	2	▲	G
T7070349	Overcoat: 24th Ave - Stillwell Terminal WST DES	Design	\$351,150	70	1.00	▬	2	▲	G
T8070313	Overcoat: 9 Av Portal to 79 Street West End	Design	\$2,091,453	70	1.00	▬	2	▲	G
T8070313	Overcoat: 24th Ave - Stillwell Terminal West End	Design	\$1,483,256	70	1.00	▬	2	▲	G
T8070313	Overcoat: 79 St - 24 Ave / West End	Design	\$1,090,705	70	1.00	▬	2	▲	G
T8070314	Elevated Structure Repairs Design	Design	\$2,410,280	70	1.00	▬	2	▲	G
Bundle BL01-8757									
T8070332	Repair Abutment Wall: Coney Island Yard	Construction	\$15,655,442	0	1.00	▲	0	▬	G
T8070333	Replace Bridge: St Marks Ave/Franklin Ave Shuttle	Construction	\$21,095,858	0	1.00	▲	0	▬	G

4th Quarter 2022 Traffic Light Report
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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 Infrastructure									
SIRTOA Station Components									
S8070101	Station Components: Various Locations	Design	\$35,976,354	30	1.04	■	0	■	R
S8070103	Rehabilitate: Stapleton Viaduct	Design	\$29,260,271	80	1.00	■	0	■	G
Structural Component Repairs - Jamaica Line									
T70502A3	Myrtle Av Line (U69 Plates)	Construction	\$406,037	0	1.00	■	0	■	G
T8050241	Jamaica Direct Fixation	Construction	\$57,585,082	95	1.00	■	0	■	G
T8050242	63rd Street Direct Fixation	Construction	\$107,035,991	37	1.00	■	0	■	G
T8070326	Jamaica Structural Repairs	Construction	\$2,195,062	0	1.00	■	0	■	G
T8070327	63 St Structural Repairs	Construction	\$1,559,591	0	1.00	■	0	■	G
T8090211	Jamaica Line: 84C Contact Rail	Construction	\$3,566,446	95	1.00	■	0	■	G
T8090212	Jamaica Line Negative Side Feeders	Construction	\$429,285	95	1.00	■	0	■	G
T8090213	63 St 84C Contact Rail	Construction	\$9,545,612	0	1.00	■	0	■	G
T8090214	63 St Negative Side Feeders	Construction	\$946,040	0	1.00	■	0	■	G
Rehabilitation of Pumping Facilities									
T8060521	Rehabilitate Pump Room #1028 - Willoughby St/BWY	Construction	\$1,969,458	0	1.00	▲	0	■	G
T8060522	Rehabilitate Pum Room #1029 - Adams St/BWY	Construction	\$14,603,894	0	1.00	▲	0	■	G
Bus Radio System									
T6120403	Replace Bus Radio System	Construction	\$226,778,600	69	1.01	■	0	■	R
T6120444	Repair of East New York Tower	Construction	\$5,925,000	90	1.36	■	0	■	R
U6030226	Bus Radio System	Construction	\$34,191,033	69	1.07	▲	0	■	R
U7030211	Bus Radio System - MTA Bus Share	Construction	\$42,148,710	69	1.06	▲	0	■	R
U7030224	Repair of East New York Tower (MTAB)	Construction	\$1,975,000	90	1.36	■	0	■	R

4th Quarter 2022 Traffic Light Report
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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 Infrastructure									
Flood Mitigation - Coney Island Yard									
ET100211	Power Cable/Comm. Equipmt. Repl- Coney Island Yard	Construction	\$162,887,094	95	1.00	▬	4	▲	R
ET100307	Coney Island Yd: Long Term Perimeter Protection	Construction	\$524,015,329	95	1.48	▬	4	▲	R
T8090409	Rehab 4 CBH Enclosures at CIY	Construction	\$5,615,825	85	1.00	▬	4	▲	R
Clifton Shop									
S7070111	Relocate HQ to Clifton Shop	Construction	\$9,148,018	92	1.00	▬	2	▲	R
ES070211	Flood Repairs- Clifton Shop (Long-Term)	Construction	\$35,540,886	92	1.01	▬	2	▲	R
ES070302	SIR Mitigation: Clifton Shop / Yard	Construction	\$163,829,910	92	1.00	▬	2	▲	R
Central Substation Bundle									
T6090217	Reconstruct 6 Negative Manholes- Ctrl Subs/ 6 Ave.	Construction	\$2,633,989	100	1.21	▬	0	▬	R
T7090203	Substation Rnwl & New Rectifier: Centrl SS 6AV	Construction	\$48,433,798	100	1.11	▬	0	▬	R
T8090405	Rebuild Ducts: Central Platform	Construction	\$7,951,855	100	1.08	▬	0	▬	R
New Substations at New Dorp and Clifton Stations									
S7070106	New Power Substation: New Dorp	Construction	\$24,976,307	98	1.02	▬	3	▲	R
S7070107	New Power Substation: Clifton	Construction	\$30,578,568	98	.99	▬	3	▲	R
Clifton Shop Track and Switch									
S7070103	SIR Mainline Track Replacement	Construction	\$49,559,678	99	1.01	▬	4	▲	R
S7070113	SIR Clifton Yard Track and Switch Replacement	Construction	\$15,945,306	96	.92	▬	4	▲	R
S8070109	SIR Mainline (2021)	Construction	\$34,357,067	64	.97	▬	4	▲	R
S8070109	Track and Switch Rehab: SIR Mainline (Addtl Work)	Construction	\$15,113,650	100	.97	▬	4	▲	R
207th Street Shop Roof and Component Repair									
T6100455	207th St. Boiler House Structural Repairs	Construction	\$2,839,806	100	1.00	▬	0	▬	G

4th Quarter 2022 Traffic Light Report
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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 Infrastructure									
207th Street Shop Roof and Component Repair									
T7100402	207th St Maint & OH Shop Roof & Component Repl	Construction	\$59,951,102	100	1.00	▬	1464	▲	R
Bundle BL01-8845									
T8160605	IQ Consulting Serv.: UST Remediation - 2021	Construction	\$5,240,496	0	1.00	▲	0	▬	G
U7030225	IQ: UST Remediation at CP & Eastchester	Construction	\$1,865,723	0	1.00	▲	0	▬	G
Structural Repairs - Rockaway Viaduct									
ET070310	Rockaway ROW Debris Shielding	Construction	\$16,671,218	0	.91	▼	0	▬	G
ET070311	Sandy Mit: New Crossover at Beach 105th St. / RKY	Construction	\$81,247,792	0	.99	▼	0	▬	G
ET070312	Rockaway Line Long Term Protection	Construction	\$72,766,382	0	.99	▼	0	▬	G
ET070312	Sandy Mitigation: South Channel Bridge Generator	Construction	\$2,394,196	0	1.00	▲	0	▬	G
ET070313	Rockaway Park Yard Compressor Room (ROW)	Construction	\$17,997,454	0	.97	▼	0	▬	G
T6080338	Sandy Mitigation: Rockaway Bundle	Construction	\$117,988,006	0	.99	▲	0	▬	G
T8070323	Repl of Elect/Equip: S. Channel Bridge	Construction	\$60,275,039	0	.95	▲	0	▬	G
T8070324	Rehab Hammels Wye	Construction	\$106,413,315	0	.96	▲	0	▬	G
T8070325	Elev Structure Repairs: Over-Land Sections	Construction	\$102,639,516	0	.97	▼	0	▬	G
Substation Component Replacement Bundle									
T7090206	Replace HT Switchgear - Various Locs	Construction	\$31,171,968	95	1.02	▬	0	▬	R
T8090216	Replace Transformer and Associated Equip - 41 St Substation	Construction	\$7,525,953	0	1.00	▬	0	▬	R
Replace Supervisory Vent Controls - Various Locs									
T7060503	Replace Supervisory Vent Controls - Var Locs	Construction	\$28,168,716	100	1.00	▬	0	▬	R
T8060507	Replace Supervisory Vent Controls - 2 Locs / FLS	Construction	\$5,800,000	100	1.00	▬	0	▬	R

4th Quarter 2022 Traffic Light Report
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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 Infrastructure									
All Other Infrastructure Projects									
ET070209	Sandy Repairs: Rockaway Line Wrap Up	Construction	\$48,935,876	35	.99	■	0	■	G
ET090304	Mitigation: Montague Substations - Various Locs	Construction	\$9,131,858	72	.89	■	5	▲	R
ET100314	Sandy Mitigation: 207th Street Sewers	Construction	\$148,993,039	56	1.05	■	0	■	R
ET160310	Sandy Mitigation: Consolidated Revenue Facility	Construction	\$11,608,999	64	1.00	■	0	■	G
T6120323	Flatbush & Ulmer Park: Window Replacement	Construction	\$9,312,141	70	1.00	■	0	■	G
T6160717	Livingston Plaza Repairs	Construction	\$24,481,308	100	.99	■	0	■	R
T7060506	Rehab Forsyth St Vent Plant	Construction	\$93,548,145	76	1.03	■	0	■	R
T7070308	Rehab Emergency Exits (3rd Party) - Var Locs	Construction	\$19,287,302	0	1.00	▼	0	■	G
T7070316	Overcoat: Broadway - End of Line MYR	Construction	\$56,401,839	100	.96	■	1	▲	R
T7090202	Substation Renewal: Av Z CUL	Construction	\$32,170,967	91	.99	■	0	■	R
T7090219	New Substation: Canal St 8AV	Construction	\$80,412,560	0	.99	■	0	■	G
T7120306	Generator: Yukon Depot	Construction	\$11,816,772	67	1.00	■	0	■	R
T7120307	Roof, Office, HVAC: Fresh Pond Depot	Construction	\$14,859,564	53	1.00	■	2	▲	R
T7120321	East New York Depot Windows and Façade	Construction	\$18,061,652	57	1.00	■	6	▲	R
T8060505	Rehab Deep Wells & Control Upgrade Nostrand Line	Construction	\$22,685,806	23	1.01	■	0	■	G
T8060506	Rehab Fan Plant Damper Systems - 7 Locations	Construction	\$33,771,531	61	1.00	■	0	■	G
T8060514	Fan Plant SCADA Head-End Upgrade	Construction	\$18,757,610	20	1.00	■	0	■	G
T8060517	Deep Wells Back-flushing - Lenox Line	Construction	\$11,817,229	59	1.01	■	0	■	G
T8070344	Paint and Steel Repair, Culver Line South	Construction	\$102,411,853	0	1.00	▲	0	■	G
T8070345	Steel Repair, Culver Line North	Construction	\$55,272,535	0	1.00	▲	0	■	G
T8090207	Negative Cables: 4th Ave Line - 36St to Pacific Ph3	Construction	\$47,207,431	32	.97	■	0	■	G

4th Quarter 2022 Traffic Light Report
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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									
Infrastructure									
All Other Infrastructure Projects									
T8090215	New Substation: 28 St / 8AV	Construction	\$72,289,959	0	1.00	▲	0	▬	G
T8090410	Installation of Second Negative Rail / Dyre	Construction	\$33,017,807	0	1.00	▲	0	▬	G
T8090411	Rehabilitation of 5 CBHs; Various Locs	Construction	\$56,582,783	0	1.00	▲	0	▬	G
T8100412	Livonia Maint Shop Phase I	Construction	\$21,264,791	100	.96	▬	-4	▼	G
T8100417	207th St OH Facility	Construction	\$39,985,434	0	1.00	▲	0	▬	G
T8120304	Roof Topping & Expansion Joints Replacement at MJQ	Construction	\$12,136,355	3	1.00	▲	0	▬	G
T8160705	Livingston Piz Elec, Mechanical, Generator Phase B	Construction	\$69,183,494	19	1.00	▬	0	▬	G
T8160706	EMD Facility: Hoyt-Schermerhorn FUL	Construction	\$13,993,204	63	.99	▬	0	▬	R
U7030207	Storerooms and Depot Reconfiguration: LaGuardia	Construction	\$7,418,500	60	1.00	▬	5	▲	R
ET060327	Existing Pump Room Enhancements	Design	\$22,636,885	60	.56	▬	0	▬	G
ET090244	Traction Power Repairs: Various Locations	Design	\$137,179,696	45	.99	▬	0	▬	G
ET100315	Sandy Mitigation: Resiliency Improvements at Westchester Yard	Design	\$77,715,821	60	1.00	▬	9	▲	R
ET100315	Sandy Mitigation: Resiliency Improvements at Corona Yard	Design	\$17,165,058	99	1.00	▬	1	▲	G
T8100405	Yard Fencing: Fresh Pond Yard	Design	\$11,452,161	93	1.07	▬	0	▬	G
Systems									
Upgrade SCADA System - BMT Division									
ET090310	Sandy Mitigation: Back-up Power Control Center	Construction	\$13,435,530	2	1.00	▲	0	▬	G
T8090406	Upgrade SCADA BMT	Construction	\$50,847,369	6	1.00	▬	0	▬	G
All Other Systems Projects									
ET040317	Upgrade Emergency Booth Comm System (EBCS)	Construction	\$77,368,275	87	.98	▬	2	▲	R
S7070104	UHF T-Band Radio System Replacement, SIR	Construction	\$44,690,263	0	1.01	▼	0	▬	G

4th Quarter 2022 Traffic Light Report Projects in Design, Post-Design to Construction Award or 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 Systems									
All Other Systems Projects									
T6100454	207th St. OH Shop: Boiler Upgrades & Site Remed	Construction	\$14,706,576	100	1.14	■	0	■	R
T6160611	Replace Fire Alarm Systems at 13 Locations	Construction	\$30,829,906	100	1.11	■	0	■	R
T7080602	Upgrade Async Network to SONET, Rings A and C	Construction	\$29,980,302	100	1.00	■	0	■	R
T7080603	PBX Upgrade - Phase 2	Construction	\$55,034,700	95	1.32	▲	6	▲	R
T8080615	Liftnet Transition to Ethernet; Ph. 2 - Package 1	Construction	\$8,903,483	54	1.00	■	0	■	G
T8080616	Liftnet Transition to Ethernet; Ph. 2 - Package 2	Construction	\$7,581,165	10	1.00	■	0	■	G
T8080641	Asynch Fiber Optic Network Ring F	Construction	\$27,539,952	46	1.00	■	0	■	G
T8080642	PA/CIS Electronics Replacement - Canarsie Line	Construction	\$7,544,786	100	1.00	■	0	■	G
T8080602	Upgrade/Replace PBX-2 at Jay St	Design	\$7,890,932	14	1.00	■	0	■	G
T8080604	Copper Cable Replacement: Various Locations	Design	\$9,999,939	10	1.00	■	0	■	G
Signals / Train Controls									
200th and 207th Street Interlocking Repairs									
ET050217	Sandy Repairs: ML Track 200-207 St/8AVE	Construction	\$46,785,995	45	1.00	■	0	■	G
ET050218	Sandy Repairs: ML Switches 200-207 St/8AVE	Construction	\$33,765,637	53	1.00	■	0	■	G
ET080207	Signals: 200 St - 207 St / 8th Ave	Construction	\$70,473,438	42	1.01	■	0	■	G
CBTC - QBL East									
T8050321	Queens Blvd East Track/Switch	Construction	\$22,147,497	0	1.00	■	0	■	G
T8080317	SigMod: Queens Blvd and East 3 Interl. - Furnish	Construction	\$96,402,526	18	.97	■	0	■	G
T8080318	SigMod: Queens Blvd and East 3 Interl. - Install	Construction	\$354,487,035	17	.86	▼	0	■	G
CBTC - Crosstown Line									
T7080347	CBTC: Crosstown Line and 3 Interlockings DES	Construction	\$643,823	0	1.00	■	0	■	G

4th Quarter 2022 Traffic Light Report
Projects in Design, Post-Design to Construction Award or 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									
CBTC - Crosstown Line									
T8080323	CBTC: Crosstown Line & 3 Interlockings	Construction	\$591,001,463	0	1.00	▲	0	▬	G
T8080328	Bergen St Interlocking Upgrade	Construction	\$25,764,958	0	1.00	▲	0	▬	G
CBTC - 8th Ave Line									
T7080304	CBTC: 8AV (59 St - High St)	Construction	\$215,478,312	76	1.00	▬	0	▬	G
T7080304	CBTC: 8AV (59 St - High St)	Construction	\$4,100,000	76	1.00	▬	0	▬	G
T7080335	Interlocking Modernization: 30 St & 42nd St / 8AV	Construction	\$231,501,150	76	.89	▼	0	▬	G
T7080344	2019 M/L Switch Repl: 10 Switches CBTC 8AV	Construction	\$27,563,382	76	1.00	▬	0	▬	G
CBTC - Culver Line									
T7080307	Interlocking Modernization: Ditmas CUL	Construction	\$113,041,062	85	.88	▬	0	▬	R
T7080332	CBTC: CUL (Church Av to W8 St)	Construction	\$141,851,215	85	1.14	▬	0	▬	R
T7080333	Interlocking Modernization: Ave X CUL	Construction	\$172,933,188	85	.92	▬	0	▬	R
T7080343	2018 M/L Switch Repl: 7 Switches CBTC CUL	Construction	\$39,929,364	85	1.01	▬	0	▬	R
CBTC - QBL West									
T6080319	CBTC Queens Blvd Ln West Ph 1	Construction	\$87,047,387	98	1.00	▬	4	▲	R
T7080342	CBTC: 8AV Equip 112 R160 Cars (26 units)	Construction	\$11,900,000	50	1.00	▬	15	▲	R
T7080350	CBTC QBL West Phase 1 TA Labor	Construction	\$54,768,467	98	1.10	▲	4	▲	R
ISIM-B Module 3									
T7080614	ISIM-B Module 3: Rail Traffic Systems	Construction	\$82,947,705	100	1.00	▬	0	▬	G
T7080614	ISIM-B Module 3: Rail Traffic Systems	Construction	\$8,749,000	100	1.00	▬	0	▬	G
All Other Signals / Train Controls Projects									
T7080327	Life Cycle Mod - Speed Enforcement Systems	Construction	\$59,284,471	63	.90	▬	0	▬	G

**4th Quarter 2022 Traffic Light Report
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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									
All Other Signals / Train Controls Projects									
T7080342	CBTC: 8AV Equip 316 R179 Cars (73 units)	Construction	\$36,910,323	21	1.00	▬	-12	▼	G
T7080342	CBTC: 8AV Equip 460 R211 Cars (92 units)	Construction	\$36,654,101	30	1.00	▬	0	▬	G
T7080349	Signal Quality Enhancements (SAP)	Construction	\$18,195,000	90	1.00	▬	3	▲	R
T8080314	Single Chip UWB Interoperability (Proof of Concept) - Siemens	Construction	\$21,731,996	99	1.00	▬	1	▲	G
T8080314	Single Chip UWB Interoperability (Proof of Concept) - Thales	Construction	\$13,415,259	99	1.00	▬	5	▲	R
T8080316	CBTC: GEC Services	Construction	\$18,946,076	50	1.03	▬	0	▬	G
T8080326	CBTC: Equip 640 R211 Option 1 Cars (128 units)	Construction	\$14,411,606	16	1.00	▬	0	▬	G
ET100222	Sandy Repairs: Culver Yard (Signals/Track/Switches)	Design	\$278,460,000	15	1.00	▬	3	▲	R
NYCT									
T6100408	Replace Heavy Shop Equipment	Construction	\$7,504,000	35	1.00	▬	0	▬	G
T6160705	Employee Facility Rehab: RTO Chambers St NAS	Construction	\$19,220,091	91	1.05	▬	7	▲	R
T8041223	Station Ventilators Ph 21 - 4 Locs/ Manh & BX	Construction	\$10,260,856	63	1.00	▬	0	▬	G
T8041235	Station Ventilators Ph 20 - 4 Locations MHTN	Construction	\$10,478,119	0	1.00	▬	0	▬	G
T8041254	Station Ventilators: Ph 19 - 4 Locs, Brooklyn	Construction	\$9,182,508	0	1.00	▬	0	▬	G
T8041263	Replacement of Signage at Various Stations (2022)	Construction	\$10,789,176	0	1.00	▬	0	▬	G
T8070330	LSCRP: Repair of Priority Column Bases/JER&W/PR	Construction	\$7,470,786	61	1.00	▬	0	▬	G
T8070334	Rehab of Emergency Exits - 2022	Construction	\$12,507,676	42	1.00	▬	0	▬	G
MTA Track Program									
NYCT Department of Subways									
T70502A2	Continuous Weld Rail Ph 2 (SAP)	Construction	\$19,340,634	88	1.00	▬	8	▲	R
T8050208	Mainline Track Replacement 2020 / Flushing	Construction	\$59,886,344	80	1.00	▬	0	▬	G

**4th Quarter 2022 Traffic Light Report
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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									
MTA Track Program									
NYCT Department of Subways									
All Other MTA Track Program Projects									
T8050210	Mainline Track Replacement 2020 / Brighton	Construction	\$15,212,679	86	1.00	▬	0	▬	R
T8050211	Mainline Track Replacement 2020 / Jamaica	Construction	\$28,061,426	80	1.00	▬	0	▬	G
T8050214	Mainline Track Replacement 2020 / Astoria	Construction	\$21,026,790	79	1.00	▬	0	▬	R
T8050217	Mainline Track Replacement 2020 / 63rd St	Construction	\$8,650,354	90	1.00	▬	0	▬	G
T8050227	Mainline Track Replacement 2021 / 11th st Cut	Construction	\$19,926,544	74	1.00	▬	5	▲	R
T8050230	Mainline Track Replacement 2021 / Concourse	Construction	\$15,611,732	95	1.00	▬	0	▬	R
T8050231	Mainline Track Replacement 2021 / Bway-7th	Construction	\$16,656,471	86	.61	▼	0	▬	R
T8050232	Mainline Track Replacement 2021 / Jamaica	Construction	\$27,039,948	55	1.00	▬	0	▬	R
T8050233	Mainline Track Replacement 2021 / Eastern Parkway	Construction	\$8,145,459	86	1.00	▬	0	▬	G
T8050234	Mainline Track Replacement 2021 / Jerome	Construction	\$8,621,107	60	1.00	▬	5	▲	R
T8050235	Mainline Track Replacement 2021 / Flushing	Construction	\$29,054,120	19	1.00	▬	0	▬	R
T8050237	Mainline Track Replacement 2021 / Lenox - WPR	Construction	\$8,079,477	44	1.00	▬	5	▲	R
T8050240	Mainline Track - 2021 Support Costs	Construction	\$14,428,518	20	1.01	▬	0	▬	G
T8050247	Mainline Track Replacement 2022 / 6th Ave-Culver	Construction	\$25,964,750	88	1.00	▬	0	▬	G
T8050248	Mainline Track Replacement 2022 / 8th Avenue	Construction	\$28,714,961	89	1.09	▲	0	▬	G
T8050249	Mainline Track Replacement 2022 / 7th Avenue	Construction	\$16,042,944	89	1.00	▬	0	▬	G
T8050250	Mainline Track Replacement 2022 / Brighton	Construction	\$32,977,292	12	1.00	▬	2	▲	G
T8050251	Mainline Track - 2022 / Support Costs	Construction	\$15,095,217	5	.60	▼	0	▬	G
T8050252	Mainline Track Replacement 2022 / Myrtle	Construction	\$9,224,812	63	1.00	▬	9	▲	R
T8050254	Mainline Track Replacement 2022 / Astoria	Construction	\$18,591,811	54	1.00	▬	0	▬	R

4th Quarter 2022 Traffic Light Report
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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									
MTA Track Program									
NYCT Department of Subways									
All Other MTA Track Program Projects									
T8050258	Mainline Track Replacement 2022 / Liberty	Construction	\$23,698,058	17	1.00	▬	15	▲	R
T8050263	Mainline Track Replacement 2022 / Culver	Construction	\$17,098,309	85	1.00	▬	2	▲	R
T8050265	Track 2022 / 8AV tk A1	Construction	\$16,659,388	52	1.00	▬	1	▲	G
T8050266	ML Track - 2022/ White Plains Rd	Construction	\$19,002,082	13	1.00	▬	0	▬	G
T8050320	Mainline Track Switches- 2021 Support Costs	Construction	\$11,670,721	10	.95	▬	0	▬	G
T8050322	Mainline Switches - 2022 DES/EFA	Construction	\$15,713,385	0	1.00	▬	0	▬	G
T8050324	Mainline Track Switches 2022 / 8th Avenue	Construction	\$32,639,912	31	1.00	▬	10	▲	R
T8050328	Mainline Track Switches 2022 / Brighton	Construction	\$21,321,211	63	1.00	▬	0	▬	G
LIRR and MNR									
L8030107	2022- Annual Track Program	Construction	\$71,105,765	99	.86	▼	0	▬	G
M8030103	2020 Mainline Turnouts/Switch Renewal	Construction	\$8,347,000	100	.92	▬	0	▬	G
M8030108	2020 Cyclical Track Program	Construction	\$19,260,000	87	1.00	▬	0	▬	G
M8030302	West of Hudson Track Program - Pt Jervis Line	Construction	\$6,654,999	20	.41	▬	0	▬	G
LIRR									
Babylon Interlocking									
L70502LH	Babylon Interlocking Renewal	Construction	\$32,639,998	1	1.00	▬	0	▬	G
L8050201	Babylon Interlocking Renewal & New Sidings	Construction	\$102,311,013	1	1.10	▬	0	▬	G
Long Island City Yard Resiliency									
EL0602ZL	Long Island City Yard Restoration - Phase 3B	Construction	\$6,999,074	100	1.00	▬	0	▬	G
EL0603ZS	Long Island City Yard Resiliency - Wall and Pumping System	Construction	\$26,562,327	10	1.01	▬	0	▬	G

**4th Quarter 2022 Traffic Light Report
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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									
LIRR									
Long Island City Yard Resiliency									
EL0603ZU	Long Island City Yard - Construction	Construction	\$2,381,000	10	1.00	▬	0	▬	G
L606016J	Long Island City Yard - Phase 3B Core	Construction	\$15,200,000	10	1.03	▬	0	▬	G
LIRR ADA Package									
L8020411	ADA Locust Manor New Elevators	Construction	\$17,202,399	0	.75	▲	0	▬	G
L8020413	ADA Copiague Platform and New Elevator	Construction	\$11,531,791	0	.63	▲	0	▬	G
L8020414	ADA St Albans New Elevator	Construction	\$25,769,908	0	1.01	▲	0	▬	G
L8020420	ADA Amityville Station	Construction	\$10,865,735	0	.70	▲	0	▬	G
L8020421	ADA Laurelton Station	Construction	\$23,052,063	0	1.03	▲	0	▬	G
L8020422	ADA Massapequa Park Station	Construction	\$10,591,142	0	.66	▲	0	▬	G
L8020423	ADA Lindenhurst Station	Construction	\$11,255,860	0	.62	▲	0	▬	G
L8020424	Valley Stream Escalator / Elevator Replacement	Construction	\$25,231,132	0	1.06	▲	0	▬	G
L8020425	Auburndale Elevator Replacement	Construction	\$6,027,524	0	.76	▲	0	▬	G
All Other LIRR Projects									
EL0303ZH	Emergency Management Equipment Mitigation	Construction	\$29,026,102	75	.96	▬	-11	▼	G
EL0602ZD	West Side Storage Yard Restoration	Construction	\$43,986,089	64	1.00	▬	0	▬	R
L60304TU	Jamaica Capacity Improvements - Phase One	Construction	\$301,653,239	95	1.00	▬	1	▲	R
L70502LN	Babylon to Patchogue Signal Improvements	Construction	\$45,610,421	16	.99	▬	0	▬	G
L70701XB	Substation Components	Construction	\$36,820,000	70	1.00	▬	4	▲	R
L70701XU	Substation Repl Pkg 2: Construction	Construction	\$27,687,990	25	1.14	▬	0	▬	R
L70701XX	Hall & Babylon Signal Power Motor Generator Repl.	Construction	\$20,417,309	30	1.06	▼	0	▬	G
L8020417	Tactile Strips - Various Locations	Construction	\$12,800,000	37	2.28	▬	0	▬	G

4th Quarter 2022 Traffic Light Report
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Construction & Development									
LIRR									
All Other LIRR Projects									
L8020418	Mets-Willels EIC Relocation	Construction	\$28,866,050	30	1.00	▬	0	▬	G
L8020419	Northport Station Improvements	Construction	\$11,045,750	16	1.05	▼	0	▬	G
L8020701	GCT Facility Needs	Construction	\$18,000,000	1	1.00	▼	0	▬	G
L8030101	Construction Equipment	Construction	\$38,560,567	20	.96	▬	0	▬	G
L8030102	Various Right of Way Projects	Construction	\$10,000,000	20	1.00	▬	0	▬	G
L8030105	Queens Interlocking	Construction	\$155,020,454	27	2.18	▬	0	▬	R
L8030403	JCI - Hall Interlocking Expansion	Construction	\$158,521,343	0	1.05	▼	0	▬	G
L8040107	Cherry Valley Rd Bridge Replacement (Hempstead)	Construction	\$31,436,148	40	1.01	▼	0	▬	G
L8050103	Fiber Optic Network	Construction	\$8,000,000	25	1.00	▬	0	▬	G
L8050204	Centralized Train Control	Construction	\$30,800,000	0	1.02	▬	0	▬	G
L8050205	Signal Replacement and Interlocking Improvements	Construction	\$41,000,000	17	1.20	▬	0	▬	G
L8050205	Signal Replacement and Interlocking Improvements	Construction	\$19,693,456	63	.98	▬	0	▬	G
L8050205	Infrastructure Projects - PTC Add-Ons	Construction	\$12,806,626	0	1.01	▬	0	▬	G
L8050207	Positive Train Control (ESA)	Construction	\$33,220,000	0	1.00	▬	0	▬	G
L8060105	Mid Suffolk Yard Phase 2	Construction	\$30,000,000	0	1.00	▼	0	▬	G
L8060403	Fire Protection Improvements	Construction	\$25,000,000	0	1.00	▬	0	▬	G
L8070102	Atlantic Avenue Tunnel Lighting	Construction	\$10,000,000	5	1.00	▬	0	▬	G
L8070102	Yard Lighting & Amenities	Construction	\$8,000,000	0	1.00	▬	0	▬	G
L8070103	Station & Building Electrical Systems and Platform	Construction	\$8,000,000	24	1.00	▬	0	▬	G
L8070103	Signal Power & Power Pole Line Replacement	Construction	\$8,000,000	25	1.00	▬	0	▬	G
L8070104	3rd Rail - Protection Board & Aluminum Rail	Construction	\$27,000,000	2	1.00	▬	0	▬	G

**4th Quarter 2022 Traffic Light Report
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Construction & Development									
LIRR									
All Other LIRR Projects									
L8070104	3rd Rail - 2000 MCM Feeder Cable Upgrade	Construction	\$13,000,000	1	1.00	▬	0	▬	G
L8070106	Substation Component Renewal	Construction	\$37,805,000	6	.98	▼	0	▬	G
L8070107	Jamaica Substation	Construction	\$74,303,279	0	1.29	▲	0	▬	G
EL0402ZA	East River Tunnel Signal Sys & Infra Restoration	Design	\$179,871,202	92	1.00	▬	0	▬	G
L70204UO	East Yaphank Station	Design	\$19,540,829	50	.97	▬	0	▬	R
L70304WU	JCI PH 2 -Signals - 3P Design	Design	\$42,520,000	96	1.00	▼	0	▬	G
L80204DD	ADA Accessibility and Components 24 Stations DES	Design	\$14,218,350	25	.96	▬	0	▬	G
L8070101	Substation Replacements	Design	\$114,159,228	20	.89	▼	0	▬	G
MNR									
86th and 110th St Substations									
M6050103	H&H Power (86th St / 110th St)	Construction	\$18,792,697	100	1.01	▬	4	▲	R
M7050113	H&H Power (86th St / 110th St)	Construction	\$14,536,700	91	1.18	▬	4	▲	R
Hudson Line Power, Communication, and Signal Restoration									
EM040205	Comm & Signal Infrastructure Restoration-Ph. 1 & 2	Construction	\$108,903,081	100	1.10	▬	-9	▼	R
EM040301	Power and Signals Mitigation Phase 1	Construction	\$36,204,849	100	1.14	▬	-5	▼	R
EM040302	Hudson Line Power and Signal Resiliency	Construction	\$39,156,995	100	1.11	▬	-9	▼	R
EM050206	Power Infrastructure Restoration-Ph. 1 & 2	Construction	\$176,746,703	100	1.00	▬	-9	▼	R
EM050210	Power Infrastr Restoration-Remote Terminal Houses	Construction	\$1,280,000	14	1.00	▲	0	▬	R
Harlem and New Haven Line Priority Repair Bundle									
M7020204	Harlem Line Station Improvements	Construction	\$20,484,858	38	.94	▬	4	▲	R
M7020217	Purdy's Elevator Improvements	Construction	\$7,542,007	28	.92	▬	4	▲	R

4th Quarter 2022 Traffic Light Report Projects in Design, Post-Design to Construction Award or Construction

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Construction & Development									
MNR									
All Other MNR Projects									
EM050208	Power Infrastructure Restoration-Substations	Construction	\$48,644,198	100	1.05	▬	0	▬	R
M7030109	Purchase MoW Equipment	Construction	\$19,408,265	100	.98	▬	0	▬	G
M7030303	F/A Undergrade Bridge Rehabilitation West of Hudson	Construction	\$9,404,423	54	1.04	▬	12	▲	R
M7030304	Moodna/Woodbury Viaduct (incl timbers/walkways)	Construction	\$15,441,816	0	.97	▼	0	▬	G
M7040102	Harmon to Poughkeepsie SignalSystem	Construction	\$150,052,520	84	1.48	▬	0	▬	R
M7040112	Harlem Wayside Comm & Signal Improvements	Construction	\$72,793,590	85	1.39	▬	2	▲	R
M7050101	Replace MA's in Signal Substations	Construction	\$26,592,118	60	1.10	▲	0	▬	R
M7050104	Harlem & Hudson Power Rehabilitation	Construction	\$13,286,001	100	.96	▲	2	▲	G
M7050105	Harlem and Hudson Power Improvements	Construction	\$30,969,190	88	1.32	▬	0	▬	R
M7060101	Harmon Shop Replacement - Phase V	Construction	\$427,759,585	87	.99	▬	0	▬	G
M8020201	Upper H&H Stations Priority Repairs	Construction	\$36,190,454	23	.96	▬	0	▬	G
M8020208	North White Plains Station Rehab	Construction	\$11,118,267	85	.91	▼	0	▬	G
M8030104	Rock Slope Remediation - East of Hudson	Construction	\$6,345,538	0	.43	▬	0	▬	G
M8030107	MoW Equipment	Construction	\$23,377,936	0	.97	▬	0	▬	G
M8030201	Park Avenue Viaduct Replacement	Construction	\$491,325,630	0	.83	▼	0	▬	G
M8050110	Rebuild 2 NHL AC Substations	Construction	\$62,618,682	0	.97	▬	0	▬	G
M8060101	Upgrade Automotive Fuel System	Construction	\$12,293,814	1	1.02	▲	0	▬	G
M7020101	GCT Trainshed - Sector 2 Design	Design	\$29,474,500	81	1.12	▬	0	▬	R
M7060103	Brewster YD Improvements - Design	Design	\$5,129,117	100	.68	▬	0	▬	G
M7060104	West of Hudson Yard Improvements - Passing Sidings	Design	\$6,415,924	32	.82	▼	0	▬	G
M8020103	GCT Fire Standpipe Replacement - Phase 2	Design	\$5,294,038	80	.10	▼	0	▬	R

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Construction & Development									
MNR									
All Other MNR Projects									
M8020202	Harlem Line Station Renewals - Bot. Gardens, Wdlnw, and Williams Br.	Design	\$5,177,770	42	.05	■	0	■	G
M8030304	Moodna/Woodbury Viaduct Repairs	Design	\$38,890,258	0	.97	■	0	■	G
B&T									
BW Bridge Structural Rehab and Painting									
D801BW14	Miscellaneous Structural Rehabilitation	Construction	\$24,218,357	20	.87	■	0	■	G
D807BWPT	BW Facility-Wide Painting Program	Construction	\$8,480,507	80	.85	■	0	■	G
RFK Bridge Sidewalk Connection and Fender Upgrades									
D702RK23	HRLS Sidewalk Connection at RFK Bridge	Construction	\$21,977,632	81	.95	■	0	■	G
D801RK83	RFK Bridge Lift-Span Fender Upgrades	Construction	\$28,567,315	32	.87	■	0	■	G
Structural Rehab. at Cross Bay and Marine Parkway Bridges									
D801CB30	Structural Rehabilitation of CBB	Construction	\$31,127,464	0	.85	▼	0	■	G
D801MP16	Miscellaneous Steel Repairs	Construction	\$7,600,000	0	.52	▼	0	■	G
TN Bridge Orthotropic Deck Replacement									
D702TN49	Replacement of Grid Decks on Suspended Span	Construction	\$279,207,833	100	.88	■	0	■	G
D707TN49	Painting of Suspended Span	Construction	\$17,644,527	100	.82	■	0	■	G
Utility Redundancy and Resiliency Improvements at BW and VN Bridges									
D804BW96	Lighting, Power Redundancy & Resiliency Improvements	Construction	\$48,845,975	0	.71	▼	0	■	G
D804VN12	VNB Electrical Controls System Upgrade	Construction	\$18,163,183	0	1.01	▲	0	■	G
ED070307	BWB Mitigation - Flood Wall & Other	Construction	\$9,635,150	0	1.16	■	0	■	G
All Other B&T Projects									
D701TN53	Approach Viaduct Seismic Retrofit/Structural Rehab	Construction	\$193,249,635	68	.86	■	0	■	G
D702VN84	Reconstruction of VN Approach Ramps - Phase1	Construction	\$192,159,545	100	.86	■	0	■	G

4th Quarter 2022 Traffic Light Report
Projects in Design, Post-Design to Construction Award or 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									
B&T									
All Other B&T Projects									
D801HH36	Dyckman Street Substations Upgrade	Construction	\$42,758,230	13	.86	■	0	■	G
D801RK93	Reconstruct / Relocate RI Ramps (QR & RM)	Construction	\$116,550,481	0	.93	■	0	■	G
D802VN86	Widening Belt Parkway, Phase 1B	Construction	\$34,500,000	0	.85	■	0	■	G
D804MP09	Electrical Rehabilitation (Elevator)	Construction	\$21,701,358	44	.86	■	0	■	G
D805QM36	Relocation of QMT Refueling Station and QSB Switchgear	Construction	\$28,890,373	19	.92	■	0	■	G
D806VNX1	Install Safety Fencing on Both Levels of the VNB	Construction	\$43,923,649	100	1.00	■	0	■	G
D807MPPT	MP Facility-Wide Painting Program	Construction	\$14,614,312	100	.70	■	-2	▼	G
D807RKPT	RK Facility-Wide Painting Program - Phase 1	Construction	\$17,540,278	97	.31	■	0	■	G
D807RKPT	RK Facility-Wide Painting Program - Phase 2	Construction	\$16,915,556	10	.93	▼	0	■	G
D801HH37	Upper Level North Abutment & Retaining Wall R	Design	\$7,951,503	90	.89	■	-1	▼	G
D804VN12	Misc. Bridge Lighting & Electrical Improvements	Design	\$20,438,410	26	.99	■	0	■	G
D807TNPT	TN Facility-Wide Painting Program - Phase 2	Design	\$41,401,800	0	.99	▲	0	■	G
Integrated Projects									
Third Track Expansion Project									
G7130103	D-B Construction Contract Base	Construction	\$1,428,242,791	91	.99	■	0	■	G
G7130104	D-B Mobilization/Early Payments	Construction	\$148,631,408	91	1.00	■	0	■	G
G7130105	D-B Construction Contract Option	Construction	\$21,756,982	91	1.00	■	0	■	G
G7130105	D-B Construction Contract Option	Construction	\$964,179	91	1.00	■	0	■	G
G7130106	Mineola Second St. - Parking Structure Option 1	Construction	\$1,756,906	91	.11	▼	0	■	G
G7130107	Force Account Construction	Construction	\$126,683,747	91	1.08	▲	0	■	G
G7130108	Force Account Materials	Construction	\$4,243,201	91	1.30	▲	0	■	G

4th Quarter 2022 Traffic Light Report
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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									
Integrated Projects									
Third Track Expansion Project									
G7130109	Force Account Support	Construction	\$13,667,131	91	.87	▼	0	▬	G
G7130110	Busing	Construction	\$3,949,485	91	.66	▼	0	▬	G
G7130112	Force Account Design	Construction	\$4,681,454	91	1.00	▬	0	▬	G
G7130114	3P Project Management Contract	Construction	\$66,818,615	91	1.00	▬	0	▬	G
G7130115	MTACC Project Management	Construction	\$8,649,405	91	1.00	▬	0	▬	G
G7130115	MTACC Project Management	Construction	\$1,000,000	91	1.00	▬	0	▬	G
G7130115	MTACC Project Management	Construction	\$870,000	91	1.00	▬	0	▬	G
G7130115	MTACC Project Management	Construction	\$580,000	91	1.00	▬	0	▬	G
G7130115	MTACC Project Management	Construction	\$295,000	91	1.00	▬	0	▬	G
G7130115	MTACC Project Management	Construction	\$292,310	91	1.00	▬	0	▬	G
G7130115	MTACC Project Management	Construction	\$250,000	91	1.00	▬	0	▬	G
G7130115	MTACC Project Management	Construction	\$99,500	91	1.00	▬	0	▬	G
G7130115	MTACC Project Management	Construction	\$95,500	91	1.00	▬	0	▬	G
G7130117	Project Administration (Other Costs)	Construction	\$3,000,000	91	1.00	▬	0	▬	G
G7130117	Project Administration (Other Costs)	Construction	\$1,392,000	91	1.00	▬	0	▬	G
G7130117	Project Administration (Other Costs)	Construction	\$1,008,000	91	1.00	▬	0	▬	G
G7130119	Real Estate	Construction	\$40,000,000	91	1.00	▬	0	▬	G
G7130120	Arts for Transit	Construction	\$2,000,000	91	1.00	▬	0	▬	G
G8130103	D-B Construction Contract	Construction	\$284,138,924	91	1.00	▬	0	▬	G
G8130107	Force Account Construction	Construction	\$15,000,000	91	1.00	▬	0	▬	G
G8130109	LIRR F/A - Flagging	Construction	\$52,996,052	91	1.27	▲	0	▬	G

4th Quarter 2022 Traffic Light Report
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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									
Integrated Projects									
Third Track Expansion Project									
G8130112	Force Account Design	Construction	\$2,672,655	91	1.00	■	0	■	G
G8130114	3P Project Management Contract	Construction	\$33,177,581	91	1.00	■	0	■	G
PSNY 33rd St Corridor									
T7041350	Additional elevator 34 St BW7 PSNY-33rd	Construction	\$16,541,862	35	1.00	■	0	■	G
T8040707	Replace 3 Hydraulic Elevators: 34th BW7 PSNY-33rd	Construction	\$21,586,064	50	1.00	■	0	■	G
T8041219	Leak Remediation 34 St BW7 PSNY-33rd	Construction	\$2,405,903	30	1.00	■	0	■	G
T8080613	Comm Room 318A 34 St BW7 PSNY-33rd	Construction	\$1,479,645	18	1.00	■	0	■	G
L70208EG	PSNY-33rd Corridor (Phase 2 Construction)	Construction	\$435,879,160	92	1.00	■	0	■	G
L8020604	PSNY-33rd Phase 2 LIRR 20-24 Plan Contribution	Construction	\$18,806,909	79	1.00	■	0	■	G
Penn Station Access									
G7110107	Penn Station Access D/B Stations	Construction	\$281,385,133	13	1.00	■	0	■	G
G7110112	Penn Station Access Demolition & 3P Utilities	Construction	\$24,151,424	13	1.00	■	0	■	G
G8110103	Penn Station Access Construction Management	Construction	\$140,450,623	13	1.00	■	0	■	G
G8110108	New Rochelle Yard Improvements	Construction	\$146,938,000	0	1.00	▲	0	■	G
G8110114	Penn Station Access Other Design and Indirects	Construction	\$697,251,450	13	1.00	■	0	■	G
G8110114	Penn Station Access Systems	Construction	\$186,074,700	13	1.00	■	0	■	G
G8110114	Penn Station Access Catenary	Construction	\$150,931,200	13	1.00	■	0	■	G
G8110114	Penn Station Access Pelham Bridge, Drainage, & Site Improvements	Construction	\$141,344,200	13	1.00	■	0	■	G
G8110114	Penn Station Access Trackwork	Construction	\$98,949,900	13	1.00	■	0	■	G
G8110114	Oak., Co-Op City, DC Substations & 3rd Rail	Construction	\$90,024,900	13	1.00	■	0	■	G
G8110114	Penn Station Access Bronx River, Bronxdale, & Eastchester Bridges	Construction	\$69,371,400	13	1.00	■	0	■	G

4th Quarter 2022 Traffic Light Report
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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									
Integrated Projects									
Penn Station Access									
G8110114	Penn Station Access Design, CP215, & Annex Substations	Construction	\$11,812,500	13	1.00	▬	0	▬	G
G8110114	Penn Station Access Catenary (Design)	Construction	\$10,395,000	13	1.00	▬	0	▬	G
G8110114	Penn Station Access Van Nest, Bowery Bay, NR Substations	Construction	\$4,354,100	13	1.00	▬	0	▬	G
Second Ave Subway - Phase 2									
G7100101	SAS 2 PE, Design & Environmental	Design	\$199,094,903	90	.97	▬	0	▬	G
G7100101	SAS 2 Consultant Environmental Services	Design	\$2,342,188	90	1.00	▬	0	▬	G
G7100105	SAS Consult and in-house Construction Management	Design	\$42,144,532	90	1.05	▬	0	▬	G
G7100107	SAS 2 Prelim Const/Utilities	Design	\$270,000,000	90	1.00	▬	0	▬	G
G7100198	SAS 2 Real Estate	Design	\$39,926,264	90	1.00	▬	0	▬	G
OMNY									
All Other OMNY Projects									
T6040405	New Fare Payment System, Phase 2	Construction	\$125,270,078	42	1.22	▲	20	▲	R
T7040401	New Fare Payment System, Phase 2	Construction	\$470,823,580	42	1.01	▬	0	▬	R
T8040405	Additional Work: Fare Collection	Construction	\$55,373,420	42	1.00	▬	0	▬	R
L8020406	Fare Collection Program	Construction	\$35,000,000	0	1.00	▬	0	▬	G
M8020206	New Fare Payment Equipment	Construction	\$33,434,305	3	1.00	▬	23	▲	G
Rolling Stock									
Rail Cars									
M42 Dual-Mode Locomotives									
M7010101	Locomotive Purchase	Construction	\$291,750,993	23	1.13	▬	0	▬	R
M8010102	Locomotive Replacement	Construction	\$135,783,598	23	1.00	▬	0	▬	R

4th Quarter 2022 Traffic Light Report
Projects in Design, Post-Design to Construction Award or 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									
Rail Cars									
Purchase of R211 B-Division Cars - Kawasaki									
S7070101	Purchase 75 SIR Passenger Rail Cars	Construction	\$257,484,699	10	1.00	■	2	▲	R
T7010101	Purchase 440 B-Division Cars	Construction	\$1,402,231,935	10	1.00	■	0	■	R
T7010102	Purchase 20 Open Gangway Prototype Cars	Construction	\$79,905,106	15	1.00	■	-3	▼	R
T8010102	Purchase 640 B-Division Cars (R211 Option 1)	Construction	\$1,922,262,122	5	1.00	■	0	■	G
NYCT and SIRTOA Flat Cars									
S8070111	SIR Purchase: 7 Flat Cars	Construction	\$6,464,484	3	1.00	■	0	■	G
T8130206	NYCT Purchase: 45 Flat Cars (Fleet Growth)	Construction	\$41,557,394	3	1.00	■	0	■	G
All Other Rolling Stock Projects									
ET060317	Sandy Resiliency: Conversion of 2 Pump Trains	Construction	\$29,701,145	15	.98	■	0	■	G
T7130208	Purchase 12 3-Ton Crane Cars	Construction	\$32,794,585	39	1.00	■	0	■	G
T7130211	Purchase Locomotives	Construction	\$256,092,473	31	1.00	■	0	■	G
T7130215	Conversion of 10 R77E Locomotives	Construction	\$34,272,847	41	1.00	■	0	■	G
L70101ME	M-9 Procurement (110 Cars)	Construction	\$611,800,000	64	1.00	■	0	■	G
M6010102	M-8 New Haven Line Purchase	Construction	\$217,116,915	85	.99	■	0	■	G
M7010102	M-8 Fleet Purchase	Construction	\$117,323,612	82	.99	■	0	■	G
Buses									
Purchase of 470 Battery Electric Buses									
T8030203	Purchase 90 Articulated Electric Buses	Design	\$135,625,250	0	.82	▲	0	■	G
T8030214	Bus Purchase Design	Design	\$350,000	4	1.00	■	0	■	G

4th Quarter 2022 Traffic Light Report
Projects in Design, Post-Design to Construction Award or 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 Buses									
Purchase of 291 Hybrid and 209 Diesel Buses - Nova									
T7030203	Purchase 165 Standard Hybrid Buses (Nova)	Construction	\$145,926,252	98	1.00	▬	3	▲	R
T8030208	Purchase 126 Hybrid (Nova)	Construction	\$107,949,896	72	1.00	▬	0	▬	R
T8030209	Purchase 209 Standard Diesel (Nova)	Construction	\$141,211,796	83	1.00	▬	0	▬	R
Purchase of 60 Battery Electric Buses - New Flyer									
T7030216	Purchase 45 Standard Electric Buses	Construction	\$59,652,073	4	1.07	▲	30	▲	R
T8030213	Purchase 15 Standard All-Electric Buses	Construction	\$18,514,987	0	1.07	▲	6	▲	R
Bundle BL01-9620									
U8030218	289 Standard Diesel Buses	Construction	\$149,359,420	0	1.00	▼	0	▬	G
U8030227	116 Standard Diesel Buses (New Flyer)	Construction	\$101,308,089	0	1.00	▬	0	▬	G
Bundle BL01-9490									
T7120418	Automated Fuel Management System Upgrade	Construction	\$1,971,228	0	1.00	▲	0	▬	G
T8120406	Automated Fuel Management System: 15 Depots	Construction	\$6,745,963	0	1.00	▼	0	▬	G
U8030222	Automated Fuel Management System Upgrade	Construction	\$3,404,848	0	1.00	▼	0	▬	G
Purchase of 135 Diesel Buses - Nova									
U7030219	Purchase 25 Standard Diesel Buses	Construction	\$16,419,960	0	1.00	▬	0	▬	R
U8030216	Purchase 25 Standard Diesel Buses	Construction	\$17,682,210	0	1.00	▬	0	▬	R
U8030217	Purchase 85 Standard Diesel Buses	Construction	\$61,917,132	0	1.00	▬	0	▬	R
All Other Rolling Stock Projects									
T6030227	On-Board Audio Visual (OBAV) System	Construction	\$9,323,503	1	1.00	▬	0	▬	G
T7030206	Purchase 50 Express Buses	Construction	\$34,002,485	100	1.00	▬	0	▬	R
T7030215	AVLM for Paratransit Vehicles	Construction	\$26,828,317	66	1.00	▬	0	▬	R

4th Quarter 2022 Traffic Light Report
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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									
Buses									
All Other Rolling Stock Projects									
T7030224	AEB Charging Infrastructure - Support of 5 Depots	Construction	\$59,502,804	17	1.19	▲	12	▲	R
T8030211	Purchase 139 Standard Diesel (New Flyer)	Construction	\$98,808,397	98	1.00	▬	1	▲	R
T8030215	Purchase 5 Standard Battery Elec Buses Test/Eval	Construction	\$10,581,362	1	1.00	▬	0	▬	G
U7030202	Purchase 257 Express Buses	Construction	\$166,665,518	81	1.00	▬	3	▲	R

Stations Business Unit Program Overview

The Stations Business Unit currently oversees 228 active projects, including 81 projects in construction, with a budget of \$12.6B. In addition to ADA Package 3 bundle, C&D's first Public-Private Partnership and includes 21 new elevators at eight stations, notable projects under construction are Flushing Line State of Good Repair work at 5 station bundles, the replacement of 11 elevators at five stations, and the Livonia-Junius connector.

The IEC's Traffic Light Report currently tracks 102 tasks (ACEPs) spanning 4 capital programs. Of those, 2 tasks (2%) were flagged red, representing 1 project bundle. The table below describes why these project tasks (ACEPs) were flagged, and what C&D is doing to remediate.

The Stations BU is also seeking to identify and remediate issues at the program level by proactively engaging project control measures to anticipate challenges as the business unit expands at an unprecedented pace.

Stations BU Response to the IEC Traffic Light Report

Individual project descriptions

T7041315: ADA 149th St – Grand Concourse Complex (Construction phase)

T7041338: ADA Tremont Ave (Construction phase)

Trigger: Schedule

This project is a design-build contract for the installation of six new elevators, stairs, elevator machine rooms, and ADA boarding areas. In addition, this project consists of the re-opening of the historic headhouse at 149th St. station and restoration of its decorative terracotta, brick, and iron features.

The substantial completion date was extended six months, from July 2023 to January 2024, due to various challenges. The most significant include the availability of weekend track outages on the White Plains lines in 2022 due to bus crew shortages, which impacted the completion of the mezzanine expansion, the addition of an Area of Refuge at 149th St - Grand Concourse, and an underperforming electrical/communication subcontractor have also contributed to the current delay.

C&D is proactively working to recoup some of these delays. The team secured later weekend outages: five in 2022, three in both February and March 2023, and additional weeknight General Orders. Meetings between senior management of the MTA PMC and the contractor are being held to finalize the work associated with the NYS Code changes to update the schedule.

Infrastructure Business Unit Program Overview

The C&D Infrastructure Business Unit currently oversees 288 active projects, with a budget of \$10B, including 95 projects in construction (\$4B). The IEC independent Engineering Consultants traffic Light Report currently tracks 132 tasks (AECPS) in the C&D in the C&D infrastructure program. Of those, 8 projects with 17 tasks (10%) were flagged red.

- The C&D Infrastructure Business Unit is responsible for all infrastructure construction projects on the NYC Transit and SIR – Staten Island Railway network. This includes line structures (e.g., tunnels, bridges), line equipment (e.g., lighting, pumps, ventilation plants) power substations and cabling, shops and facilities that are essential to NYCT’s and SIR’s operation.
- Notable projects under construction include upgrading MTA’s Bus Radio System, flood mitigation at the 207th Street Yard and Coney Island Yard, constructing a new fan plant at Forsyth Street Fan Plant, and the Rockaway Wrap Up project.

Infrastructure BU Response to the IEC Traffic Light Report

Individual project descriptions

ET100315: Sandy Mitigation: Resiliency Improvements at Westchester Yard (Design phase)

Trigger: Schedule

This project is for the installation of a flood wall around the perimeter of the Westchester Avenue Yard to prevent flooding in the event of a future event like Superstorm Sandy. The scope includes:

- Individual asset protection at the critical facilities within the Yard to prevent flooding from storm surges from a Category 2 hurricane + 3 ft elevation
- Reinforced concrete walls at the critical facilities
- Asset protection study for the maintenance shop

During the fourth quarter 2022, the Design Completion date was delayed nine months, from October 2022 to July 2023, due to the addition of drainage scope requested by the user. In addition, the project was changed from a Design-Build (DB) to a Design-Bid-Build (DBB) which required further development of the specifications and front-end documents and the preparation of more detailed drawings (30% vs 100%). The team is evaluating the scope and coordinating the design with NYCDEP. While the Design completion date has been extended, it is projected the project will be advertised August 2023 and awarded by the end of 2023.

ET100211: Power Cable and Communications Equipment Replacement - Coney Island Yard (Construction phase)

ET100307: Long Term Perimeter Protection - Coney Island Yard (Construction phase)

T8090409: Rehabilitation of 4 Circuit Breaker House Enclosures - Coney Island Yard (Construction phase)

Trigger: Schedule

This bundled project provides flood mitigation to protect this 100-acre rail yard complex, home to the Overhaul, Maintenance, Pneumatic shops and more, from a storm surge threat. The scope includes the construction of flood barriers above and below grade, a new drainage system with two pump plants, and erecting a 4000-foot-long cable bridge above the trains.

During the fourth quarter 2022, the Substantial Completion date was delayed four months, from December 2022 to April 2023, due to the discovery of unmarked buried utilities. The Circuit Breaker House work was added to the contract as a change order to the contract.

While immediate repairs were made for the cable strikes, a permanent signal system is being installed that will bypass and replace the function of several damaged cables. Signals has decided to use a Programmable Logic System(PLC). This fiber-optic PLC system has experienced supply chain issues for several of the components and the complex system takes time to install and place in service.

Place in service is scheduled for April 2023 and a non-impactable extension of time was negotiated to account for this delay.

S7070106: New Power Substation - New Dorp (Construction phase)

S7070107: New Power Substation - Clifton (Construction phase)

Trigger: Schedule

This bundled project will construct new substations on Staten Island, in the vicinity of New Dorp and Clifton Stations respectively, that will augment the electrical power requirements in these areas, thus improving the reliability of train service along the right of way.

During the fourth quarter 2022, the Substantial Completion date was delayed three months, from December 2022 to March 2023 due to the project being unable to obtain a track outage which requires busing. The work at Clifton substation is complete and operational. The work at New Dorp required that a reactor be installed for the signal system. The tie in for the Substation includes checking all the signal track circuits for operation, which requires a complete shutdown of the Staten Island Railway (SIR). After discussions with SIR, work was completed over the weekend of Feb 17, 2023. The only remaining work at the site is the installation of the SCADA control work which controls the substation remotely. The contractor will schedule work and we will need in-house forces to test the work.

S7070103: Staten Island Railway - Mainline Track Replacement (Construction phase)

S7070113: Staten Island Railway - Clifton Yard Track and Switch Replacement (Construction phase)

S8070109: Staten Island Railway - Mainline Track and Switch Rehabilitation (Construction phase)

Trigger: Schedule

This bundled project is consisting of the full replacement of all track components which includes new CWR, cross ties, third rail, ballast, and geotextile fabric and the reconfiguration of Clifton Yard, to support the new shop (including new track, composite contact rails, duct banks and switches).

During the fourth quarter 2022, the Substantial Completion date was delayed four months, from December 2022 to April 2023 due to the addition of approximately 16,000 feet of mainline track and limited availability of General Orders. Adding the work to the current contract was cost effective for the MTA to add this to the existing contract. The original contractual scope has been completed, but prior to the completion of the contractual work, SIR requested the additional scope due the effects of Hurricane Ida and a new drainage structure needs to be installed at Princess Bay. Additional GO's will be required to complete this work.

Out of the additional 16,000 track feet the contractor has approximately 1000 feet of track to replace, and completion is forecast in April 2023.

T7120321: East New York Depot Windows and Façade (Construction phase)**Trigger: Schedule**

The project is for the complete replacement of all windows in the building, repointing and cleaning of the exterior bricks, electrical work, parapet replacement and the construction of a new dispatcher's office in the depot.

During the fourth quarter 2022, the Substantial Completion date was delayed six months, from December 2022 to June 2023, due to the contractor's performance in completing the work. Adding to the delays, were stop work orders were issued by NYC Department of Buildings, for the scaffolding. At the request of the MTA, the project manager was removed and the work is ongoing.

Subsequent to the reporting period, the Substantial Completion date was pushed out another three months to September 2023.

ET090304: Sandy Mitigation at Montague-Furman Substation - Broadway Line (Construction phase)**Trigger: Schedule**

This project entails the replacement of two high-tension switchgears, installation of watertight manhole covers, and watertight sealant at the duct banks at the Montague-Furman Substation.

During the fourth quarter 2022, the Substantial Completion date was delayed five months, from December 2022 to May 2023, due to Con Edison availability. The project requires that Con-Ed de-energize the high tension feeders so the contractor can remove existing air blast switchgears at the new elevated platform, for a new vacuum switchgear. Con Ed was unable to de-energize the Unit A switchgear, due to service restrictions, which resulted in a 174 calendar day delay. Once construction of the unit A switch gear was completed, it took Con Ed an additional 157 days to reenergize switch gear A. Based on the previous experiences, C&D anticipates delay in energization of Unit B further extending substantial completion date.

In an effort to mitigate delays to unit B, C&D infrastructure group has been working with Power Operations to permit the de-energization of Unit B ahead of the project commissioning phase, and having Con-Ed do the cable replacement instead of the contractor, which removes additional energization and de-energization events from the schedule.

U7030207: Storerooms and Depot Reconfiguration – LaGuardia Depot (Construction phase)**Trigger: Schedule**

The project scope consists of reconfiguring multiple areas of the facility to accommodate additional bus parking and the relocation of the crew quarters and storage facilities.

During the fourth quarter 2022, the Substantial Completion date was delayed five months, from October 2022 to March 2023 due to material supply issues for electrical equipment, finishes, field conditions and restrictions in relocating depot personnel. During the excavation of the storeroom floor, petroleum contaminated soil was encountered and had to be addressed, this caused delay to the overall contract. Contractor performance and staffing has been an issue. In addition, the contractor has been unable to procure the specified Cat 6 cable for the computers. The alternate submittal provided was not approved, pushing the schedule out another 3 months to June 2023.

Systems Business Unit Program Overview

The C&D Systems Business Unit currently oversees 91 active projects with a budget of \$2B, including 35 projects in construction (\$562M) in the Project System Report (PSR). In addition, the \$1B Cellular/WiFi Expansion project is not included in the PSR as it is a public private partnership license agreement which is managed by the Systems Business Unit; the \$300M Ad concession is also excluded from the PSR. The Independent Engineering Consultant's (IEC) Traffic Light Report tracks 14 tasks (ACEPs) in the C&D Systems Business Unit. Of those, two projects (14%) were flagged red.

- The Systems Business Unit is responsible for the delivery of all C&D Systems projects and supporting other Business Units in implementing Systems best practices. Some of the major customer facing programs include Help Points in all stations, Public Address/Customer Information Systems and Countdown Clocks, OutFront Digital Information & Advertising Screens, and Wi-Fi & Cellular Services in all subway stations, as well as the networking infrastructure needed to support them.
- Some of the major projects under construction include installing a new Enhanced Emergency Booth Communication System, upgrading the power Supervisory Control and Data Acquisition (SCADA) system for the BMT, and building an Emergency Power Control Center, adding resiliency to power, cooling, and systems at the Operations Control Center, installing Closed Circuit TV (CCTV) cameras in stations, and upgrading the B Division Public Address System.

The Systems Business Unit continues to identify and address issues at the program level. Due to attrition and the slow pace of hiring, the Systems Business Unit continues to evaluate its' current organizational structure along with utilization of consultant support and streamlining workflows.

Systems Business Unit Response to the IEC Traffic Light Report

Individual project descriptions

ET040317: Upgrade Emergency Booth Communication System (Construction Phase)

Trigger: Schedule

This project will upgrade the Emergency Booth Communication System (EBCS) in all 464 Subway Agent Booth locations to a faster and more reliable system. This is a Sandy Resiliency project.

Substantial Completion was delayed four months over the last two quarters, from November 2022 to March 2023, due in part to a delay in the cutover of the Help Point (HPs) devices and because of the provisioning of circuits by Electronic Maintenance Division for the remaining twenty agent booths. In addition, there is a pending agreement on when the 6-months in-service durability testing starts, and when the training is to be performed and due to the lack of in-house forces for witnessing of testing and training documentation reviews. As of the end of February, 9 of the 465 agent booths remain to be cutover to the new EBCS and HPs have been cutover at 131 of the 472 stations.

Subsequent to the reporting period, the Substantial Completion date has been pushed out an additional nine months to December 2023. There is the potential slip beyond December 2023, if all the operational issues with the system are not timely resolved so that the 6 month testing can start and be completed. A full schedule delay analysis is also pending, as a scheduler was only recently made available to start the analysis.

**T7080603: Private Branch Exchange (PBX) Upgrade: Phase 2 (Construction Phase)
Trigger: Cost and Schedule**

This project will upgrade obsolete NYCT telephone system equipment with modern equipment at seven locations.

During this quarter, the Substantial Completion date was extended six months, from December 2022 to June 2023, and there was a budgetary shortfall of approximately \$13.5M. Both the schedule delay and budgetary shortfall were due to erroneous as-built design drawings. The drawings showed redundant power. However, during construction, it was discovered redundant power did not exist. This increased the number of power and communication out-of-service requirements. The PBX-1 telephone switch requires an additional eight communication and power outages. Also contributing to the delay is the lack of Electronic Maintenance Division resources. A budget modification will be submitted to C&D.

Subsequent to the reporting period, the Substantial Completion date has been pushed out an additional three months to September 2023, for the same reasons.

Signals / Train Controls Business Unit Program Overview

The Signal's Business Unit currently oversees 28 active projects, including 14 projects in construction, with a budget of \$3.2B. Notable projects under construction include CBTC installation at QBL West, QBL East, and Culver Lines.

The IEC's Traffic Light Report currently tracks 31 tasks (ACEPs) in the Signal program. Of those, 6 tasks(19%) were flagged red, representing 4 projects. The table below describes why these project tasks (ACEPs) were flagged, and what C&D is doing to remediate.

The BU is also seeking to identify and remediate issues at the program level, i.e., across projects.

Signals / Train Controls BU Response to the IEC Traffic Light Report

Individual project descriptions

T6080319: CBTC Queens Boulevard Line West Phase 1 (Construction phase)

T7080342: CBTC: 8th Avenue Line Equip 112 R160 Cars (26 units) (Construction phase)

T7080350: CBTC Queens Boulevard Line West Phase 1 (Construction phase)

Trigger: Schedule

This bundled project will install Communications Based Train Control, to replace the existing conventional signal system, on the Queens Boulevard Line. The QBL is the third line to be upgraded to CBTC technology. This is the first CBTC project that incorporates CBTC on four lines E, F, M, and R. It is also the first project to accomplish interoperability between two suppliers.

Substantial Completion for this contract has been delayed four months, from December 2022 to April 2023, due to Siemens software issues in stabilizing their carborne and wayside equipment. In 2022, the project suffered from multiple technical setbacks and is behind schedule. Siemens is aggressively addressing setbacks and has yet to provide a complete schedule for the remaining activities. While Siemens' mobilization is improving, they are still unable to push all the activities in parallel.

Subsequent to the reporting period, the Substantial Completion date has been pushed out an additional eight months, to December 2023.

T7080349: Signal Quality Enhancements (Subway Action Plan) (Construction phase)

Trigger: Schedule

This project consists of surveying all areas that exhibit slow clearing signals and to enhance the signal system that controls the movement for NYC Transit system to function more efficiently. This project is an In-house construction project handled by Maintenance of Way department.

Substantial Completion for the contract was delayed three months, from December 2022 to March 2023, due to newly found slow clearing signal locations which require additional reliability work and the subsequent need to

replace mechanical timers to electronic timers. In addition, to install and replace civil speed signs throughout the system. Department of Subways is currently assessing the possibility of extending the number of locations and possible extension of time to December 2024.

T8080314: Single Chip UWB Interoperability (Proof of Concept) – Thales (Construction phase)**Trigger: Schedule**

This project provides technical support for the Ultra-Wide Band (UWB) Interoperability effort by validating the recently upgraded Piper UWB radio, providing technical information to develop a configuration baseline, participating in working groups and supporting Interoperable UWB radio validation testing with the Siemens and Humatics team for a UWB One Chip solution.

Substantial Completion for the contract slipped 5 months, from October 2022 to March 2023, due to Thales requiring more time to analyze the data for the UWB Interoperability.

ET100222: Sandy Repairs: Culver Yard (Signals/Track/Switches) (Design phase)**Trigger: Schedule**

This project will replace damaged signal equipment and cables, including mainline interlocking and automatic signals. The design shall include mitigations to protect equipment against future flooding such as relocating equipment to where flooding is not possible and installing watertight equipment.

The project delay design completion was pushed out three months, from January 2023 to April 2023, due to Engineering Force Account shortages and solidification of the Scope of Work.

NYCT Department of Subways Program Overview

NYCT Department of Subways conducts a range of in-house capital work, including tracks and switches, as well as employee facilities. The IEC's Traffic Light Report flagged eight Track project tasks (ACEP) in the NYCT DOS program.

NYCT often schedules track work to take advantage of General Orders already obtained for other projects, a practice known as piggy-backing. This saves resources for the agency and reduces service disruptions for our customers. Unfortunately, this dependence on other projects' schedules makes the track program more vulnerable to schedule changes.

It should be noted that when there is no available track access for some projects, the in-house track workforces will schedule work at other locations where track access is available. The track workforce has this flexibility to be opportunistic by shifting their resources to other locations that are track accessible assuming they have the material and resources on hand to do the work. Unlike the third-party contractors, schedule slippages do not result in cost impacts for the in-house program.

NYCT Department of Subways Response to the IEC Traffic Light Report

Individual project descriptions

T70502A2: 2020 Continuous Weld Rail Phase 2 (Subway Action Plan) – (Construction phase)

Trigger: Schedule

This project will remove bolted rail along the right of way systemwide where CWR can be installed under the Subway Action Plan. This will improve the condition of the track, create a safer, smoother, and quieter ride for passengers, and reduce the possibility of broken rails.

During the fourth quarter 2022, the Substantial Completion date was extended eight months, from October 2022 to June 2023, due to limited track access. Since there was no availability for track access in this area the schedule has slipped, and the work will be rescheduled once track access becomes available.

T8050227: 2021 Mainline Track Replacement – 11th Street Cut (Construction phase)

T8050237: 2021 Mainline Track Replacement – Lenox-White Plains Road Line (Construction phase)

T8050252: 2022 Mainline Track Replacement – Myrtle Line (Construction phase)

T8050258: 2022 Mainline Track Replacement – Liberty Line (Construction phase)

T8050263: 2022 Mainline Track Replacement – Culver Line (Construction phase)

Trigger: Schedule

These projects will reconstruct segments of mainline tracks that have reached the end of their useful life. Locations were determined based on the latest condition survey. In addition to the track scope, the signals and contact rails will also be replaced as required.

During the fourth quarter 2022, the Substantial Completion dates for all these projects were extended from four to fifteen months, due to prioritization of the C&D capital program; specifically, 63rd St direct fixation, 53rd St pump room, Queensboro Plaza ADA and Culver CBTC. Additionally, there are bus and train crew constraints and in certain instances crew utilization is half of the available division crews on a weekend. In some locations, the track footage being fixed was revised. All work will be rescheduled once track access becomes available.

T8050324: 2022 Mainline Track Switches – 8th Avenue Line (Construction phase) M44197**Trigger: Schedule**

This project will replace mainline switches by in-house forces. Locations were determined based on the latest switch survey. In addition to the track scope, the existing turnouts, track switches, switch valves, connection valves, ties, and signal cables will also be replaced as required.

During the fourth quarter 2022, the Substantial Completion date was extended ten months, from May 2023 to March 2024, due to limited materials. Due to a fire at the manufacturing facility, the supplier has been delayed in providing delivery of the switches needed to complete this project.

NYCT In-house Department Response to the IEC Traffic Light Report**Individual project description****T6160705: Employee Facility Rehabilitation RTO Chambers St / Nassau Loop (Construction phase)****Trigger: Schedule**

This project will provide for the construction of a new consolidated employee facility on the mezzanine level of the Chamber Street-Nassau Loop Station. The total area of rehabilitation and reconstruction is approximately 7,000 SF. The project will provide offices, Male/Female locker rooms and toilets, workshop, storage rooms, wash-up areas, mechanical room, heating, ventilation, electrical system, air conditioning, lighting, plumbing, flooring, painting, and communication systems.

The Substantial Completion date was pushed out seven months, from November 2022 to June 2023, due to a delay in the delivery of various long lead items. Currently, Infrastructure Capital Construction (ICC) is waiting for the delivery of the new sewer ejector pump as well as the cabinets and hardware for the employee lunchroom. In addition, a new domestic water service was added to the project and requires two separate water lines, sprinkler and potable water, to be brought into the facility. ICC has sub-contracted the installation and there is a delay in the issuance of the associated Department of Transportation permits, but NYCT anticipates the work being completed by June 2023.

Metro-North Railroad Business Unit Program Overview

The MNR Business Unit currently oversees 85 active projects, including 20 projects in construction, with a budget of \$3B. Notable projects under construction include the Harmon Shop Improvements, Grand Central Terminal Trainshed, and the Park Avenue Viaduct Replacement projects.

The IEC's Traffic Light Report currently tracks 32 tasks (ACEPs) in the C&D Metro-North program. Five (16%) of those 32 tasks were flagged red, representing three projects. The description below describes why these project tasks were flagged, and what C&D is doing to mitigate them.

Metro-North Railroad BU Response to the IEC Traffic Light Report

Individual project descriptions

M6050103: Harlem & Hudson Lines Power Improvements (Construction phase)

M7050113: Harlem & Hudson Power (86th St / 110 St) (Construction phase)

Trigger: Schedule

This bundled project's scope consists of the construction of a new 86th St. Substation and the replacement of existing Negative Return Reactors at the 110th St. Substation with larger capacity units. The existing Substation is rated at 3.3 Megawatt (MW) and is fed from a single Con-Ed source. The new substation will provide 6.6 MW of power and utilize two independent feeds from Con-Ed improving the system operational redundancy.

During the fourth quarter of 2022, the project completion date was pushed out four months, from November 2022 to March 2023. This schedule delay was due to Con-Ed's delayed response in connecting the second power feeder and the procurement of parts for the switchgear repair at the 86th Street substation because of supply chain issues. Con-ed is currently working on putting together a timeframe and prioritizing the work to resolve the last remaining issue with the secondary feeder. The switchgear repair will be completed upon parts being delivered and the "Burn-in" period will commence after the repair is complete.

Subsequent to the reporting period, the Substantial Completion date was extended nine months further to December 2023.

M7020204: Harlem Line Station Improvements (Construction phase)

M7020217: Purdy's Elevator Improvements (Construction phase)

Trigger: Schedule

This bundled project's scope consists of the installation of two new elevators at Hartsdale Station, one new elevator and raising of the existing pedestrian overpass at Scarsdale Station, and one new elevator and demolition of the existing stairs at Purdy's Station.

During the fourth quarter of 2022, the project completion date was delayed four months, from May 2023 to September 2023, due to design changes required by the New York State Department of Transportation (NYSDOT). NYSDOT requested extending the proposed retaining wall, at Purdy's station, further north to protect the Route 116 bridge embankment and abutment slope from the new construction. After several rounds of reviews, the project team proposed an alternative solution, installation of a grade beam, which is simpler to construct and should mitigate further delays. The project team continues to closely coordinate with NYSDOT for acceptance of the alternative grade beam design and excavation support details.

Subsequent to the reporting period, the Substantial Completion date was extended another two months, from September 2023 to November 2023, based on the latest contractor's schedule update received January 2023.

M7030303: Force Account Undergrade Bridge Rehabilitation - West of Hudson**Trigger: Schedule**

This project will repair, rehabilitate or replace the existing undergrade bridges located along the Port Jervis Line which are not in a State of Good Repair.

During the fourth quarter of 2022, the Substantial Completion date slipped twelve months, from December 2023 to December 2024. This slip was due to a MNR equipment failure and not having the piece of machinery readily available to complete the track raises which are required prior to the bridge replacement. The project team has explored different approaches to mitigate this situation and reached out to New Jersey Transit (NJT) for support in completing this effort. NJT has agreed to perform the track raises and will commence the work in the spring of 2023. It is anticipated the funding is sufficient at this time.

Bus Procurements Response to the IEC Traffic Light Report**Individual project descriptions****T7030203: Purchase 165 Standard Hybrid Buses (Nova) (Construction phase)****Trigger: Schedule**

The purpose of this project is for the purchase of 165 standard hybrid bus and the buses to be operated by MTA NYC Transit. The buses will be used for the replacement of the over-aged fleet throughout the City that are beyond their useful life. The buses will be designed to operate in revenue service for a useful life of 12 years or 500,000 miles and will meet Environmental Protection Administration (EPA) emission standards as well as Americans with Disabilities Act (ADA) standards.

During the fourth quarter 2022, the Substantial Completion date was delayed three months, from October 2022 to January 2023. The schedule delay is due to software update and replacement PCS' resulting in extended time needed for component replacement. All buses have been delivered and are in-service.

T7030216: Purchase 45 Standard Battery Electric Buses (Construction phase)**T8030213: Purchase of 15 Standard Battery Electric Buses (Construction phase)****Trigger: Schedule**

The purpose of this bundled project is the purchase of 60 standard battery electric buses to be operated by MTA NYC Transit throughout areas that have the supporting infrastructure for depot charging. The buses will be designed to operate in revenue service for a useful life of 12 years or 500,000 miles and will meet EPA emission standards as well as ADA standards.

During the fourth quarter 2022, the Substantial Completion, for each part of this contract was extended by six months, from March 2024 to September 2024, due to additional testing required. In addition, New Flyer has a recall that is pending resolution; therefore, additional time may be needed. Lastly, there are two pilot buses that will be used for an in-service evaluation. The configuration audit was conducted on Pilot Bus #1 spanning three weeks from January to February 2023; reworks are underway; and Pilot Bus #2 is in production. Both buses will be used for two separate in-service evaluations. The estimated in-service start time for the first bus is tentatively April, pending further information on the recall.

T7030224: AEB Charging Infrastructure - Support of Five Depots (Construction phase)**Trigger: Cost and Schedule**

The purpose of this project is to provide the electrical charging infrastructure to charge 60 standard electric buses that are to be operated by MTA NYCT at five locations. These chargers will be able to charge all buses that are purchased by MTA NYCT. These chargers will be compliant with existing charging standards for both plug-in and pantograph charging.

During the fourth quarter of 2022, the completion of this project was delayed 12 months, from February 2023 to February 2024 and has a \$10M budgetary shortfall, due to issues with the existing design and inflation related to the materials for the charging infrastructure installations. One location had a grounding issue and Con Ed provided additional requirements, which needed to be incorporated into the design. One location has been completed, another is 95% complete, and three other locations are finalizing drawings. The delivery of the first production bus is scheduled for April 2024.

T8030211: Purchase 139 Standard Diesel Buses (New Flyer) (Construction phase)**Trigger: Schedule**

The purpose of this project is the purchase of 139 standard diesel buses by MTA NYC Transit. The buses will be used for the replacement of the fleet throughout the City that are beyond their useful life. The buses will be designed to operate in revenue service for a useful life of 12 years or 500,000 miles and will meet Environmental Protection Administration emission standards as well as Americans with Disabilities Act standards.

The Substantial Completion was delayed three months over the last two quarters, from October 2022 to January 2023, primarily due to the bus manufacturer experiencing production delays and parts shortages with passenger seats. All buses have been delivered and are in-service.

U7030202: Purchase of 257 Express Buses (Construction Phase)**Trigger: Schedule**

The purpose of this project is the purchase of 257, 45-foot, diesel express buses to be operated by MTA Bus. The buses will be used for the replacement of the over-aged fleet throughout the City that are beyond their useful life. The express buses will be designed to operate in revenue service for a useful life of 12 years or 500,000 miles and will meet Environmental Protection Administration (EPA) emission standards as well as Americans with Disabilities Act (ADA) standards.

During the fourth quarter 2022, the Substantial Completion was delayed three months, from December 2022 to March 2023, due to the bus manufacturer experiencing production delays and parts shortages. As of February 2023, 256 of 257 are delivered. The last bus was delivered and will be ready for service in March 2023.



**Projects in CPC’s Risk-Based Monitoring Program
(4th Quarter 2022 Traffic Light Report – Period Ending December 31, 2022)**

The following projects in CPC’s Risk-based Monitoring Program are currently reported on by the responsible MTA Business Unit in accordance with the CPC Work Plan schedule and are continually monitored by the Independent Engineering Consultant. Monitored projects from multiple Capital Programs are included in the Quarterly Traffic Light Report. The list is subject to periodic review and adjustment by the MTA.

Projects in CPC's Risk-Based Monitoring Program			
Capital Programs			Project
2010-14	2015-19	2020-24	
Integrated Capital Projects			
	X		Second Avenue Subway - Phase 2
X	X		East Side Access & Regional Investments
	X		Penn Station Access
		X	Penn Station – 33 rd St Corridor
	X		LIRR Expansion Project – Mainline Third Track - Floral Park to Hicksville
Signals and Communications			
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 – Queens Blvd East
	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		OMNY New Fare Payment System – Phase 2
	X		ADA 149 th St/Tremont Ave Stations
	X		ADA Accessibility Package A
		X	ADA Accessibility Package 2
		X	ADA 68 th St / Hunter College



**Projects in CPC’s Risk-Based Monitoring Program
(4th Quarter 2022 Traffic Light Report – Period Ending December 31, 2022)**

Capital Program			Project
2010-14	2015-19	2020-24	
Shops and Yards			
	X		Harmon Shop Replacement Phase V, Stage 2
	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 Coney Island Yard Long Term Perimeter Protection
			Sandy Program 207 th Street Yard Long Term Perimeter Protection

Contracts Department
Steve Plochochi, Senior Vice President

PROCUREMENT PACKAGE
March 2023

PROCUREMENTS

The Procurement Agenda this month includes six actions for a proposed expenditure of \$300M.

Subject Request Authorization to Award Various Procurement Actions					
Contracts Department Steve Plochochi, Senior Vice President					
Board Action					
Order	To	Date	Approval	Info	Other
1	Capital Program Committee	3/27/23	X		
2	Board	3/29/23	X		

Date: March 22, 2023			
Internal Approvals			
	Approval		Approval
X	Deputy Chief Development Officer, Delivery	X	President
X	Deputy Chief Development Officer, Development	X	Executive Vice President & General Counsel

Purpose

To obtain the approval of the Board to award several procurement actions and to inform the Capital Program Committee of these procurement actions.

Discussion

MTA Construction & Development proposes to award Competitive Procurements in the following categories:

<u>Schedules Requiring Two-Thirds Vote</u>	<u># of Actions</u>	<u>\$ Amount</u>
C. Competitive Requests for Proposals (Award of Purchase/Public Work Contracts)	6	\$ 300,000,000
TOTAL	6	\$ 300,000,000

Budget Impact

The approval of these procurement actions will obligate capital funds in the amount listed. Funds are available in the capital budget for this purpose.

Recommendation

That the procurement actions be approved as proposed. (The items are included in the resolution of approval at the beginning of the Procurement Section.)

MTA Construction & Development

BOARD RESOLUTION

WHEREAS, in accordance with Sections 559, 2879, 1209 and 1265-a of the Public Authorities Law and the All Agency General Contract Procurement Guidelines, the Board authorizes the award of certain non-competitive purchase and public works contracts, and the solicitation and award of request for proposals in regard to purchase and public work contracts; and

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

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

NOW, the Board resolves as follows:

1. As to each purchase and public work contract set forth in annexed Schedule A, the Board declares competitive bidding to be impractical or inappropriate for the reasons specified therein and authorizes the execution of each such contract.
2. As to each request for proposals (for purchase and public work contracts) set forth in Schedule B for which authorization to solicit proposals is requested, for the reasons specified therein, the Board declares competitive bidding to be impractical or inappropriate, declares it is in the public interest to solicit competitive request for proposals and authorizes the solicitation of such proposals.
3. As to each request for proposals (for purchase and public work contracts set forth in Schedule C for which a recommendation is made to award the contract), the Board authorizes the execution of said contract.
4. As to each action set forth in Schedule D, the Board declares competitive bidding impractical or inappropriate for the reasons specified therein, and ratifies each action for which ratification is requested.
5. The Board authorizes the execution of each of the following for which Board authorization is required: i) the miscellaneous procurement contracts set forth in Schedule E; ii) the personal service contracts set forth in Schedule F; iii) the miscellaneous service contracts set forth in Schedule G; iv) the modifications to personal/miscellaneous service contracts set forth in Schedule H; v) the contract modifications to purchase and public work contracts set forth in Schedule I; vi) the modifications to miscellaneous procurement contracts set forth in Schedule J.
6. The Board ratifies each action taken set forth in Schedule K for which ratification is requested.

December 2022

LIST OF COMPETITIVE PROCUREMENTS FOR BOARD APPROVAL

Procurements Requiring Two-Third Vote:

Schedule C. Competitive Requests for Proposals (Award of Purchase/Public Work Contracts)

(Staff Summaries required for all items greater than \$1M)

- | | | |
|--|---------------------------------------|--------------------------------------|
| 1-6. Multiple Vendors | \$300,000,000 (Est. Aggregate) | <u>Staff Summary Attached</u> |
| Contract Nos. C31392A thru C31392C
and C31393A thru C31393C | | |
| Thirty-Six Months | | |

MTA Construction and Development requests Board approval to award six publicly advertised and competitively solicited indefinite quantity contracts to three firms for the design, construction and repair of structural steel, concrete, masonry, and other miscellaneous components in the five boroughs of New York City. Two contracts will be awarded to each firm, one state-funded and one federally funded. The Contracts are “zero-dollar” based with no minimum guarantee of any assignments.

Staff Summary

Item Numbers 1 - 6

Dept & Dept Head Name: Delivery/Mark Roche, Deputy Chief Development Officer					
Contracts Department: Daniel Tentler, Senior VP & Deputy General Counsel					
Board Reviews					
Order	To	Date	Approval	Info	Other
1	Capital Program Committee	3/27/23	X		
2	Board	3/29/23	X		
Internal Approvals					
Order	Approval	Order	Approval		
X	Deputy Chief, Development	X	President		
X	Deputy Chief, Delivery	X	Executive VP & General Counsel		

SUMMARY INFORMATION	
Vendor Name See the list below	Contract Number C31392A thru C31392C (State) C31393A thru C31393C (Federal)
Description Design-Build Services for Indefinite Quantity Repairs of Structural Steel, Concrete, Masonry and other Miscellaneous Components	
Total Amount \$300,000,000 Est. Aggregate	
Contract Term Thirty-Six Months	
Option(s) included in Total Amount? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Renewal? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Procurement Type <input checked="" type="checkbox"/> Competitive <input type="checkbox"/> Non-competitive	
Solicitation Type <input checked="" type="checkbox"/> RFP <input type="checkbox"/> Bid <input type="checkbox"/> Other:	
Funding Source <input type="checkbox"/> Operating <input checked="" type="checkbox"/> Capital <input checked="" type="checkbox"/> Federal <input type="checkbox"/> Other	

Purpose/Recommendation

MTA Construction and Development (“C&D”) requests Board approval to award six publicly advertised and competitively solicited indefinite quantity contracts (“Contracts”) to three firms (each, a “Design-Builder”) for design build services for the design, construction and repairs of structural steel, concrete, masonry, and other miscellaneous components within the five boroughs of New York City. Two contracts will be awarded to each firm, one state-funded and one federally funded, with a total estimated aggregate amount of \$300 million over a thirty-six month contract term. The Contracts contain agreed to unit prices for the various types of anticipated repairs but are “zero-dollar” based with no minimum guarantee of any assignments. The selected firms are:

Design-Builders

1. Forte-FOS JV
2. Paul J. Scariano, Inc.
3. Restani Construction Corporation

Contract Numbers

- C31392A (State) / C31393A (Federal)
 C31392B (State) / C31393B (Federal)
 C31392C (State) / C31393C (Federal)

Discussion

The work to be performed under these Contracts includes survey, testing, design, environmental remediation, construction, and installation required to repair structural defects at various New York City Transit (“NYCT”) facilities and locations. More specifically, work includes: (i) the repair or replacement of steel beams, columns, girders, trusses, struts, bracings and connections; (ii) repair of concrete spalls and cracks; (iii) repair or replacement of concrete slabs, walls, beams, toppings and encasements; (iv) repair of wood elements, including canopy timber boards, rafters and mezzanine floorboards; and (v) repair of concrete masonry unit walls and brick walls. Also included is any survey, testing, abatement, transportation, and disposal of hazardous and non-hazardous materials as required to perform the work. The work under these Contracts will be performed on an as-needed work order basis. Specific work requirements for a project will be defined in the scope of work for each work order that can be issued competitively among the Design-Builders or issued directly. Work orders can be issued up to the total estimated aggregate budget amount of \$300 Million.

Staff Summary

Item Numbers 1 - 6

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Combining the state and federally funded requirements into one solicitation creates a more efficient procurement process and results in the three Design-Builders being retained to perform all services, regardless of the funding source.

A one-step procurement process was conducted for the Contracts. A Request for Proposal (“RFP”) was advertised requesting the submission of technical and cost proposals. The following four entities submitted proposals:

- Forte-FOS JV (a joint venture between Forte Construction Corporation and FOS Development Corporation) (“Forte-FOS”)
- J-Track, LLC (“J-Track”)
- Paul J. Scariano, Incorporated (“PJS”)
- Restani Construction Corporation (“Restani”)

The selection committee, consisting of representatives from C&D’s Contracts and Delivery Departments, and NYCT’s Infrastructure Engineering Department, first reviewed the written technical proposals and held virtual oral presentations which were evaluated utilizing the selection criteria set forth below listed in relative order of importance:

- Survey, Design & Construction (Strategies for efficient scope delivery)
- Schedule (Approaches and strategies to maintain schedule and effective use of Railroad Support Services)
- Management Plan (Demonstration of plans for work phases including survey, design, construction, and close-out)
- Relevant Experience (Past projects, organizational structure, general business experience, and stability)
- Record of Performance (Record of performance on other governmental and non-governmental contracts, including the delivery of similar projects on time and within budget.)
- Safety and Quality (Evaluation on safety record (lost time, EMR, etc.), other quality violations, and proposers’ safety, quality control and quality assurance plan for this project.)
- Diversity Practices (Evaluation of proposers’ goals plans to meet the DBE, M/WBE, and SDVOB goals)
- Other Relevant matters

Based on its review of the technical proposals, all four proposers were deemed technically qualified by the selection committee. The selection committee next opened and reviewed the Proposers’ price proposals consisting of one-hundred forty-one unit price payment items. Review of the unit price payment items revealed that all four Proposers had portions of their pricing submissions exceeding C&D’s estimates to a degree that would have precluded using those unit price payment items in a work order. The selection committee subsequently invited all four proposers in for discussions to identify factors, such as perceived risks and assumptions, that were causing the unit price payment items to be higher than anticipated. Following these discussions, a post-proposal Addendum was issued to all Proposers addressing their concerns resulting in each firm submitting a revised price proposal.

After reviewing the revised price proposals, the selection committee determined that Forte-FOS, PJS, and Restani were in the competitive range and were invited to participate in negotiations. The selection committee decided to eliminate J-Track from further consideration because their revised proposal contained price increases across most unit price payment items which were significantly higher than the other proposers, making them uncompetitive.

Negotiations with the remaining three firms focused on strategies to further reduce their pricing. At the conclusion of the negotiations, all three firms submitted a Best and Final Offer (“BAFO”). After review, the selection committee unanimously determined to accept all three BAFO’s and award contracts to Forte-FOS, PJS, and Restani as their proposals offered the best value to MTA.

The selected proposers demonstrated comprehensive knowledge of the work requirements under this contract along with possessing the necessary experience required and identified potential challenges with solutions to matters specific to the NYCT system. Additionally, all assigned key personnel submitted by each proposer reflected the requisite qualifications and experience.

In connection with a previous contracts awarded to PJS, PJS was found to be responsible notwithstanding significant adverse information pursuant to the All-Agency Responsibility Guidelines and such responsibility finding was approved by the MTA Chairman and Chief Executive Officer in consultation with the MTA General Counsel in February 2016. No new significant adverse information has been found relating to PJS and PJS has been found to be responsible.

D/M/WBE/SDVOB Information

The MTA Department of Diversity and Civil Rights (“DDCR”) has established a Disadvantage Business Enterprise (“DBE”) goal of 22.5% for the federally funded contracts and a Women Owned Business Enterprise (“WBE”) goal of 15%, a Minority Owned Business Enterprise (“MBE”) goal of 15% and a Service-Disabled Veteran-Owned Business (“SDVOB”) goal of 6% for the state funded contracts. Although these are design-build contracts with some undefined scope, all three selected proposers are committed to meeting the required goal requirements and their utilization plans are under review.

Forte-FOS and PJS have achieved their goals on recent projects. Restani has achieved their goals on prior projects as well as demonstrated good faith efforts on achieving goals on recent projects.

Impact on funding

C31392A through C31392C will be with state funds and C31393A through C31393C will be primarily federally funded. These Contracts are all “zero-dollar” based, and therefore funds will be provided on a work order basis by the capital project requiring these services.

Alternatives

That C&D self-perform the services to be provided under these Contracts. This is not recommended as C&D lacks the in-house resources to provide the required services.