



Metropolitan Transportation Authority

Capital Program Committee Meeting

June 2022

Committee Members

J. Lieber, Chair
N. Zuckerman, Vice Chair
A. Albert
J. Barbas
G. Bringmann
N. Brown
S. Chu
M. Fleischer
R. Glucksman
D. Jones
B. Lopez
D. Mack
H. Mihaltses
J. Samuelson
J. Soliman
V. Tessitore

Capital Program Committee Meeting

2 Broadway, 20th Floor Board Room

New York, NY 10004

Monday, 6/27/2022

12:15 - 1:30 PM ET

1. SUMMARY OF ACTIONS

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2. PUBLIC COMMENTS PERIOD

3. APPROVAL OF MINUTES – MAY 23, 2022

CPC Committee Minutes - Page 5

4. 2022 – 2023 COMMITTEE WORK PLAN

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5. LIRR ROLLING STOCK UPDATE

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7. MNR ROLLING STOCK UPDATE

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8. BUS ROLLING STOCK UPDATE

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9. C&D SAFETY REPORT

Committee Safety Report - Page 78

10. CAPITAL PROGRAM STATUS

Commitments, Completions, and Funding Report - Page 80

11. MTA CAPITAL PROGRAM QUARTERLY TRAFFIC LIGHT REPORT

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12. C&D PROCUREMENTS

C&D Procurements - Page 135

**CONSTRUCTION & DEVELOPMENT
COMMITTEE ACTIONS
SUMMARY for JUNE 2022**

Responsible Department	Vendor Name	Total Amount	Summary of Action
Contracts	T. Moriarty & Son	\$ 1,235,001	MTA Construction and Development requests that the Board ratify Modification No. 20 to Contract B-62032 for a redesigned flood roller gate at the MJ Quill Bus Depot.

MINUTES OF MEETING
MTA CAPITAL PROGRAM COMMITTEE
May 23, 2022
New York, New York
12:15 P.M.

CPC members present:

Hon. Janno Lieber
Hon. Andrew Albert
Hon. Jamey Barbas
Hon. Norman Brown
Hon. Randolph Glucksman
Hon. David Jones
Hon. Haeda Mihaltses
Hon. Neal Zuckerman

Board members present:

Hon. Gerard Bringmann

CPC members not present:

Hon. Michael Fleischer
Hon. John Samuelsen
Hon. Vincent Tessitore, Jr.

MTA staff present:

Evan Eisland
Rob Free
Jolyon Handler
John McCarthy
Tom McGuinness
Tim Mulligan
Steve Plochochi
Mark Roche
Tom Savio
Jamie Torres-Springer
Rob Troup
Anthony Tufano

Independent Engineering Consultant staff present:

Joe Devito
Elizabeth King

* * *

Chairman Lieber called the May 23, 2022 meeting of the Capital Program Committee to order at 12:33 P.M.

Public Comments Period

There were three public speakers in the public comments portion of the meeting: Jason Anthony, Amazon Labor Union; Bradley Brashears PCAC; and Charlton D'Souza, Passengers United.

Meeting Minutes

The minutes of the meeting held on April 25, 2022 were approved, with one correction.

CPC Work Plan

There were no changes to the CPC Work Plan; upon motion duly made and seconded, the CPC Work Plan was approved.

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 several recent project completions, starting with the new Times Square Station entrance – a complex project in the busiest station in the subway system, beneath the busiest public space in the world. Of note is that the project -- which was delivered on schedule and under budget -- comprised scope elements well beyond an amazing new staircase, including: a new ADA-accessible elevator; a fully renovated station entrance area; a number of high-tech security upgrades; the rebuilding of the fare collection area; reconstruction of the public plaza at the station entrance (which required extensive utility relocation); installation of public art – specifically, the largest mosaic in the subway system; and historic preservation work in the station entrance and around the station. He then cited the reopening of the Clark Street Station on the 2-3 Line, including the replacement of the elevators, which was completed on time. In addition, the completion of the Livonia Street station elevators marks the 15th completed ADA station since 2020, with another 11 scheduled for completion by the end of 2023 – all part of the 70-plus stations slated for accessibility improvements in the '20-'24 Capital Program. In addition, President Torres-Springer noted that a Town Hall kick-off meeting on the Interborough Express project was held recently with hundreds of attendees and many more having viewed it since, demonstrating the palpable excitement surrounding this project. Finally, by way of introduction to today's CPC agenda, he then noted that each of the Integrated

Megaprojects will have a transformative impact on the lives of MTA's customers: Third Track will deliver more reliable service across the Long Island Rail Road and enable bi-directional service that will open up more opportunities for New Yorkers and Long Islanders alike; Penn Station Access (PSA) will be similarly impactful for MNR riders and East Bronx residents -- an area long underserved by public transit; the LIRR Concourse at Penn Station is the next step toward remaking Penn Station into a world-class facility for commuters and New Yorkers; and East Side Access (ESA) opens up the East Side of Manhattan to Long Islanders, delivering huge time savings and new connections. President Torres-Springer concluded his remarks by noting that while these projects are in very different phases -- with PSA just starting construction while others are nearing substantial completion or beneficial use -- the successes and lessons learned from one project are being applied to the next, including the use of Design-Build project delivery, bundling work into a smaller number of contracts, and pro-active outreach to utilities and permitting agencies.

C&D Capital Program Update

Mr. Free highlighted the far-reaching benefits that the upgraded infrastructure of the LIRR Expansion (a.k.a. Third Track) project brings to LIRR customers, including improved operational resiliency and flexibility -- including reverse commuting, and increased capacity and service reliability. Mr. Tufano then provided an update on construction progress on this extremely complex 10-mile long, \$2.5B railroad expansion project. Noting that while many initially doubted the MTA's ability to execute such a project on budget and on schedule, the Third Track project is, in fact, being delivered as originally planned, with the first section to be placed in service in August of this year and full service to commence by year's end, and substantial completion slated for second quarter 2023; in addition, the project continues to progress under budget. Mr. Tufano then cited several project benefits -- beyond those associated with improved operations, as noted by Mr. Free -- that will provide an improved quality of life to those in the surrounding community, including improved accessibility, noise reduction measures, and the improved safety and reduced traffic delays stemming from the elimination of eight grade crossings. Mr. Tufano acknowledged the many parties whose collaborative efforts have led to the project's success, and thanked the neighboring communities for their patience during construction; he concluded his remarks by citing the remaining work for the balance of this year through to substantial completion next year.

In its Project Review of the LIRR Expansion project, the IEC noted that overall, the project, which is 87% complete, is on schedule and within budget. The IEC commented that the project has made notable progress on major milestones such as the completion of the final bridge replacement at Denton Avenue, the Nassau 3 / Divide 1 Cutover and related work, and the New Hyde Park Pedestrian Underpass. Based on the IEC's review of the project schedule, Substantial Completion in April of 2023 for major construction is achievable. With respect to budget, overall, project costs remain within budget, and in its review of remaining work -- noting that there are outstanding claims and other commercial issues requiring reconciliation -- the IEC finds

that the project budget is sufficient to complete the work. Finally, the IEC has observed that despite numerous challenges, the Project Management Team has successfully implemented mitigation measures that have kept the project on schedule, and the IEC expressed confidence in the Team's ability to continue to do so.

Before asking Mr. McGuinness for his update on the Penn Station Access (PSA) project, Mr. Torres-Springer provided an overview of the project itself, including the many benefits to commuters as well as residents of surrounding East Bronx neighborhoods. Mr. McGuinness -- the former Project Executive on the successful LIRR Expansion Project -- then provided the first update on the project since it was awarded to the Design-Build joint venture of Halmar International and Railworks in late 2021. Among the additional benefits from the project are increased reverse commuting opportunities, decreased travel times, optimized use of existing infrastructure, less congestion and cleaner air, regional transportation connectivity, and enhanced network reliability. The Notice to Proceed was issued in January 2022, with substantial completion scheduled for March 2027, and the current project budget is \$2.4B (although contract options are anticipated, which if executed would total an additional \$385M). In addition to new and upgraded infrastructure, including 19 miles of new track, interlockings, substations, overhead catenary structures, and bridge rehabilitations or replacements, the project will include the construction of four new Metro North stations in the Bronx -- in Hunts Point, Morris Park, Co-op City, and Parkchester/Van Nest. Mr. McGuinness then noted that a key principle from the Third Track project, i.e., establishing a collocated field office for all project stakeholders in order to promote timely decision-making, is being applied to PSA. He highlighted a wide range of activities currently underway or anticipated in the next several months, including securing permits, conducting community outreach and engagement activities, and construction of the Leggett Interlocking. Mr. McGuinness concluded his remarks by citing the following key project risks and mitigations: coordination with railroad operators and establishing specific formal agreements with these entities; property easements and acquisitions; and coordination with third party stakeholders.

In its Project Review of the Penn Station Access project, the IEC noted that a Design-Build contract was awarded in December 2021, with a Substantial Completion in March 2027 -- a critical element of which is that the project must provide a Notice to Proceed for the Option Work (including the reconfiguration of MNR's New Rochelle Yard) by January 2023. In addition, according to the IEC, after 6 months, final design is at 45% complete and progressing well. The IEC confirmed that the project's forecast Budget and Estimate at Completion (EAC) for both the Base and Option work are \$2.9B, and that funding for the Option and deferred component work will need to be secured. The IEC then outlined top project risks, including sufficient Amtrak resources to support both management of the project and Force Account work, and timely review and approval of project documents by CSX -- a tenant railroad to Amtrak. The IEC then noted that it will be participating in C&D's risk assessment update planned for second quarter of this year, which will identify and provide mitigation measures for all major project risks. The IEC concluded its review by noting that the Team's strategy to have all stakeholders in one location at the field office in New Rochelle is a positive step for swift

decision-making and management over a project of this size and complexity.

Mr. Handler provided an update on work underway on the LIRR Concourse, the latest phase of the overall Penn Station program. Key elements of this \$539M project -- primarily aimed at an improved customer experience -- include increasing the width of the concourse from 30 to 57 feet for improved customer circulation, raising ceiling height to 18 feet without obstruction, upgrades to lighting, improved way-finding signage, better air circulation and expanded volume of fresh air, and improved station access and elevator reliability. While the project is on budget and schedule -- with a contractual completion date of March 2023 -- Mr. Handler noted that the project team is pushing for a December 2022 opening. Noting that the project has recently received several accolades and awards, including the prestigious Diamond Award for Excellence in Engineering from the American Council of Engineering Companies of New York, he then outlined several recent milestones achieved by the project. Looking ahead to the balance of work in 2022, including installation of architectural finishes, continued progress on mechanical, electrical, and plumbing (MEP) system installation, and completion of ADA upgrades, he noted continued supply chain-related risks. Mr. Handler concluded his presentation by expressing appreciation to LIRR customers for their patience during project construction, and by briefly touching on future Penn Station work, as envisioned in the program Master Plan.

In its Project Review of the LIRR Concourse, the IEC noted that overall, the project is 65% complete and remains on schedule. The IEC finds that a December opening, which is C&D's aim, to be challenging but achievable, provided project risks are contained. Further, the IEC expressed confidence that the project will successfully meet the March 2023 Substantial Completion date. With respect to budget, the IEC noted that project's \$539M budget and EAC are unchanged from the last report and that the IEC analysis finds it is sufficient to complete the remaining scope of work. Ongoing project risks -- which will continue to be managed through project completion -- include supply chain disruptions and code compliance issues; however, the IEC finds the project team has implemented sound procedures to effectively mitigate major risks.

Describing the opening of East Side Access (ESA) as a generational event, Mr. Free noted that the ESA project will enhance the lives of thousands of people by improved transit options, reliability, and service. ESA will provide immense benefits to LIRR service by operating train service to two major terminals in midtown Manhattan, one on the West Side and one on the East Side, increasing overall train service, improving the frequency of train service, offering customers more travel options, reducing commute times, and providing resiliency of service. Mr. Troup then provided an update on ESA construction, including recent completions of the many ancillary facilities associated with the project. Of note is the activity taking place in the Mid-Day Storage Yard and the Yard Services Building, including its recent use by LIRR personnel as they prepare to take over project operations. Mr. Troup then highlighted the various systems that are currently functioning and undergoing testing in the ESA facility itself, allowing early Physical Characteristics training by LIRR staff to get underway. Acknowledging the efforts of the many stakeholders involved in systems testing -- all working together to create an efficient testing environment -- Mr. Troup then cited the challenges posed by integrating the thousands of devices

that comprise the systems in question; he concluded his presentation by outlining various aspects of interim maintenance of both railroad and facility assets. Mr. Free then provided details on the federally mandated Physical Characteristics (PC) training currently underway, involving over 2000 LIRR employees -- including conductors, engineers, train dispatchers, and right-of-way employees -- as they become familiar with the territory so they can safely operate trains and perform maintenance on the infrastructure. Mr. Free concluded his remarks by citing the various other activities underway in preparation for the takeover of operations by LIRR, including robust hiring efforts.

In its Project Review of the East Side Access project, the IEC noted that the budget of \$11.1 B remains sufficient to complete the work required to enter revenue service. Based on its review of the latest project schedule, the IEC finds that a December 2022 Revenue Service Date is still achievable, but remains contingent on increased productivity to complete the system testing work and to allow a six-week period for pre-revenue operations. According to the IEC, in order to address issues and delays to critical systems, including Fire Alarm, Building Management / Fire Life Safety, and Positive Train Control, the project team has been diligent in identifying mitigations to be undertaken by the contractors. However, to achieve Safety and Security Certification required for revenue service, additional staff may be necessary to expedite the submittal and approval of the required packages, as the certification process has, to date, advanced at a slower-than-required rate. As cited by Mr. Troup, the IEC noted that early involvement of the MTA Fire Alarm/Code Compliance unit and LIRR Fire Marshal is aiding in the identification and correction of fire life safety and code issues, which must be resolved prior to revenue service. In terms of Operational Readiness, the IEC confirms that significant progress has been made in turning over the Midday Storage Yard and Yard Services Building to LIRR, advancing physical characteristics training of train crews, and starting Emergency Preparedness activities. In the IEC's opinion, the Operational Readiness Tasks are on schedule to support revenue service by the end of the year. The IEC concluded its remarks by noting that, having been involved with the ESA project in varying capacities since the Environmental Impact Statement (EIS) phase, the current project team leaders have been able to maintain its commitment to budget and revenue service for the last several years.

Vice Chairman Zuckerman then requested that an After-Action Review of the East Side Access project be undertaken, considering the project's considerable duration (from conception to imminent completion), as well as cost to the public. Chairman Lieber confirmed that such a study will be conducted, noting however, that MTA has already effectuated key lessons learned from the project, including avoiding breaking megaprojects into numerous separate contracts (which resulted in complex coordination issues among contractors), as well as creating very specific agreements to limit MTA's damage exposure with parties that control outages. Further, Vice Chairman Zuckerman called for a discussion -- *to be taken up in either the Finance Committee or the LIRR Committee* -- of the incremental operating budget developed in support of East Side Access, to which Chairman Lieber agreed.

Procurement Actions

Stephen Plochochi, Senior Vice President (“SVP”), Contracts, MTA Construction & Development Company (“C&D”) reported there were three procurement actions being brought to the Capital Program Committee this month, one competitive item totaling \$39.9M and two ratifications totaling \$7.1M. SVP Plochochi then presented the competitive item and requested the approval of all three items.

Upon a motion duly made and seconded, the Capital Program Committee voted the following procurement actions be brought before the MTA Board and recommended their approval:

1. The award of a publicly advertised and competitively solicited contract (C34866) to L.K. Comstock & Company LLC for design-build services to upgrade the supervisory control and data acquisition system which connects to the Power Control Center and to create a new back-up electronic power control center for the amount of \$39,900,000 and a duration of 1,034 calendar days.
2. The ratification a modification (No. 78) to the Traction Power Systems Package No. 4 for the East Side Access project contract (CS084) with E-J Electric Installation Co. to energize, operate and maintain four traction power substations to support Long Island Rail Road (“LIRR”) Physical Characteristics Training, for a total cost of \$5,203,200.
3. The ratification a modification (No. 95) to the Traction Power Systems Package No. 4 for the East Side Access project contract (CS084) with E-J Electric Installation Co. to replace fourteen (14) electrically operated sectionalized switches with new load break switches for a total cost of \$1,896,055, and an excusable delay of 121 days, extending the substantial completion date of the Contract to September 22, 2022.

A copy of the Resolution and the Staff Summaries for the above items are filed with the records of the Capital Program Committee Meeting of this date.

Adjournment

Upon motion duly made and seconded, Chairman Lieber adjourned the May 23, 2022 meeting of the MTA Capital Program Committee at 1:55 PM.

Respectfully submitted,
Michael Jew-Geralds
Office of Construction Oversight



2022-2023 CPC Committee Work Plan

I. Recurring Agenda Items

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

II. Specific Agenda Items

July

Overall Capital Program

- Stations

September

Overall Capital Program

- Railroads

OMNY
Quarterly Traffic Light Report

October

Overall Capital Program

- Infrastructure

November

Overall Capital Program

- Signals and Train Control

Minority, Women and Disadvantaged Business Participation
Small Business Development Program

December

Overall Capital Program

- B&T

Security Projects
Quarterly Traffic Light Report

January

Overall Capital Program

- Integrated Megaprojects

February

Overall Capital Program

- Stations

March

Overall Capital Program

- Railroads

OMNY

Quarterly Traffic Light Report

April

Overall Capital Program

- Infrastructure

Minority, Women and Disadvantaged Business Participation

May

Overall Capital Program

- Signals & Train Control
- Rolling Stock

June

Overall Capital Program

- Integrated Megaprojects

Security Projects

Quarterly Traffic Light Report



LIRR M-9 Railcar Project

Jim Allen
Chief Rolling Stock Programs Officer

LIRR M-9

M-9 Cars are required for:

- Provide passenger service to Grand Central Madison
- Retire M-3 Cars which were manufactured in 1984-1986

New Features:

- Closed loop armrest
- Powered B-end door
- Electrical outlets at each row of seats
- Improved bathroom amenities (touchless, improved sliding doors)
- CCTV – crime deterrent and incident investigation tool
- Car number in consist displayed
- (Car 2 of 6)

LIRR M-9 - Project Update

Contract was awarded to Kawasaki Rail in September 2013 for 92 Base Order cars

Budget			
	Base order 92 cars	Option 110 cars	Total 202 cars
Project Budget	\$406.4 M	\$327.2 M	\$733.6 M
Current EAC	\$406.0 M	\$327.0 M	\$733.4 M
Contingency	\$0	\$0.2 M	\$0.2M

LIRR M-9 - Car Update

- 130 cars have been accepted and are operating successfully in passenger service throughout LIRR's electrified territory
- 6 cars are undergoing operational testing at LIRR's Hillside facility
- 32 cars are being prepared for operational testing at Arch Street, which is a LIRR facility leased to Kawasaki
- 20 cars are undergoing final assembly at Kawasaki, Yonkers NY facility (KRC)
- 14 cars are being manufactured at Kawasaki's facility in Lincoln, NE plant (KMM)

LIRR M-9 - Car Acceptance Summary

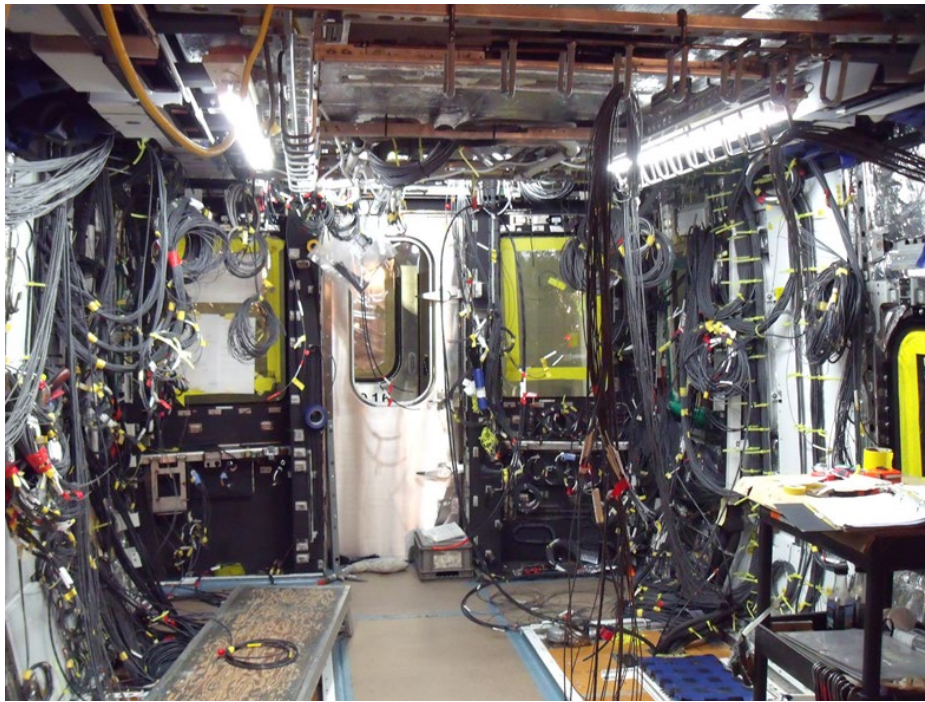
Description	Current Forecasted Acceptance Completion	Change from Last Report (June 2021)
202 cars - conditional acceptance (92 base order + 110 option cars)	September 2023	17 months

- Kawasaki incurred delays affecting the car delivery schedule due to several workmanship issues, as well as defects and failures that were discovered during on-site testing at LIRR
- These issues require adjustments, repairs or complete parts and system replacement prior to LIRR granting a car a conditional acceptance
- The COVID-19 pandemic, labor resource issues, and supply chain shortages have also contributed to delays in the schedule

LIRR M-9 - Oversight

- LIRR's project team continues to perform rigorous oversight during car testing and acceptance to ensure that all M-9s placed in passenger service are safe, reliable, and provide our customers the quality they deserve
- As a result, while the project has experienced delays, **the Mean Distance Between Failure (MDBF) for M-9 cars accepted to date exceeds the contract requirement by approximately 65% (250,000 miles vs. 150,000)**
- The MDBF will continue to increase as modifications are implemented
- LIRR continues to hold Kawasaki accountable for workmanship issues, demanding appropriate repairs and quality oversight by Kawasaki managers prior to each car receiving final acceptance
- Costs for all additional measures necessary to accept rolling stock to be borne by Kawasaki

LIRR M-9 - Car Production



Kawasaki Motors Manufacturing (KMM) Lincoln, NE

LIRR M-9 - Final Assembly

- Underfloor equipment
- Underfloor wiring
- Coupler
- Luggage rack
- Seating
- Truck
- Function test



Kawasaki Rail Car (KRC), Yonkers, NY

June 2022 CPC Independent Engineering Consultant Project Review

LIRR M-9 Contract



MTA Independent Engineering Consultant

LIRR M-9 Contract

Scope of Work

- In September 2013, Kawasaki was awarded a base contract for 92 M9 vehicles. A follow-on option order for 110 railcars was exercised in July 2017. The M9 is a PTC-ready, self-propelled electric multiple unit (EMU) vehicle for use on LIRR. They will replace the M3 railcar fleet built during the early 1980's, allow for some ridership growth and are capable of operation in Grand Central Madison Access territory.



McKISACK

MTA Independent Engineering Consultant

LIRR M-9 Contract

Schedule

- Conditional Acceptance (CA) is now forecast by the project team as September 2023, a 33-month delay from the original contract date.
 - Due to Kawasaki's failure to resolve quality, technical and parts availability issues, they have not met the criteria required for acceptance resulting in a three month pause.
 - Assuming acceptance of the final 72 vehicles resumes in June 2022, an improvement in the production rate from 4 to 5 cars-per-month(cpm) would be required to meet the September 2023 date.
- In the opinion of the IEC, an average rate of 5 cars/month is achievable providing Kawasaki is able to overcome the parts shortage and achieve workforce stability.

LIRR M-9 Contract

Budget

- ▣ The LIRR's M-9 budget and Estimate at Completion (EAC) of \$733.6M have not changed since last report.
- ▣ The IEC has reviewed the project expenditures to date, including unallocated contingency, outstanding change orders, delay costs and risk on remaining work and forecasts that the Estimate at Completion could exceed the budget by up to \$9.6M.

LIRR M-9 Contract

Observations

- The specific issues preventing acceptance of vehicles are:
 - The repair of Vestibule Flooring.
 - HVAC Condenser Fan rework.
 - Third rail current collector mounting bolt repair.
- At the direction of LIRR, Kawasaki has revised their manufacturing process and procedures where needed.
 - They have provided a refresher course to line personnel in order to improve their understanding and performance.
 - Kawasaki has exchanged quality personnel between KMM and KRC facilities, which has proven to be very helpful.
 - KHI Japan is providing additional experienced personnel to support the project at the KMM facility.

LIRR M-9 Contract

Comments

- ▣ Improvements made to the manufacturing processes and procedures will benefit later projects, including NYCT R211s.
- ▣ Final acceptance will not be achieved until all critical FMI work has been completed which could result in a delay to cars entering service.
- ▣ The LIRR has provided support and partnered with Kawasaki to support the fleet modification work. LIRR has aggressively pushed to accept only vehicles that meet contract requirements.
- ▣ The IEC has observed Kawasaki attempting to close out as many open items as possible at both LIRR and KRC Yonkers facilities, however the remaining 14 cars in Nebraska and 6 cars at LIRR cannot be completed at this time due to part shortages.
- ▣ The IEC acknowledges the LIRR has pushed Kawasaki to develop an achievable field action plan to correct issues on vehicles not yet conditionally accepted on LIRR property and allowing the conditional acceptance to recommence.



NYCT Subway Car Program

Siu Ling Ko
Vice President & Chief Mechanical Officer, Division of Car Equipment
Department of Subways

NYCT Subway Car Program

Overall Goals

Maintaining State of Good Repair to Ensure a Safe & Reliable Fleet

- Achieved through regular maintenance programs and replacement of subway cars upon the end of their useful lives.

Supporting Signal System Modernization

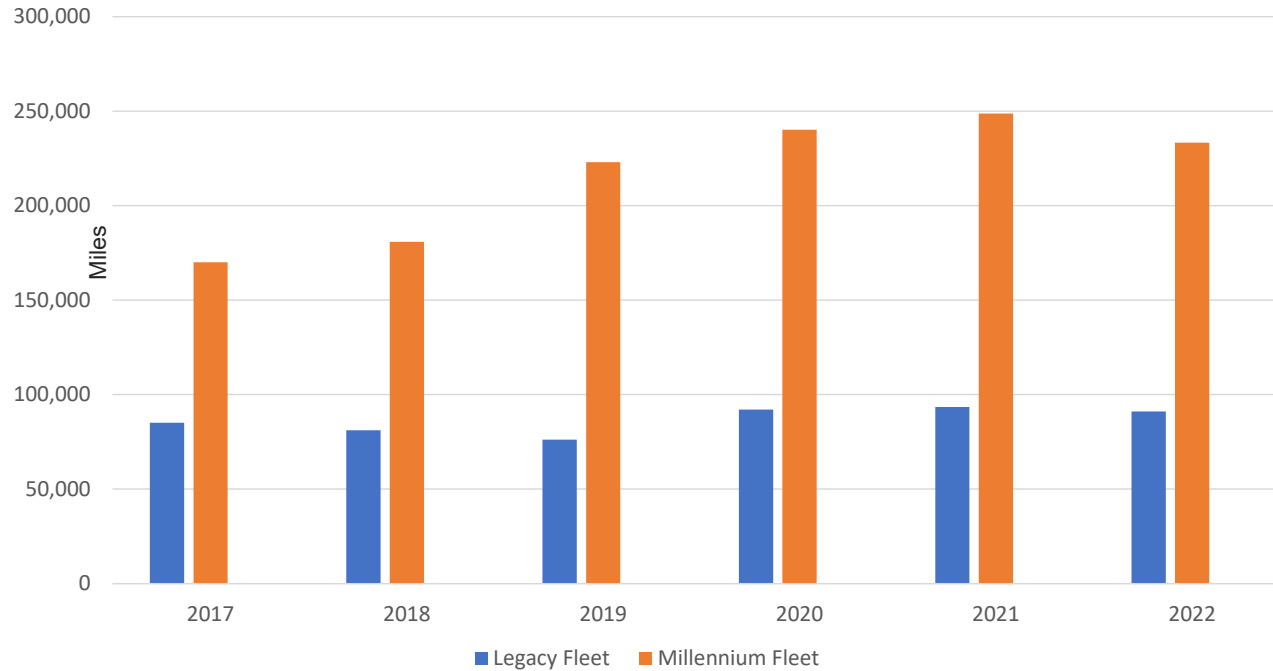
- Requires installation of communications equipment directly on our subway cars.
- New subway cars must be designed to accommodate latest signal technology.
- Retrofit existing subway cars to accommodate this equipment.

The R211A/T program will support these goals by replacing the 40+ year NYCT R46 cars, with CBTC-equipped cars to enable expansion of CBTC on the B-Division, including the 8th Av **A C E** Lines.

The R211S cars will replace the almost 50-year old Staten Island Railway (SIR) R44 cars.

NYCT Subway Car Program Maintaining State of Good Repair

Annual Mean Distance Between Failure



Reliability of millennium fleet (cars purchased since 2000) has increased

60%

since 2016 and exceeds legacy fleet by

2.5x

* 2022 = 12 Mo. Moving Avg. through April 2022

NYCT Subway Car Program

R211 Project Overview

- Awarded to Kawasaki in February 2018
- Up to 1,612 cars for NYCT and SIR
- Base order (535 cars):
 - Base order budget \$1.75 B
 - 440 standard 'R211A' cars
 - 75 SIR 'R211S' cars
 - 20 open gangway test 'R211T' cars
- Division of Car Equipment is actively managing the R211 program to minimize increases to EAC.



NYCT Subway Car Program

R211 - Kawasaki April 2022 Schedule Under Review

- **R211A Pilot Train** – delivered July 2021 (12 months late). Qualification testing underway at NYCT.
 - The pilot train continues to undergo extensive testing. Upon successful completion, production car deliveries will begin in December 2022 (15 months late).
- **R211T Open Gangway Test Trains** – projected deliveries in October/December 2022 (17/19 months late).
- **R211S Staten Island Railway Cars** - test train projected delivery in February 2023 (14 months late); production cars projected start delivery in March 2024 (18 months late) with completion October 2024 (16 months late).
- **R211A Base Order** – projected for completion in January 2025 (17 months late).

NYCT Subway Car Program

R211 Project Management Mitigation Actions

The R211 project management team actively engages with Kawasaki to mitigate ongoing schedule challenges:

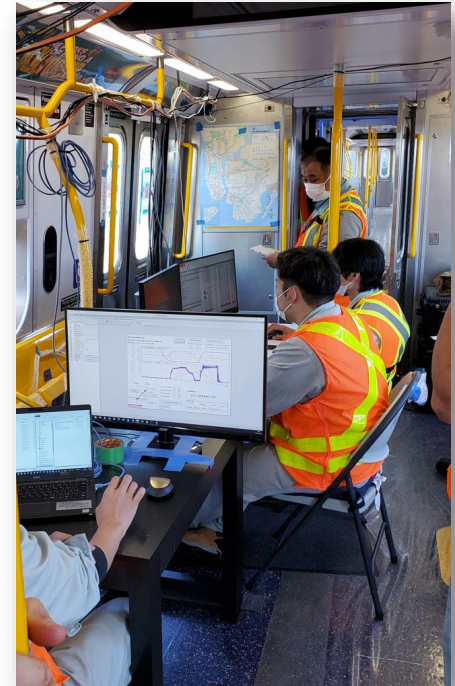
- Weekly production and manpower update reports from KMM.
- Ongoing engagement with Kawasaki to review schedule and Kawasaki's oversight of sub-suppliers.
- Qualification of alternate sources to mitigate supply chain issues.
- NYCT and consultant support on-site at KMM.
- NYCT and consultant visits to supplier sites to resolve open issues to minimize production and testing delays.
- Ongoing project support for Kawasaki qualification testing at NYCT.

NYCT Subway Car Program

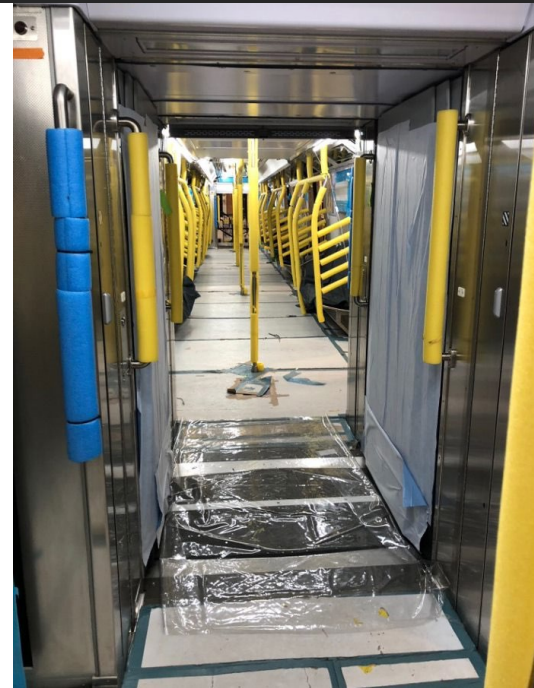
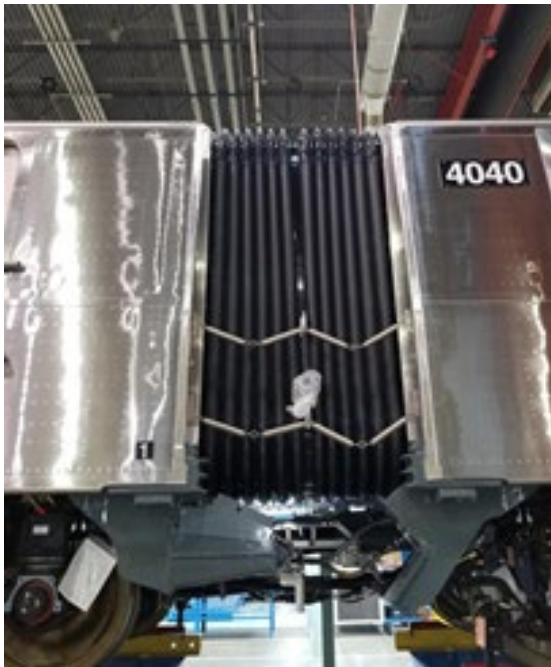
R211 Upcoming Steps

- **R211A Pilot Train** – continue qualification testing and implementation of field modifications at NYCT.
- **R211T Open Gangway Test Trains** – initiate qualification testing and evaluation of open gangway following prototype deliveries in October 2022 and December 2022.
- **R211S Staten Island Railway Cars** – initiate qualification testing at NYCT and SIR following test train delivery in February 2023.
- **Execution of Option 1** – projected for Q4 2022/Q1 2023, total of 640 cars.
- **Based on the late delivery of the R211 cars, MTA C&D is developing alternate plans for 8 Av CBTC cutover.**

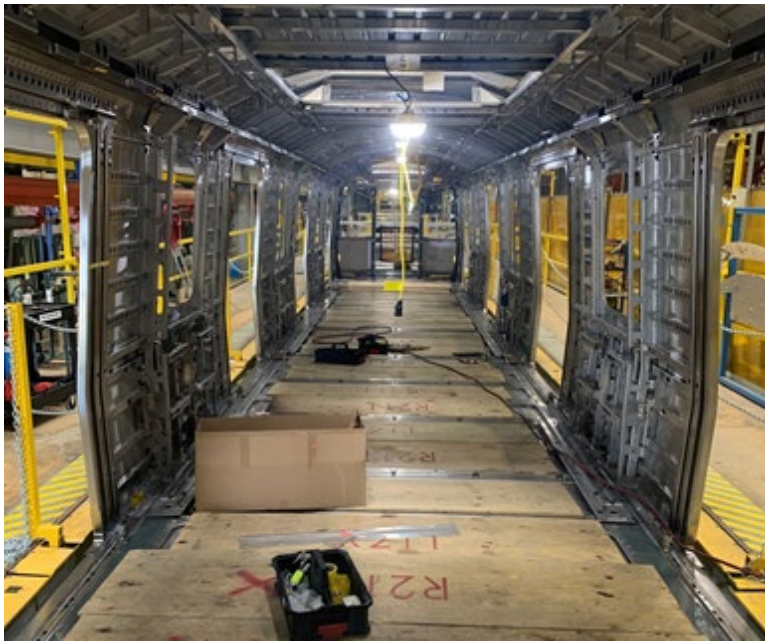
NYCT Subway Car Program R211A Prototype Train Testing



NYCT Subway Car Program R211T Production in Lincoln, NE



NYCT Subway Car Program R211A Production Units in Lincoln, NE



NYCT Subway Car Program R211S Production in Lincoln, NE



June 2022 CPC Independent Engineering Consultant Project Review

NYCT R211 Contract



MTA Independent Engineering Consultant

NYCT R211 Contract

Scope of Work

- ▣ The R211 project 535-car base order was awarded to Kawasaki in February 2018 for \$1.75B, funding was provided for in the 2015-2019 Capital Program.
- ▣ The contract has three vehicle sub-classes: R211A, R211S, and R211T:
 - ▣ 440-R211A cars to partially replace 748 B-Division R46 vehicles.
 - ▣ 75-R211S cars to replace the R44 fleet on the Staten Island Railway. All R44 SIR cars will be retired.
 - ▣ 20-R211T open gangway pilot cars. The R211T open gangway test trains will prove the feasibility of this design.
 - ▣ R211A Pilot vehicles are on site and are now being tested.
- ▣ The letter of Intent to Exercise the R211A Option 1 has been issued.



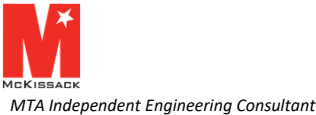
MTA Independent Engineering Consultant

NYCT R211 Contract

Schedule

R211 Project Schedule			
Milestone	Base Contract Date	Latest Schedule Update 5-22	Delay
1st Production Unit Delivery to NYCT (R211A)	Sept-21	Dec-22	15 mo.
R211A Last Production Unit Delivery	July-23	Jan-25	18 mo.
R211S Start Delivery Car Delivery	Sept-22	Mar-24	18 mo.
R211S Last Production Car Delivery	Mar-23	Oct-24	19 mo.
R211T Pilot Car Delivery	May-21	Nov-22	18 mo.

- The 10 pilot cars are now being tested and having Field Modification Instructions (FMI's) incorporated. Kawasaki has dispatched engineers and production workers to support this work.
 - Completion of pilot car testing has now been extended due to technical issues from August 2021 to November 2022, a total delay of 15-months or a 3-month delay since last report.
 - Final delivery of all R211 vehicles has changed from July 2023 to January 2025, an 18-month delay.
 - The delivery schedule for the base order of 535 vehicles equates to an average delivery rate of 20 vehicles per month.
 - Assuming timely resolution of supply chain and labor issues and that Kawasaki will utilize two production lines with two work shifts each; it is the IEC's opinion this rate of production will be challenging and may result in a further delay to the project of between 6 and 9 months. This would require the R46 fleet life be extended incurring additional maintenance and support cost.



NYCT R211 Contract

Budget

- ▣ The project budget and EAC of \$1.75B have not changed since last report (June 2021).
- ▣ The IEC has reviewed project expenditures to date, change orders, delay costs, unallocated contingency and risk to remaining work and forecasts the EAC could exceed the project budget by up to \$47.3M, should no cost-cutting measures be undertaken.



MTA Independent Engineering Consultant

NYCT R211 Contract

Observations

- To assist with skilled labor issues Kawasaki has:
 - Added experienced personnel to support the project at the Kawasaki Motors Manufacturing (KMM) facility.
- Created a Skills Qualification Program where all new employees at the Nebraska facility undergo 90-days of training plus 30 days to demonstrate qualifications.
- Kawasaki is reevaluating vendors parts and logistic capabilities and NYCT is accelerating their qualification process in certifying these vendors.
- Kawasaki has recently adopted a new electronic tracking and monitoring system that provides a clear issue status and minimizes the need for follow-up production rework.
- The IEC acknowledges the contractor's efforts which are intended to assist the car-builder in achieving their stated production level, while delivering high quality cars for acceptance.



McKISACK

MTA Independent Engineering Consultant

NYCT R211 Contract

Concern

- The IEC is concerned that the late delivery of the R211A fleet is a coordination issue which will impact the 8th Avenue CBTC project.
- This project is dependent upon the delivery of the entire fleet of 440 R211A cars (415 in service + 25 spares).
 - Due to the unavailability of the R211A cars by the CBTC testing start date of February 2024, the 8th Avenue project team has developed a mitigation plan. The plan requires 300 cars be accepted by August 2024.



MTA Independent Engineering Consultant



Metro-North Railroad Locomotive Contract

Joseph E. Reynolds
Senior Director - Rolling Stock Delivery & Integration

SC42-Dual Mode Locomotive Project Description

- The dual mode locomotive contract is intended to replace GE P32AC-DM locomotives nearing or exceeding their projected 25-year lifespan
- Parts obsolescence, maintainability cost, and poor reliability forced the replacement of the P32 at the expense of other rolling stock replacement programs of vehicles that have also reached the end of their design life such as the M-3 replacement as part of the M-9 program
- The current P32s operate with both diesel and third rail electric power
- Notice of Award – March 2021 to SIEMENS and built in Sacramento, CA
- Federally funded project that meets all the requirements of Buy America
- Recently completed second design review (65% of the design completed)
- The design completion is on schedule for 4Q 2022
- Manufacturing of the first (pilot) locomotive is scheduled to begin in the 3Q 2023

SC42-Dual Mode Locomotive

Key Features

- Greener (lower emissions)
 - Use of Diesel Exhaust Fluid (DEF) for aftertreatment to lower emissions.
 - 89% reduction in NOX emissions (Nitrogen Oxides).
 - 97% fewer Hydro Carbons (HC's)
 - 98 % reduction in particulate matter
 - Locomotive meets the latest EPA Tier IV requirements
 - Power type AC diesel-electric and DC third rail
 - Extended electric mode, less fuel usage and lower operating cost
- Ability to operate at higher speeds
- Quieter
- Improved reliability



SC42-Dual Mode Locomotive Quantities & Budget

Base order	19
Option	8
Current Total	27 Locomotives
Total project budget (base + option)	\$378.2 M
Unit price per locomotive	\$12.4 M
Invoiced to date - in line with the program milestone payment schedule	\$80.2 M
Current EAC (Due to increase soft cost from pre-award estimates and exercising options)	\$413.6 M

Increase the Current Project Budget to equal the Estimate at Completion due to extended schedule, increases the EAC for project oversight, inspection, testing (at two sites) by the consultant, project management and F/A support.

Under the contract, the below-listed agencies will have the following options:

- MNR up to 32 additional locomotives
- LIRR up to 65 locomotives in an alternate configuration
- CDOT up to 20 locomotives in an alternate configuration
- NYSDOT up to 25 locomotives in an alternate configuration

SC42-Dual Mode Locomotive Schedule

Program is currently on schedule

We are currently on schedule with the original contract dates

Major Activity	Date
Notice of Award	March 2021
Design Review Start	2Q 2021
Design Completion	4Q 2022
First (Pilot) Locomotive Manufacturing Complete	3Q 2024
Qualification Testing of Pilot	4Q 2024 to 2Q 2025
Delivery and Acceptance Testing of First Locomotives	2Q 2025
Delivery and Acceptance Last Locomotive Manufacturing	2Q 2027

SC42-Dual Mode Locomotive

Current and Continuing Activities

- Monthly progress review meeting
- Conducting two different weekly meetings between MNR and Siemens - Monday - engineering meeting and Wednesday - project meeting.
- Continued safety committee monthly meeting with all stakeholder's safety personnel.
- Began receiving and reviewing Final Design Review (FDR) submittals.
- Coordination with all stakeholders, both within MNR and externally.



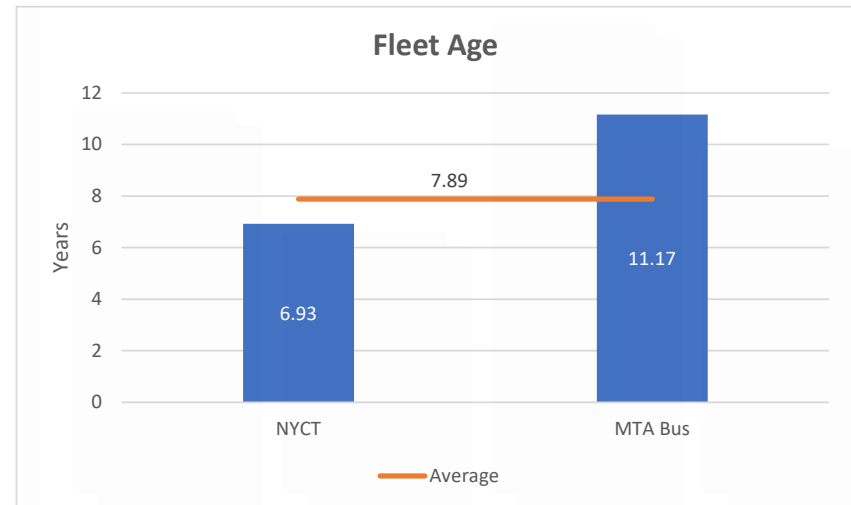
MTA New Bus Program

Daniel Cardoza
Chief Maintenance Officer (acting)
NYCT/DOB & MTA Bus Company



Current Bus Fleet and Age

	Number of Buses		
	NYCT DOB	MTA Bus	Total
Standard 40'	2,992	662	3,654
Clean-Diesel	1,652	45	1,697
CNG	405	220	625
Hybrid	935	397	1,332
Articulated 60'	1,027	141	1,168
Clean-Diesel	903	141	1,044
CNG	109	0	109
All Electric	15	0	15
Coach 45'	513	524	1,037
TOTAL	4,532	1,327	5,859



Above figures based on Spring 2022 Bus Assignment

2015-2019 Capital Program Bus Procurements

100% of 2015-2019 program bus purchases awarded

- 1,776 total buses
- 89% of buses delivered (1,575)

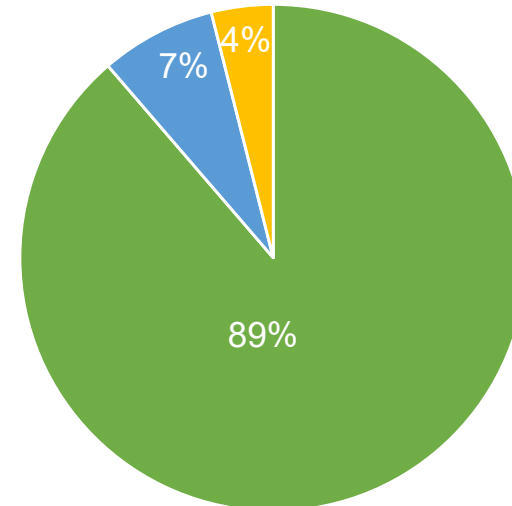
Production underway for 3 contracts

- 257 Prevost clean-diesel express (MTA Bus) – 96 remaining
- 50 Prevost clean-diesel express – 20 remaining
- 165 Nova standard hybrids – 15 remaining

Pre-production underway for 2 contracts

- 25 standard clean-diesel buses (part of 135 Nova bus order)
- 45 standard battery-electric buses (part of 60 New Flyer bus order)

2015-2019 Capital Program Bus Purchases



- Delivered Through 5-31-2022
- In Production
- In Pre-Production

2020-2024 Capital Program Bus Procurements

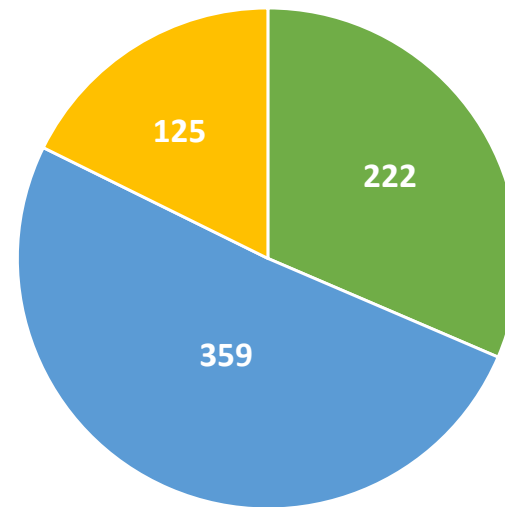
29% of 2020-2024 program bus purchases awarded

- 706 awarded of 2,435 total programmed
- 9% delivered (222)

Work ongoing for 7 awarded contracts

- 5 contracts in production
 - 23 Prevost clean-diesel express (4 of 23 operating funded) – 4 remaining
 - 126 Nova standard hybrids – 56 remaining
 - 209 Nova standard clean-diesels – 166 remaining
 - 84 New Flyer standard hybrids – complete
 - 139 New Flyer standard clean-diesels – 133 remaining
- 2 contracts in pre-production
 - 110 standard clean-diesel buses (part of 135 Nova bus order)
 - 15 standard battery-electric buses (part of 60 New Flyer bus order)

2020-2024 Capital Program
Current Contracts Status



■ Delivered ■ In Production ■ Pre-Production

2020-2024 Capital Program Bus Procurements

Active procurements

- 470 battery-electric buses
 - 355 standard
 - 25 standard (MTABC)
 - 90 articulated
- 5 Nova standard battery-electric buses
- 250 express clean-diesel buses (MTABC)
- 289 standard clean-diesel buses (MTABC)
- 245 articulated clean-diesel buses

Upcoming procurements

- 213 standard CNG buses (MTABC)
- 155 standard CNG buses
- 92 express clean-diesel buses
- 10 battery-electric test buses

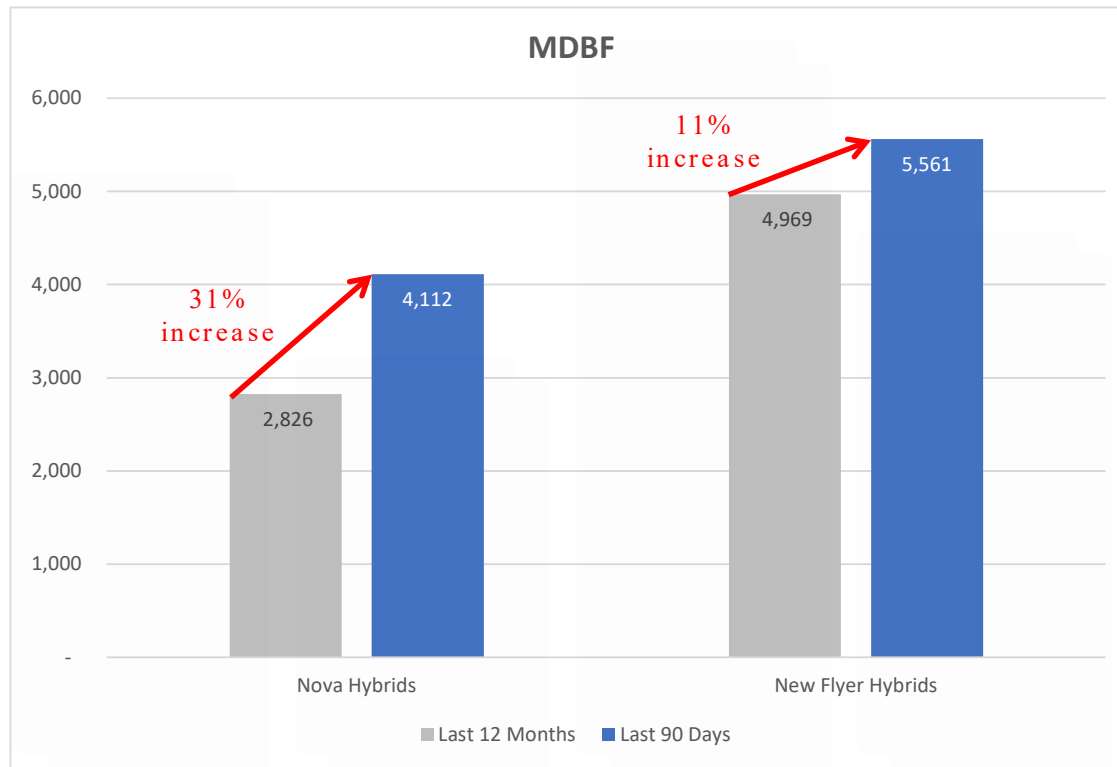
Bus Contract Status

Summary of Contract Info

Fleet	Agency	Received	Status	Completion Date	Schedule Slip	Current Budget	Current Expenditures	% Expended
110 + 84 New Flyer Standard Hybrids	NYCT	194	Completed	June 2022	25 weeks	\$170.5 M	\$143.3 M	84%
165 + 126 Nova Standard Hybrids	NYCT	220	In Production	December 2022	70 weeks	\$253.8 M	\$172.0 M	68%
257 Prevost	MTA Bus	161	In Production	December 2022	45 weeks	\$166.7 M	\$90.8 M	54%
50 +23 Prevost*	NYCT	49	In Production	December 2022	40 weeks	\$50.7 M	\$31.0 M	61%
209 Nova Standard Diesels	NYCT	43	In Production	February 2023	63 weeks	\$141.2 M	\$17.2 M	12%
139 New Flyer Standard Diesels	NYCT	6	In Production	October 2022	31 weeks	\$98.8 M	\$2.5 M	6%
Total		673						

* 4 of 23 buses Operating funded

Mean Distance Between Failures for Hybrids



Safety Measures, Amenities & Improvements

Safety measures – equipped on all new buses

- Advanced camera systems and back-up cameras
- Pedestrian Turn Warning (PTW)
- High visibility windows
- Bus operator barriers

Customer amenities – equipped on all new buses

- Automatic Passenger Counters (APC)
- Digital Information Screens (DIS)
- Accessibility improvements

Service reliability improvements

- Automatic Bus Lane Enforcement (ABLE)
- Transit Signal Priority (TSP)

APPENDIX

Recently Completed Bus Deliveries

110 + 84 New Flyer Hybrid 40-ft Standards (NYCT-DOB)

- Base contract for 110 buses awarded December 2019
- Contract Modification for 84 buses awarded March 2021
- \$170.5 million total budget (on budget)
- All 194 buses accepted
- Buses operating in Brooklyn and Manhattan



Ongoing Bus Deliveries

165 + 126 Nova Hybrid 40-ft Standards (NYCT-DOB)

- Base contract for 165 buses awarded December 2019
- Contract Modification for 126 buses awarded February 2020
- \$253.8 million budget (on budget)
- 220 buses accepted
- Complete delivery is planned for December 2022



Ongoing Bus Deliveries

257 Prevost 45-ft Coaches (MTA Bus)

- Awarded November 2019
- \$166.7 million budget (on budget)
- 161 buses accepted
- Complete delivery is planned for December 2022



Ongoing Bus Deliveries

50 + 23 Prevost 45-ft Coaches (NYCT-DOB)

- Base contract for 50 buses awarded November 2019
- Contract Modification for 23 buses awarded December 2021 (4 buses are operating funded)
- \$48.1 million budget – Capital (on budget)
- \$ 2.5 million budget – Operating (on budget)
- 49 buses accepted
- Complete delivery is planned for December 2022



Ongoing Bus Deliveries

209 Nova Clean-Diesel 40-ft Standards (NYCT-DOB)

- Awarded February 2020
- \$141.2 million budget (on budget)
- 43 buses accepted
- Complete delivery is planned for February 2023



Ongoing Bus Deliveries

139 New Flyer Clean-Diesel 40-ft Standards (NYCT-DOB)

- Awarded March 2021
- \$98.8 million budget (on budget)
- 6 buses accepted
- Complete delivery is planned for October 2022



Service Reliability Improvements

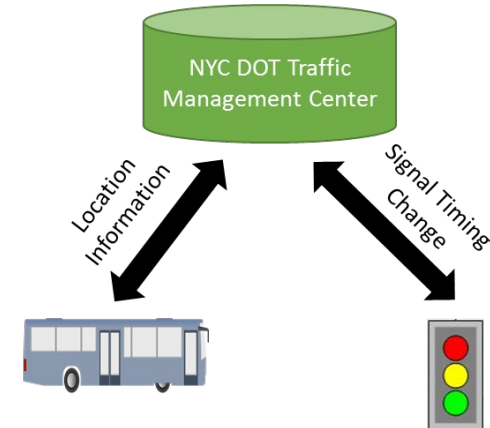
Automatic Bus Lane Enforcement (ABLE)

- Partnership with NYCDOT and NYCDOT to ticket vehicles in bus lanes
- 123 buses operating on 7 routes in Manhattan and Brooklyn
- Approximately 140,000 violations issued to date
- Contract to expand to 300 more buses to be imminently; new routes planned to launch by the end of the year



Transit Signal Priority (TSP)

- Shortens red or extends green lights to allow buses to travel without stopping
- Over 4,400 buses deployed across 110 routes (local, limited, and express)
- All new buses are TSP-ready
- 235 new intersections with TSP in 2022 to date
- Over 2,700 intersections systemwide



Safety Improvements

Advanced Camera Systems

- Improve situational awareness for incident investigations
- Over 4,700 buses currently equipped
- All new buses come equipped



Advanced Camera System

Back-Up Cameras

- Provide added visibility and safety for operators while backing up
- 1,500 buses are currently equipped
- All new buses will come equipped



Back-Up Camera

Safety Improvements

Pedestrian Turn Warning (PTW)

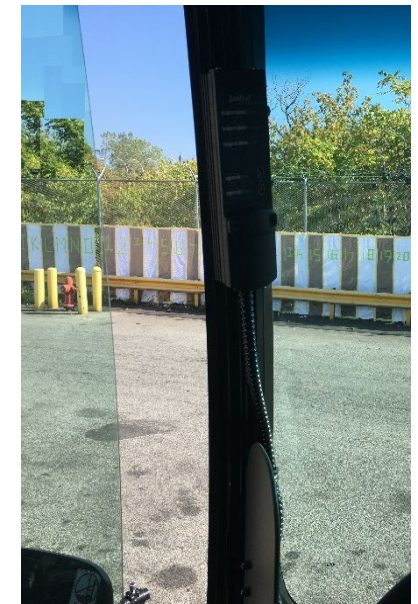
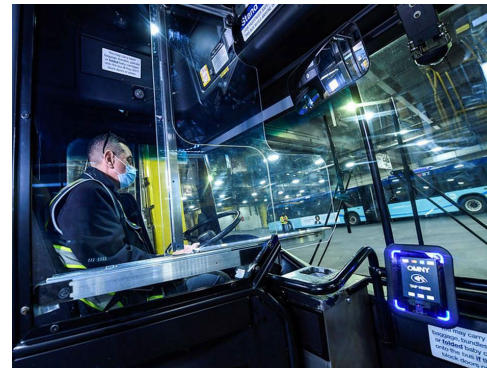
- Audible announcement outside the bus when the bus makes a turn
- Approximately 1,900 buses are currently equipped

High Visibility (Hi-Vis) Windows

- Structural changes reduce obscuration by ~50%
- Approximately 2,000 buses currently equipped

Bus Operator Barriers

- Barriers installed on 100% of the local fleet, to be followed by express buses
- All local buses have been retrofitted with a polycarbonate slider



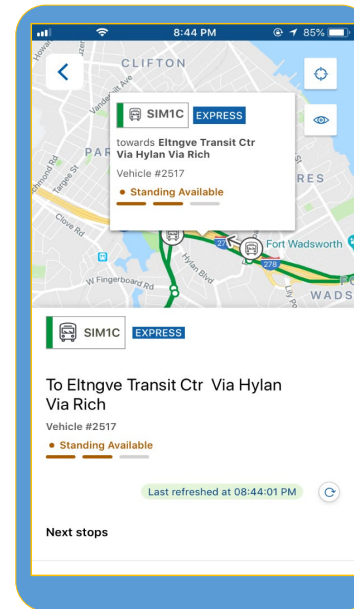
Customer Amenities

Automatic Passenger Counters (APC)

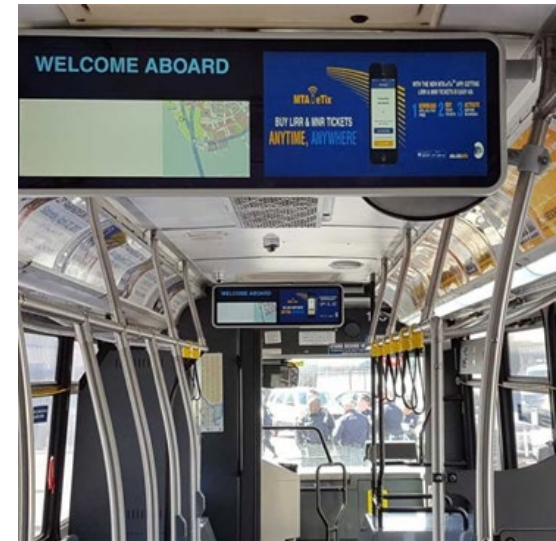
- Provides real-time information on vehicle loads
- Over 3,500 buses currently equipped
- Award of Phase 2 contract for retrofit of 790 buses expected in September 2022

Digital Information Screens (DIS)

- Provides customers with a new level of “next stop” information, as well as service alerts, and other digital content
- Contract for next phase planned for award in Q4 2022
- Over 3,300 buses currently equipped



Automatic Passenger Counter
Real Time Seat Availability



Digital Information Screens

Accessibility Enhancements

Accessibility enhancements developed with the System Wide Accessibility Group

- Additional flip-up seats for flexible seating options (e.g., walkers, strollers, etc.), and new longitudinal seats
- Wider ramp with improved visible delineation (Ramp widened from 30 inches to 32 inches)
- Wider rear door allows ease in egress with improved access to handrails (Door width increased from 30 inches to 40 inches)
- Deliveries of new buses began in March 2021 – approximately 450 buses received thus far



Wider Ramp with Stripe



Longitudinal Alternating Flip-up Seats



Wider Rear Door

Zero-Emissions Fleet Progress

10 Standard Bus Pilot

- Operated in Manhattan, Brooklyn, and Queens from 2018-2021

15 Articulated Bus Purchase

- 1st MTA electric bus purchase
- Began operation late in 2019

60 Standard Bus Purchase

- \$64.5 million contract awarded in December 2021
- Total budget is \$73.2 million
- In-service evaluation planned to begin in Q4 2022
- Complete delivery expected by Q4 2023
- Buses will be distributed across all 5 boroughs
- Charging infrastructure being installed at 5 depots (contract award with NYPA in March 2021)



Zero-Emissions Fleet Progress

5 Standard Nova Bus Purchase

- Test and evaluation fleet to increase the pool of qualified electric bus vendors
- Negotiations ongoing, award expected in 2022

Comprehensive Transition Study

- Provides fleet, facility, and power supply analysis to support planning for 100% zero-emissions transition
- Consultant contract awarded June 2022
- Phase 1 complete in 12 months from NTP

470 Bus Purchase

- Includes 90 articulated and 380 standard buses, including 25 standards for MTA Bus
- Submitted for 2022 FTA Low-No Grant funding
- Projected award in 2023
- Supporting charging infrastructure projects will install equipment at 11 depots



June 2022 CPC Independent Engineering Consultant Project Review

Bus Contracts



MTA Independent Engineering Consultant

Bus Contracts

Scope of Work

- ▣ There are eleven active bus contracts totaling 1,358 vehicles at a cost of \$1.1B.
- ▣ MTA is balancing the Battery Electric Bus (BEB) contracts and facility modifications with available funding.
 - ▣ Battery Electric Buses are currently servicing Manhattan and Queens routes.
- ▣ 60 BEB contract awarded December 2021. Deliveries are scheduled to be completed by Q4 2023.
- ▣ 380 BEB and 90 Articulated buses are expected to be awarded by Q4 2023.
- ▣ 28 bus depots are being evaluated for upgrades to the charging systems and power systems infrastructure in order to support the new Battery Electric vehicles.

Bus Contracts

Budget

Description	Award Date	Budget	Per Unit Cost
257 Diesel Express Buses	19-Nov.	\$166.7M	\$583K
50 Diesel Express Buses	19-Nov.	\$33.9M	\$591K
23 Diesel Express Buses	21-Dec.	\$16.8M	\$629K
165 Hybrid Buses	19-Dec.	\$146M	\$789K
126 Hybrid Buses	21-Feb.	\$108M	\$789K
209 Diesel Standard Buses	21-Feb.	\$141.2M	\$606K
110 Hybrid Electric Buses (2 types)	19-Dec.	\$99.3M	\$753K/782K
139 Diesel Standard Buses	20-Oct.	\$98.8M	\$635K
84 Hybrid Electric Buses	21-Mar.	\$71.2M	\$779K
60 Battery Electric Buses	21-Dec.	\$72M	\$1.0M
135 Standard Diesel Buses	21-Dec.	\$98M	\$644K

- The Department Of Buses (DOB) has eleven active vehicle contracts with a total budgeted cost of \$1.1B.
 - Since last report three contracts were awarded December 2021.
 - 60 Battery Electric Buses, budgeted for \$72M.
 - 135 Diesel Buses, budgeted for \$98M.
 - 23 Diesel Express Buses, budgeted for \$16.8M.
- An IEC cost review of the active projects finds the overall budget and Estimate At Completion have not changed since last report (June 2021).

Bus Contracts

Schedule

Description	Vendor	Previously Reported Delivery Dates	Current Delivery Dates	Delivered as of 5/31/2022	Delay (since last report)
257 Diesel Express Buses	Prevost	Feb. 2022	Dec. 2022	161	10 mo.
50 Diesel Express Buses	Prevost	Mar. 2022	Dec. 2022	30	9 mo.
23 Diesel Express Buses	Prevost	May. 2022	Jun. 2022	19	1 mo.
165 Hybrid Buses	Nova	Sept.2021	Jul. 2022	152	10 mo.
126 Hybrid Buses	Nova	Mar. 2022	Dec. 2022	70	9 mo.
209 Diesel Standard Buses	Nova	Mar. 2022	Feb. 2023	43	11 mo.
110 Hybrid Electric Buses	New Flyer	Oct. 2021	Mar. 2022	Completed	5 mo.
139 Diesel Standard Buses	New Flyer	Mar. 2022	Oct. 2022	6	7 mo.
84 Hybrid Electric Buses - Pilots	New Flyer	Jan. 2022	Apr. 2022	Completed	3 mo.
60 Battery Electric Buses	New Flyer	-	Dec. 2023	0	N/A
135 Standard Diesel Buses	Nova	-	May 2023	0	N/A

- Nine bus contracts have experienced delays of up to 11 months since our last report(see table above).
- The delivery delays are attributable to COVID-19 impacts, supply chain and technical issues. Bus manufacturers have submitted revised delivery schedules and are under review by DOB to ensure these dates are in line with their expectations while still achieving quality standards.

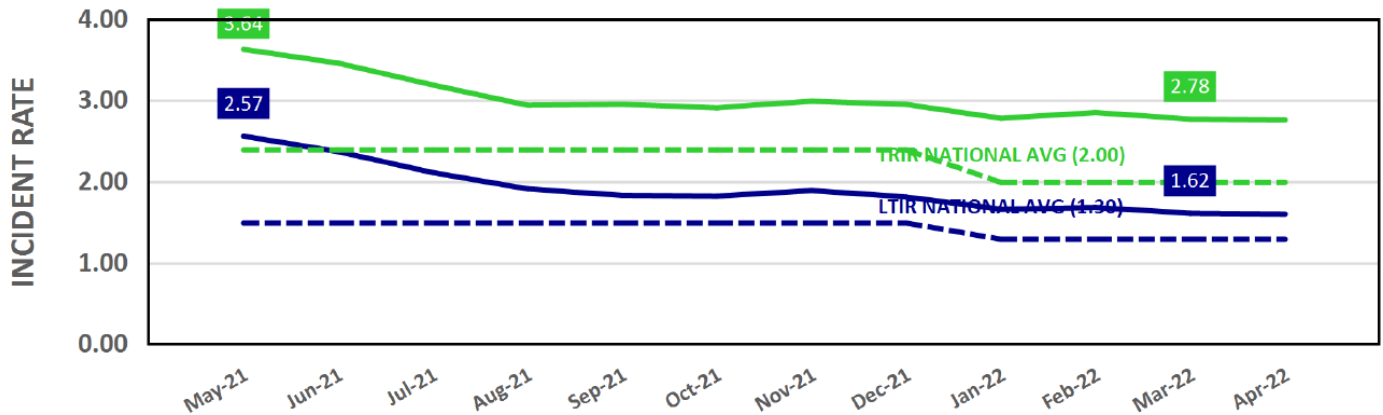
Bus Contracts

Observations

- Bus projects are experiencing delivery delays and performance issues, which involve:
 - Parts shortages due to supply chain issues.
 - Electric door integration.
 - Vendor rework backlog.
 - Battery issues.
 - Production quality.
- Manufacturers and vendors have identified root causes for technical issues and are working to develop and implement corrective actions. The DOB and manufacturers are tracking the progress in these areas to ensure all issues are satisfactorily resolved.
- The IEC concurs with the DOB strategy being used; however, risks remain and there is potential of further performance and schedule impacts as Covid continues to impact equipment manufacturer's plant performance and their ability to achieve timely bus delivery.
- In our 2020 bus report, the IEC suggested a comprehensive performance and cost analysis to properly assess the bus program. This would allow a proper assessment of the cost and value of the transition to a zero emissions fleet.
 - The DOB released an RFP with a phased implementation approach for this purpose and the award of this work is imminent.

SAFETY SUMMARY

TOTAL RECORDABLE INCIDENT RATE (TRIR) & LOST TIME INCIDENT RATE (LTIR)



SAFETY NARRATIVE

INCIDENTS (MONTH of APRIL) Four (4) Lost Time and Five (5) Recordable

- **Four (4) Lost Time Incidents:** B&T – Two (2) and Infrastructure Two (2).
- **Five (5) Recordable Incidents:** One (1) each for B&T, Infrastructure, LIRR, 3rd Track and Penn Gateway.

INVESTIGATIONS:

- **INF – LT – 5/5/2022 – C-34836** – Worker struck by falling tool resulting in 6 stitches. Received 3 days away from work.
- **INF – LT – 5/5/2022 – C-34836** – Worker's arm contacted energized 120V underground line in excavation. Did not report until 5/10/2022 when he felt ill and was taken for a medical evaluation. Received 3 days away from work.
- **INF – LT – 5/20/2022 – C-34836** – Electrician was struck by a falling angle iron that she was carrying with another electrician resulting in 5 stitches. Received 3 days away from work.
- **INF – REC – 5/18/2022 – C-34836** – Worker was performing wall demolition and was struck on head (hard hat) by falling concrete. Employee was taken to the hospital, treated, and released same day.
- **STA – LT – 5/17/2022 – E-30512** – Electrician was mounting panel box and cut base of right thumb, receiving 7 stitches. Subsequent surgery was successful to repair damaged nerves. Worker to be out approximately 4 months.
- **STA – REC – 5/9/2022 – A-37151** – Labor Foreman (Competent Person), using battery powered radial saw cut their left hand, thumb, index, and middle fingers.
- **B&T – LT – 5/24/2022 – MP PTX** – A Painter suffered a fractured and lacerated left hand when their hand was caught between aerial lift handle and bridge structure, resulting in 1 day away from work. The investigation determined an unsafe act in an aerial lift by failing to lower the lift basket prior to operation.
- **MNR - 5/29/2022 – LT - GCT Train Shed Sector 1 Project** - Painter was utilizing a 12-foot ladder to retrieve a can of paint. The ladder slid out causing him to fall. Painter was transported to hospital and required surgery for the placement of a pin. He has been released. Investigation revealed the worker did not follow the approved SWP and used unsafe work practices by extending beyond the side rails of the ladder and not footing or otherwise securing the ladder.
- **MNR - 5/3/2022 – REC – Croton Harmon Yard** – Sheet Metal worker drilling into concrete when drill bit got hung up causing fracture to wrist. Investigation revealed that the drill did not have the required safety clutch.
- **MNR - 5/6/2022 – REC – Croton Harmon Yard** – Iron Worker descending ladder off a duct bank when ladder tipped back causing him to fall backward landing on his back. Worker was placed on restricted/light duty.
- **MNR - 5/12/2022 – REC – Croton Harmon Yard** - Electrician pulling cables, overexerted and tore a bicep muscle. It is undetermined if there had been a pre-existing condition.

AUDITS: INTERNAL – 168 EXTERNAL – 519 including 415 OCIP Visits

- Top Safety Hazards found include General Safety/Housekeeping, Electrical, Supervision/Organization and Barricades/Enclosures.
- Positive Findings include Tools (Hand and Power), Fire Protection/Prevention, Ladders/Stairways, and Electrical.

SAFETY SUMMARY

TRENDS:

- There was a reduction in the reported labor hours for April and lower reported accidents, trending is expected to remain level.

ACTIONS:

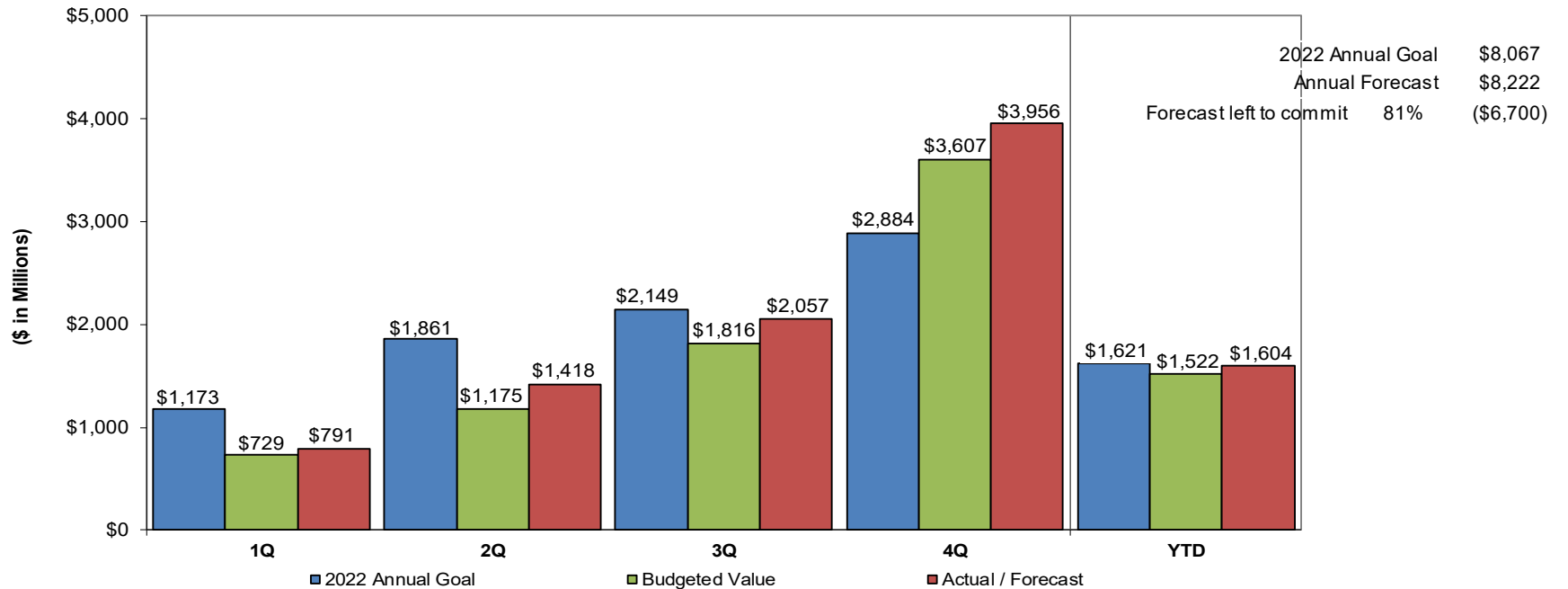
- VP of C&D Safety began on May 26.
- PMT's throughout the MTA C&D Business Units and Integrated Projects, were reminded of the need for their offices to continue being active participants in ensuring safety compliance and oversight of projects.
- C&D Safety continues to try to increase the amount of randomized Safety Inspections throughout C&D projects, however, the need for review of project Safety Submittals is creating some challenges to this effort (lack of resources).
- Chief of Safety conducted unannounced safety inspection on May 25, 2022, on contract E-34028 at the Court Street Station. Positive observations included, Elevator opening adequately barricaded, DOT Permits up to date and posted, Street laydown/storage area free of obstructions and accumulated debris and Housekeeping maintained throughout the site. Negative observations included, Contractor personnel missing training credentials; Electrical issues, Power Tool Issues, General Safety Issues, Public Protection Issues and PMC Inspector did not have the required Daily Safety Checklist available. The information was sent to the PCEO who sent it to the General Contractor for correction.

MTA Capital Program Commitments & Completions

through
May 31, 2022

Capital Projects – Commitments – May 2022

MTA-wide 2022 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.

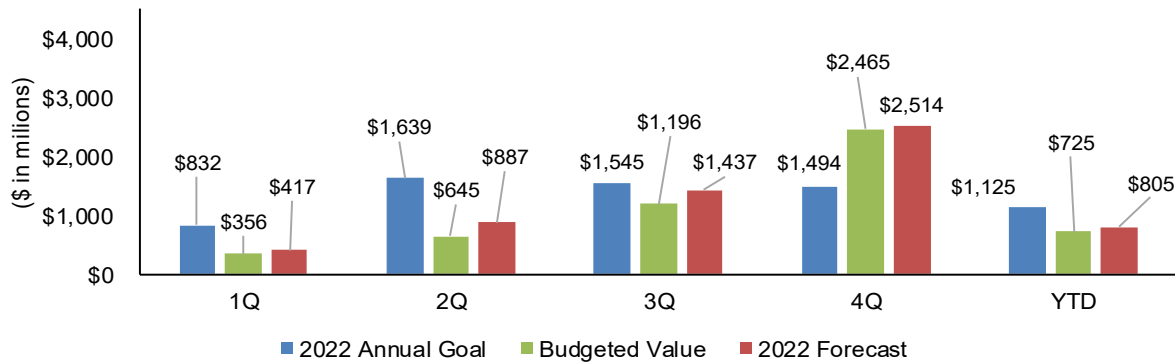
Commitments Summary

In 2022 the MTA plans to commit nearly \$8.1 billion worth of capital projects. Through May the MTA has committed \$1.6 billion versus a \$1.6 billion year-to-date goal. By year end the MTA projects committing 102% of its annual commitments goal.

NYCT/MTA Bus Capital Projects – Commitments – May 2022 – Budget Analysis and Schedule Variances

NYCT and MTA Bus Budget Analysis

Summary Chart Data	1Q	2Q	3Q	4Q	YTD
2022 Annual Goal	\$832	\$1,639	\$1,545	\$1,494	\$1,125
2022 Forecast	\$417	\$887	\$1,437	\$2,514	\$805
Budgeted Value	\$356	\$645	\$1,196	\$2,465	\$725



Q1 Schedule Variances

Project	Commitment	Goal	Forecast
---------	------------	------	----------

2 NYCT/MTA Bus Amber Commitments

Amber delays are within 2 months of goal.

Line Structures

E 180th St ROW Bundle / WPR,	Construction	Mar-22	Mar-22 (A)
Dyre	\$	175.0	\$ 167.6

The award date was initially delayed until April 2022 to address proposer concerns by removing negative rail work from the project scope as well as introducing B&T practices for structural painting into new specifications for use by NYCT. A more recent delay was connected with qualifying the proposed painting subcontractor.

Facilities

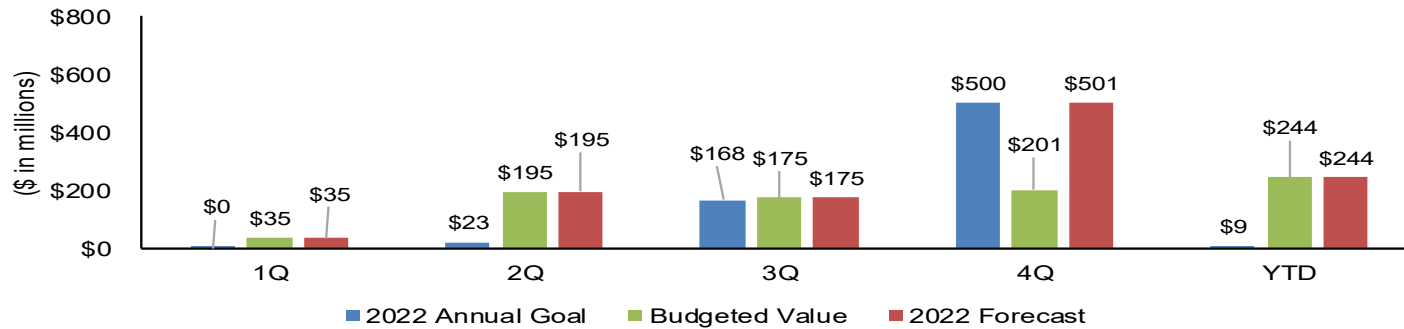
Tiffany Central Warehouse	Construction	Feb-22	Mar-22 (A)
	\$	58.4	\$ 58.4

The award was rescheduled due to additional time needed to respond to questions and comments received from the proposers, which required technical changes to the contract

LIRR Capital Projects – Commitments – May 2022 – Budget Analysis and Schedule Variances

LIRR Budget Analysis

Summary Chart Data	1Q	2Q	3Q	4Q	YTD
2022 Annual Goal	\$0	\$23	\$168	\$500	\$9
2022 Forecast	\$35	\$195	\$175	\$501	\$244
Budgeted Value	\$35	\$195	\$175	\$201	\$244



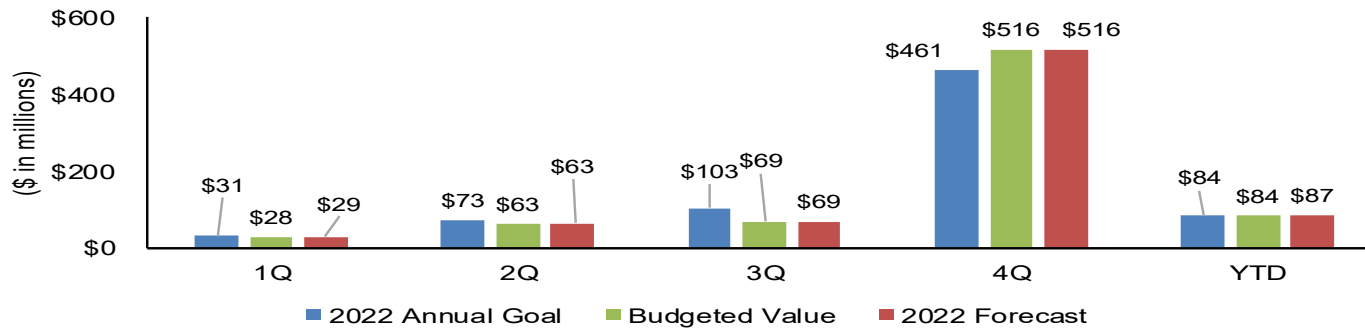
Q1 Schedule Variances

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

MNR Capital Projects – Commitments – May 2022 – Budget Analysis and Schedule Variances

MNR Budget Analysis

Summary Chart Data	1Q	2Q	3Q	4Q	YTD
2022 Annual Goal	\$31	\$73	\$103	\$461	\$84
2022 Forecast	\$29	\$63	\$69	\$516	\$87
Budgeted Value	\$28	\$63	\$69	\$516	\$84



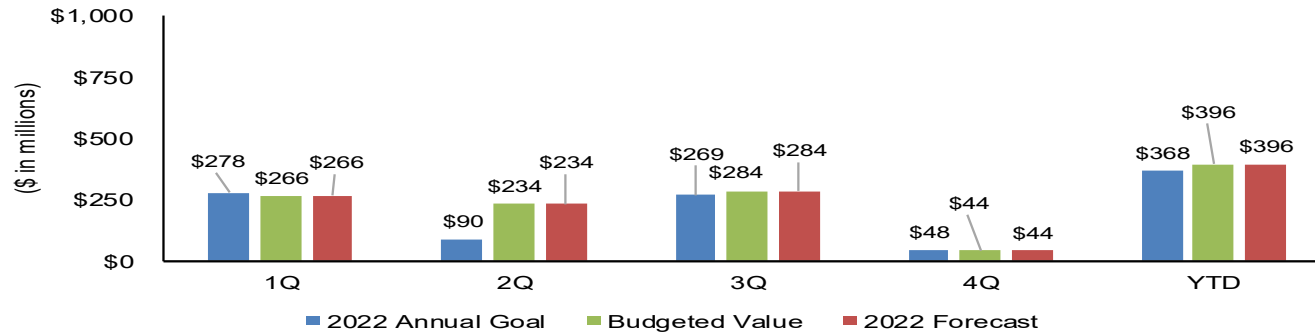
Q1 Schedule Variances

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

MTA Network Expansion Projects – Commitments – May 2022 – Budget Analysis and Schedule Variances

MTA Network Expansion Budget Analysis

Summary Chart Data	1Q	2Q	3Q	4Q	YTD
2022 Annual Goal	\$278	\$90	\$269	\$48	\$368
2022 Forecast	\$266	\$234	\$284	\$44	\$396
Budgeted Value	\$266	\$234	\$284	\$44	\$396



Q1 Schedule Variances

Project	Commitment	Goal	Actual
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1 Network Expansion Amber Commitments

Amber delays are within 2 months of goal.

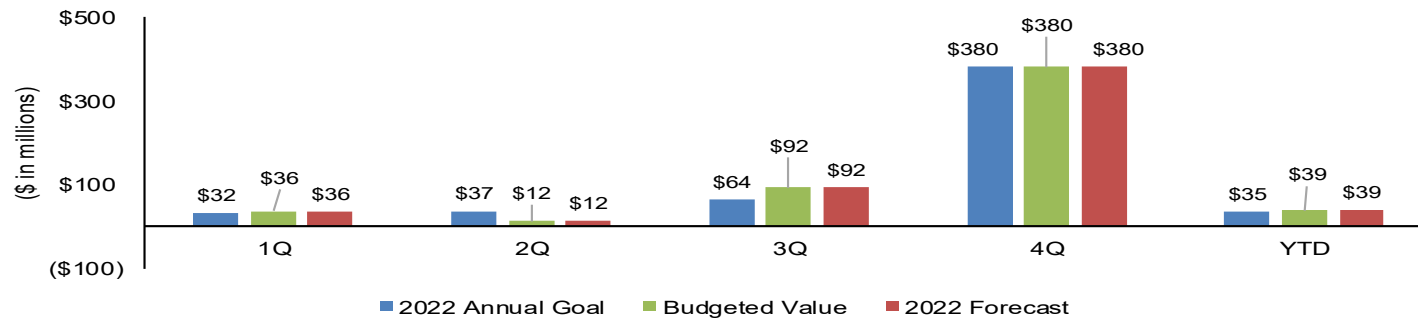
East Side Access

Interim Maintenance Contract	Construction	Mar-22	Apr-22 (A)
		\$32.6	\$20.8
<p>The award was delayed due to additional time required for final contract negotiations. A reduction in scope resulted in a reduced award value.</p>			

B&T Capital Projects – Commitments – May 2022 – Budget Analysis and Schedule Variances

B&T Budget Analysis

Summary Chart Data	1Q	2Q	3Q	4Q	YTD
2022 Annual Goal	\$32	\$37	\$64	\$380	\$35
2022 Forecast	\$36	\$12	\$92	\$380	\$39
Budgeted Value	\$36	\$12	\$92	\$380	\$39



Q1 Schedule Variances

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

Capital Projects – Completions – May 2022

Actual Goal	MTA-wide 2022 Major Completions													Post 2022
	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22		
Total	53	2	1	4	3	3	10	3	6	2	3	3	13	0
Jan-22	1	1												
Feb-22	2			1			1							
Mar-22	5			3		1				1				
Apr-22	6				2		1	1						2
May-22	3			1		2								
Jun-22	11						8		1					2
Jul-22	3	1	1					1						
Aug-22	5								5					
Sep-22	2							1		1				
Oct-22	3										3			
Nov-22	4											3	1	
Dec-22	8													8

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

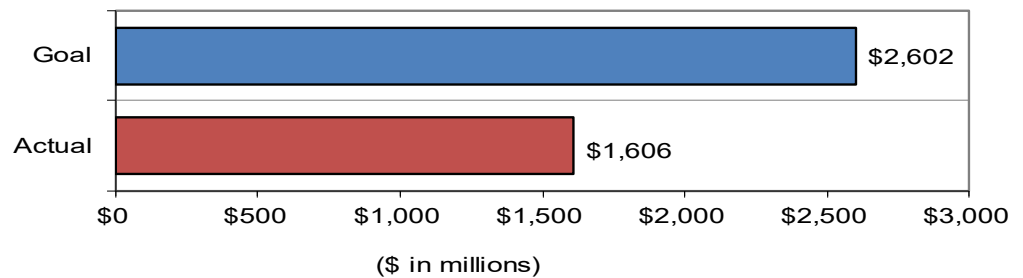
Completions Summary

In 2022 the MTA plans to complete \$9.2 billion of projects. Through May, the MTA has completed \$1.6 billion versus a \$2.6 billion year-to-date goal. The shortfall is mostly due to delays of several major completions, all are identified on the following pages. These delayed completions are all anticipated to be achieved later in the year. By year end the MTA forecasts meeting 96% its overall \$9.2 billion completions goal.

The year-end shortfall is due to the combined impact of several non “major” completion delays to 2023, eight of which totaling \$214 million are in NYCT’s Track and Switch program. In addition, the overall completion of a 209 Standard Diesel Bus order worth \$141 million has also been delayed to early 2023.

Budget Analysis

2022 Annual Goal \$9,234
 Annual Forecast \$8,854
 Forecast left to complete 82% (\$7,247)

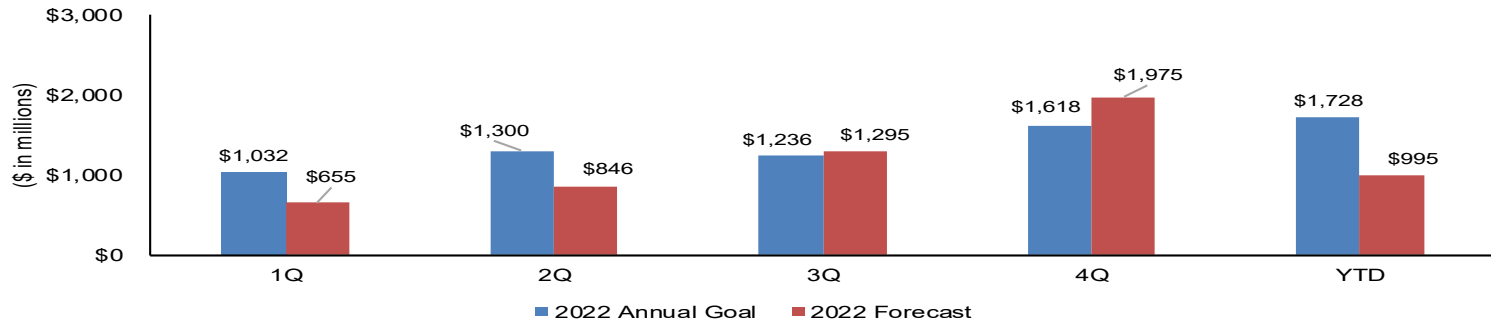


NYCT/MTA Bus Capital Projects – Completions – May 2022 – Budget Analysis and Schedule Variances

NYCT and MTA Bus Budget Analysis

Summary Chart Data	1Q	2Q	3Q	4Q	YTD
2022 Annual Goal	\$1,032	\$1,300	\$1,236	\$1,618	\$1,728
2022 Forecast	\$655	\$846	\$1,295	\$1,975	\$995

2022 Goal (Rolling Stock)	\$185	\$287	\$80	\$407	\$439
Forecast (Rolling Stock)	\$99	\$171	\$226	\$407	\$185



Schedule Variances

Project	Completion	Goal	Forecast
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2 NYCT/MTA Bus Amber Completions

Amber delays are within 2 months of goal.

Power

New Substation: Harrison Pl / Canarsie	Construction	Feb-22	Apr-22 (A)
		\$ 51.3	\$ 51.3
The schedule change reflects the delayed completion of equipment wiring and breaker energization.			

Stations

ADA: Livonia Avenue / Canarsie	Construction	Mar-22	May 22 (A)
		\$ 84.3	\$ 84.3
The completion delay reflected the additional time required to complete steel repairs and station painting.			

Project	Completion	Goal	Forecast
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4 NYCT/MTA Bus Red Completions

Red delays are beyond 2 months of goal.

Power

Power Upgrade: RCC, PCC - Ph. 2	Construction	Feb-22	Jun-22
		\$ 63.4	\$ 63.4
The completion date reflects the additional time required to review and complete punch list work, including AWO #53 (upgrade the UPS and generator monitoring system).			

New Substations at New Dorp and Clifton	Construction	Apr-22	Dec-22
		\$ 50.4	\$ 50.4
The project completion has been delayed due to final cables connection and testing.			

Signals

CBTC QBL West Ph.1 /Siemens	Construction	Jun-22	Dec-22
		\$ 214.6	\$ 214.6
Substantial completion has been delayed due to carborne hardware/firmware testing.			

NYCT/MTA Bus Capital Projects – Completions – May 2022 – Budget Analysis and Schedule Variances

Schedule Variances

Completion	Goal	Fore cast
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4 NYCT/MTA Bus Red Completions

Red delays are beyond 2 months of goal.

Buses

Hybrid-Electric Standard Buses (Nova)	Construction	Apr-22	Dec-22
	\$	253.9	\$ 253.9

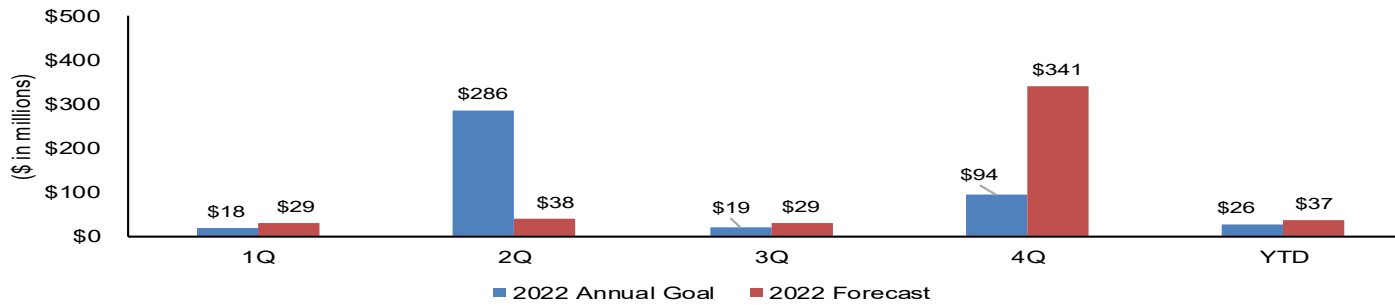
Bus delivery schedules have been delayed due to supply chain issues w ith the final bus delivery anticipated for December 2022.

LIRR Capital Projects – Completions – May 2022 – Budget Analysis and Schedule Variances

LIRR Budget Analysis

Summary Chart Data	1Q	2Q	3Q	4Q	YTD
2022 Annual Goal	\$18	\$286	\$19	\$94	\$26
2022 Forecast	\$29	\$38	\$29	\$341	\$37

2022 Goal (Rolling Stock)	\$0	\$198	\$0	\$0	\$0
Forecast (Rolling Stock)	\$0	\$0	\$0	\$198	\$0



Schedule Variances

Project	Completion	Goal	Actual
1 LIRR Red Completion			
Red delays are beyond 2 months of goal.			
<i>Rolling Stock</i>			
M9 Fleet Procurement	Fleet Purchase	Jun-22	Dec-22
		\$197.8	\$197.8

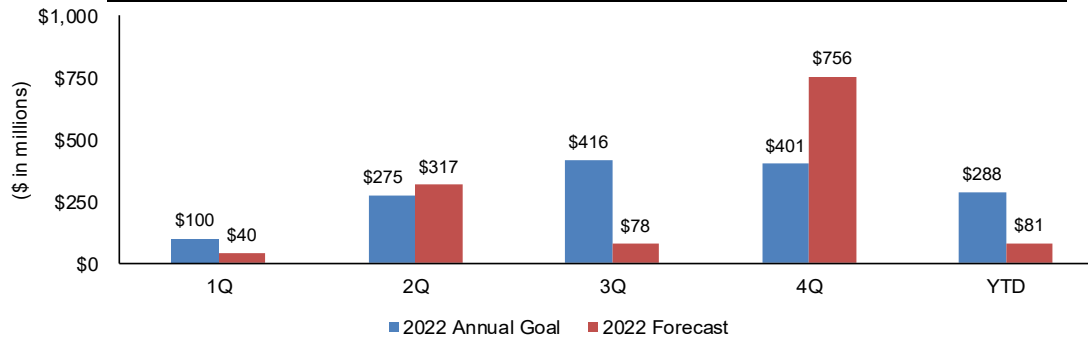
The slippage in the schedule is a result of Kawasaki correcting various workmanship issues prior to conditional acceptance by LIRR.

MNR Capital Projects – Completions – May 2022 – Budget Analysis and Schedule Variances

MNR Budget Analysis

Summary Chart Data	1Q	2Q	3Q	4Q	YTD
2022 Annual Goal	\$100	\$275	\$416	\$401	\$288
2022 Forecast	\$40	\$317	\$78	\$756	\$81

2022 Goal (Rolling Stock)	\$0	\$0	\$0	\$230	\$0
Forecast (Rolling Stock)	\$0	\$0	\$0	\$230	\$0



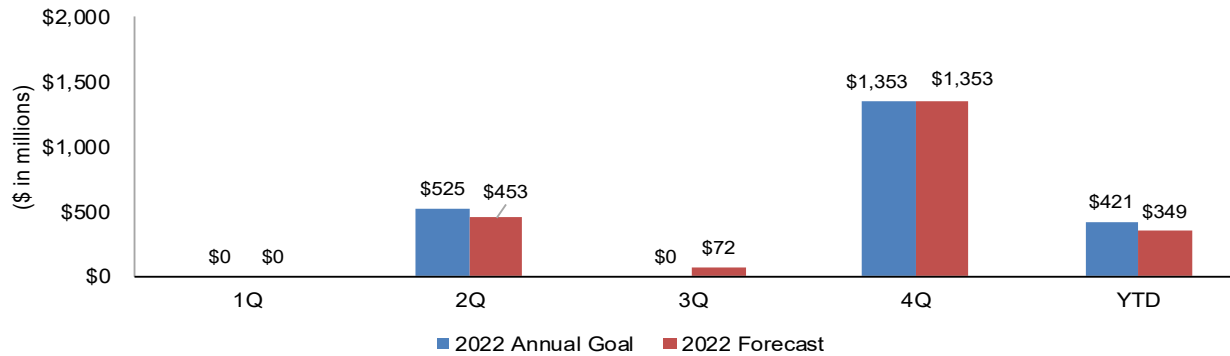
Schedule Variances

Project	Completion	Goal	Forecast	Project	Completion	Goal	Forecast																								
<p>2 Metro-North Amber Completions (1 new this month) Amber delays are within 2 months of goal.</p> <p><i>Communications</i></p> <table border="1"> <tr> <td>Network Infrastructure Replacement</td> <td>Construction</td> <td>Apr-22</td> <td>Jun-22</td> </tr> <tr> <td></td> <td></td> <td>\$44.4</td> <td>\$44.4</td> </tr> </table> <p>Before the Dense Wave Division Multiplexing (DWDM) equipment can be put online, the deficiencies identified by Mitsubishi (HVAC unit manufacturer) need to be rectified pushing this to a June 2022 completion.</p> <p><i>Stations</i></p> <table border="1"> <tr> <td>GCT/ESA Unified Trash Facility (New Item)</td> <td>Construction</td> <td>Jun-22</td> <td>Aug-22</td> </tr> <tr> <td></td> <td></td> <td>\$33.3</td> <td>\$33.3</td> </tr> </table> <p>Additional scope was added [Heat Trace Panels] which extends the completion by two months.</p>				Network Infrastructure Replacement	Construction	Apr-22	Jun-22			\$44.4	\$44.4	GCT/ESA Unified Trash Facility (New Item)	Construction	Jun-22	Aug-22			\$33.3	\$33.3	<p>1 Metro-North Red Completion Red delays are beyond 2 months of goal.</p> <p><i>Power</i></p> <table border="1"> <tr> <td>86th / 110th Substations</td> <td>Construction</td> <td>Mar-22</td> <td>Sep-22</td> </tr> <tr> <td></td> <td></td> <td>\$30.3</td> <td>\$30.3</td> </tr> </table> <p>This project is delayed due to completion of an asset study, completion of the removable panel air filter system, and equipment testing which has extended the overall project completion date to September 2022.</p>				86th / 110th Substations	Construction	Mar-22	Sep-22			\$30.3	\$30.3
Network Infrastructure Replacement	Construction	Apr-22	Jun-22																												
		\$44.4	\$44.4																												
GCT/ESA Unified Trash Facility (New Item)	Construction	Jun-22	Aug-22																												
		\$33.3	\$33.3																												
86th / 110th Substations	Construction	Mar-22	Sep-22																												
		\$30.3	\$30.3																												

MTA Network Expansion Projects – Completions – May 2022 – Budget Analysis and Schedule Variances

MTA Network Expansion Budget Analysis

Summary Chart Data	1Q	2Q	3Q	4Q	YTD
2022 Annual Goal	\$0	\$525	\$0	\$1,353	\$421
2022 Forecast	\$0	\$453	\$72	\$1,353	\$349



Schedule Variances

Project	Completion	Goal	Forecast
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1 Network Expansion Completion

Red delays are delayed more than 2 months of goal.

East Side Access

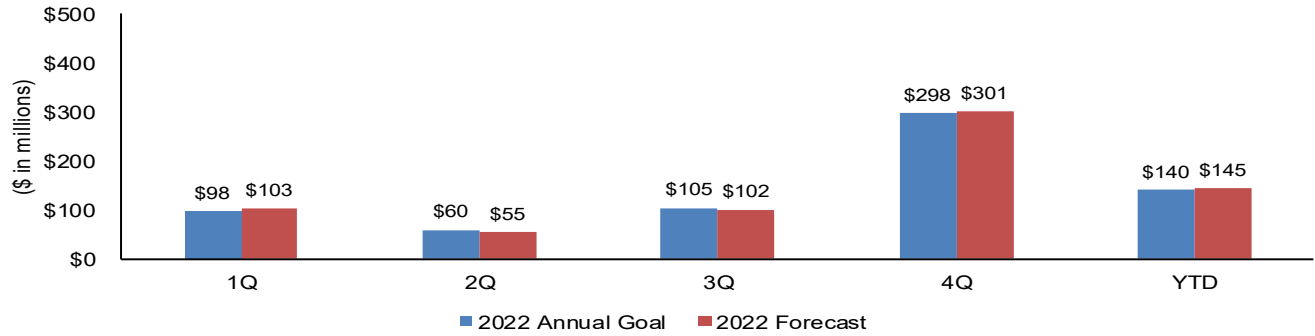
Systems Package 2 - Tunnel	Construction	Apr-22	Jul-22
Systems - CS086		\$72.0	\$72.0

Additional completion scope, including additional wiring/cabling, testing, and PTC work was added to CS086 contract which will further extend the contract's completion.

B&T Capital Projects – Completions – May 2022 – Budget Analysis and Schedule Variances

B&T Budget Analysis

Summary Chart Data	1Q	2Q	3Q	4Q	YTD
2022 Annual Goal	\$98	\$60	\$105	\$298	\$140
2022 Forecast	\$103	\$55	\$102	\$301	\$145



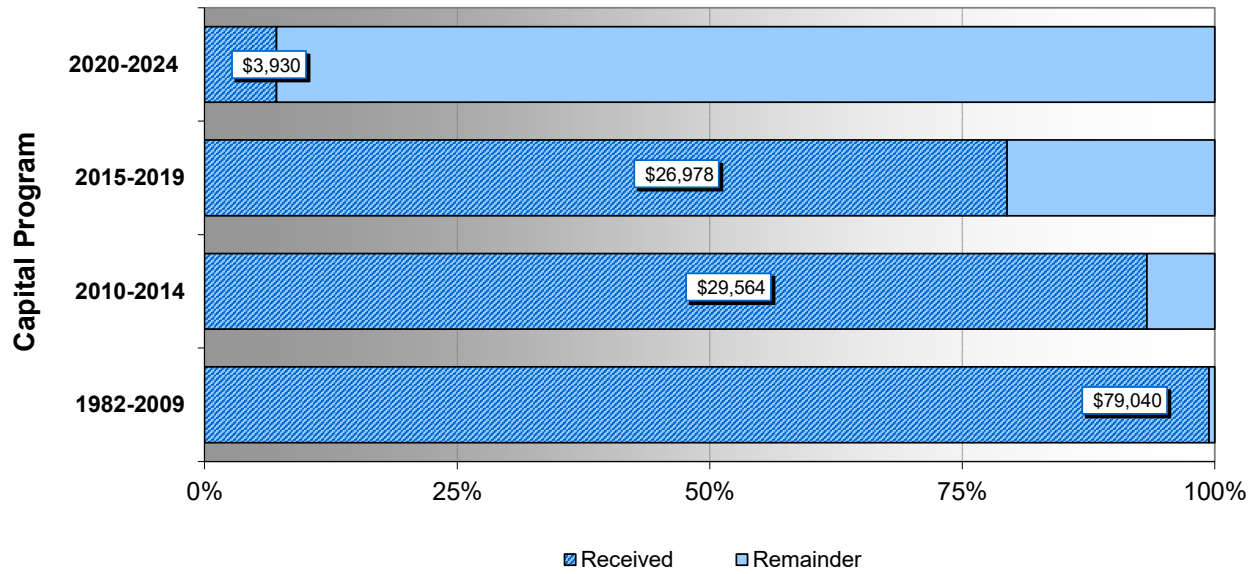
Schedule Variances

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

Status of MTA Capital Program Funding

Capital Funding (May 2022)

\$ in millions



Capital Funding Detail (May 2022)

\$ in millions

	Funding Plan		Receipts	
	Current	Thru April	This month	Received to date
2010-2014 Program				
Federal Formula, Flexible, Misc	\$5,786	\$5,857	(\$76)	\$5,781
Federal High Speed Rail	173	173	-	173
Federal New Start	1,278	1,278	-	1,278
Federal Security	89	89	-	89
Federal RRIF Loan	-	-	-	-
City Capital Funds	719	608	-	608
State Assistance	770	770	-	770
MTA Bus Federal and City Match	132	113	-	113
MTA Bonds (Payroll Mobility Tax)	11,701	10,647	-	10,647
Other (Including Operating to Capital)**	1,270	1,124	-	1,124
B&T Bonds	2,022	1,864	-	1,864
Hurricane Sandy Recovery				
<i>Insurance Proceeds/Federal Reimbursement</i>	6,697	6,697	-	6,697
<i>PAYGO</i>	171	171	-	171
<i>Sandy Recovery MTA Bonds</i>	659	225	-	225
<i>Sandy Recovery B&T Bonds</i>	230	23	-	23
Total	31,696	29,640	(76)	29,564
2015-2019 Program				
	Current	Thru April	This month	Received to date
Federal Formula, Flexible, Misc	\$6,898	\$5,528	\$132	\$5,660
Federal High Speed Rail	\$122	\$122	-	\$122
Federal Core Capacity	100	-	-	-
Federal New Start	500	-	-	-
Federal Security	18	15	-	15
State Assistance	9,091	6,179	918	7,096
City Capital Funds	2,669	2,050	2	2,052
MTA Bonds	8,398	8,175	-	8,175
Asset Sales/Leases	803	315	-	315
Pay-as-you-go (PAYGO)**	2,156	1,572	-	1,572
Other	271	68	-	68
B&T Bonds & PAYGO/Asset Sale	2,942	1,902	-	1,902
Total	33,969	25,926	1,052	26,978
2020-2024 Program				
	Current	Thru April	This month	Received to date
Capital from Central Business District Tolling	\$15,000	\$ -	\$ -	\$ -
Capital from New Revenue Sources	10,000	461	-	461
MTA Bonds and PAYGO	9,754	202	-	202
Other Contribution	520	-	-	-
Federal Formula	7,500	2,799	-	2,799
State of New York	3,000	-	-	-
City of New York	3,007	127	-	127
Federal New Start (SAS Ph2)	2,905	-	-	-
Federal Flexible	275	51	-	51
Federal Other	15	71	(56)	15
Federal Security	30	10	-	10
B&T Bonds	3,327	266	-	266
Total	55,334	3,986	(56)	3,930

First Quarter 2022 TLR Summary

- Overall, a total of 342 projects were reviewed this quarter:
 - 22 in Design
 - 9 in Post-Design to Construction
 - 311 in Construction

- Of these:
 - 242 (71%) were designated Green
 - 30 (9%) were designated Red
 - 70 (20%) triggered variances in prior quarters

Of the 30 projects that triggered a Key Performance Indicator (KPI) this quarter, 28 were for Schedule variances and 2 were for Cost. Of the 30 projects, 29 are in Construction, 1 is in Procurement and none are in Design.

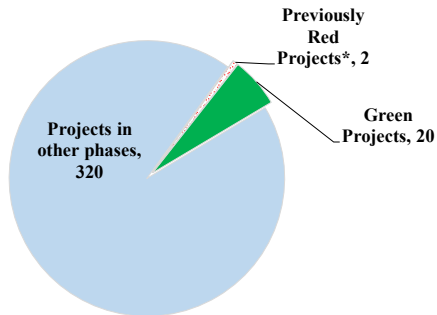
- For every designated Red project, C&D has prepared a brief variance report that summarizes the problems encountered and the corrective actions taken this quarter.

1st Quarter 2022 Traffic Light Report on the MTA Capital Program

A total of 342 Projects were Reviewed for the 1st Quarter 2022

The 342 active projects include 22 projects in Design, 9 in Post-Design to Construction Award, 311 in Construction

22 of 342 Projects in Design

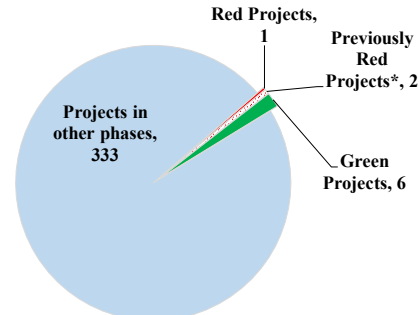


* see Terms and Definitions page

First Quarter 2022: 22 projects were reviewed in this phase with 20 designated green and 2 as previously red.

Fourth Quarter 2021: 25 projects were reviewed in this phase with 18 designated green, 6 as previously red and 1 red.

9 of 342 Projects in Post-Design to Construction Award

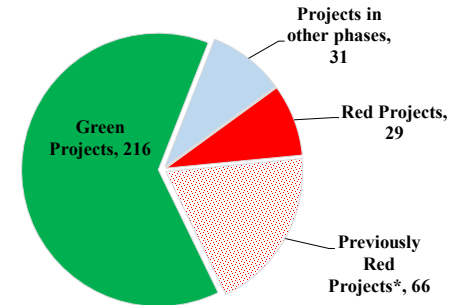


* see Terms and Definitions page

First Quarter 2022: 9 projects were reviewed in this phase with 6 designated as green, 2 previously red, and 1 red. The root cause of the red project's schedule slip was the need for additional geotechnical investigation and coordination with MTA Real Estate to obtain construction access and easement with private owners.

Fourth Quarter 2021: 4 projects were reviewed in this phase with 1 designated as green, 1 previously red, and 2 red.

311 of 342 Projects in Construction

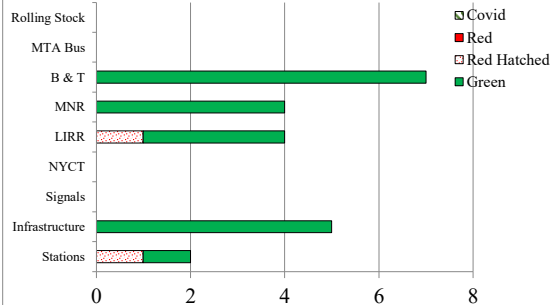


* see Terms and Definitions page

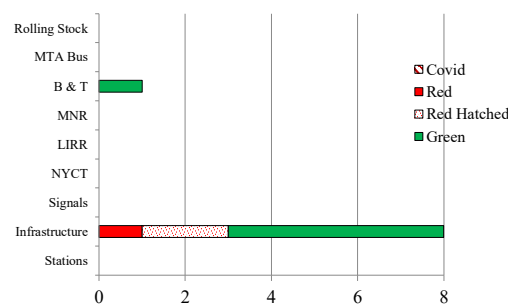
First Quarter 2022: 311 projects were reviewed in this phase with 216 designated green, 66 previously red, and 29 red. The 29 projects had root causes of contractor performance, MTA resource support, unforeseen site conditions, track access, and Con Ed coordination.

Fourth Quarter 2021: 303 projects were reviewed in this phase with 201 designated green, 53 previously red, and 49 red.

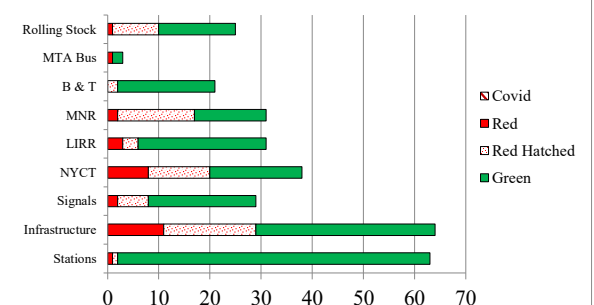
22 Projects in Design



9 Projects in Post-Design to Construction Award



311 Projects in Construction









Project Terms and Definitions 1st 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: 22

-  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 last Traffic Light Report / A project in design that has been designated as Previous Red may be returned to Green when it has been in compliance with the two performance indicators for two consecutive quarters.

Projects in Post Design to Construction Award Phase: 9

-  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 Traffic Light Report. Project may be returned to Green when it has been in compliance with two performance indicators for two consecutive quarters.


Projects in Construction: 311


-  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 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 Traffic Light Report / A project in construction that has been designated as Previous Red may be returned to Green when it has been in compliance with the two performance indicators for two consecutive quarters.




Projects impacted by Covid-19 (Temporary TLR Criteria): 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 Traffic Light reporting thresholds this quarter, however, a project issue has been directly attributed to Covid-19. The issues may include; the implementation of safety protocols, new work rules and occupancy restrictions, travel limitations, reduced personnel availability, funding delays, etc. Covid-19 is a temporary imposition on the MTA’s Capital Program and therefore a temporary TL has been developed for these projects.

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

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

 Previous Red: Previously indicated as Red Lined with no new substantial change since the last Traffic Light Report / A project in 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 Traffic Light Report.
➤ 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 Traffic Light Report. 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.

**1st 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									
Stations - ADA Accessibility Program - Projects in Construction									
68th St-Hunter College									
T7041324	ADA: 68 St-Hunter College LEX	Construction	\$145,243,219	3	1.00	■	0	■	G
T8041225	Platform Components: 68 St. - Hunter College LEX	Construction	\$6,231,878	0	1.00	■	0	■	G
ADA 149th St									
T7041315	ADA: 149 Street-Grand Concourse Complex	Construction	\$114,670,180	37	.98	■	0	■	G
T7041338	ADA: Tremont Ave BXC	Construction	\$54,345,378	37	1.00	■	0	■	G
ADA 14th St complex									
T7041251	Platform Components: 5 Locs CNR	Construction	\$3,781,498	1	.16	■	0	■	G
T70412L2	Platform Components: 14 St 6 AV	Construction	\$8,079,176	1	1.00	■	0	■	G
T7041330	ADA: 14th St 6th Av/7th Av Complex DES	Construction	\$4,499,092	0	1.04	▼	0	■	G
T7041346	ADA: 6 Av CNR	Construction	\$59,193,122	1	1.00	■	0	■	G
T7041347	ADA: 14 St 6AV	Construction	\$29,691,326	1	1.00	■	0	■	G
T7041348	ADA: 14 St BW7	Construction	\$55,195,340	1	1.00	■	0	■	G
T8041221	Station Ventilators CNR	Construction	\$2,054,470	1	1.00	■	0	■	G
T8041229	Platform Components: 6 Avenue / Canarsie	Construction	\$32,806,122	1	1.00	■	0	■	G
T8041230	Platform Components: 14th Street / 6 Ave	Construction	\$5,042,631	1	1.00	■	0	■	G
T8041304	ADA: 6 Ave / Canarsie	Construction	\$33,373,926	1	1.00	■	0	■	G
T8041305	ADA: 14 St / Broadway/ 7th Ave	Construction	\$29,873,986	1	1.00	■	0	■	G
T8070312	LSCRP 8th Ave CNR	Construction	\$34,975,533	1	1.00	■	0	■	G
ADA Package 2									
T7041213	Renewal: Woodhaven Blvd JAM	Construction	\$56,874,701	0	1.00	■	0	■	G
T7041314	ADA: Court Square XTN (Elevator Phase)	Construction	\$24,576,717	0	1.02	■	0	■	G

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Construction & Development									
Stations									
Stations - ADA Accessibility Program - Projects in Construction									
ADA Package 2 - cont'd									
T7041316	ADA: Woodhaven Boulevard JAM	Construction	\$39,075,927	0	1.00	■	0	■	G
T7041327	ADA & Station Improvements: Westchester Sq PEL	Construction	\$90,053,940	0	1.00	■	0	■	G
T7041335	ADA: Queensboro Plaza FLS	Construction	\$76,823,764	0	1.00	■	0	■	G
T8040708	Replace 5 Elevators at 2 Locations JAM	Construction	\$40,858,814	0	1.00	■	0	■	G
T8041232	Station Renewal: Woodhaven Boulevard/PEL	Construction	\$24,396,207	0	1.00	■	0	■	G
T8041329	ADA: Woodhaven Blvd/JAM	Construction	\$27,496,852	0	1.00	■	0	■	G
T8041330	ADA & Station Improvements: Westchester Sq/PEL	Construction	\$36,525,711	0	1.00	■	0	■	G
T8041345	ADA: 181 St 8AV	Construction	\$48,549,533	0	.99	■	0	■	G
ADA Package A									
S8070108	ADA: New Dorp SIR	Construction	\$36,662,644	38	1.00	■	0	■	G
S8070110	Components: New Dorp SIR	Construction	\$1,398,318	38	1.00	■	0	■	G
T8041215	Design: Station Components DES	Construction	\$4,134,927	34	1.02	▼	0	■	G
T8041231	Components: Metropolitan Ave XTN	Construction	\$3,059,485	38	1.00	■	0	■	G
T8041303	ADA: Dyckman St (NB) BW7	Construction	\$21,409,058	38	1.00	■	0	■	G
T8041317	ADA: Grand St CNR	Construction	\$28,729,727	38	1.00	■	0	■	G
T8041319	ADA: 7th Ave CUL	Construction	\$45,089,509	38	1.00	▲	0	■	G
T8041327	ADA: Lorimer St CNR	Construction	\$64,361,247	38	1.00	■	0	■	G
T8041328	ADA: Metropolitan Ave XTN	Construction	\$49,572,458	38	1.00	■	0	■	G
T8041332	ADA: East 149th St PEL	Construction	\$40,872,739	38	1.00	■	0	■	G
T8041337	ADA: Beach 67th St FAR	Construction	\$44,055,778	38	1.00	■	0	■	G

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Construction & Development									
Stations									
Stations - ADA Accessibility Program - Projects in Construction - cont'd									
Times Square Shuttle									
T7041307	ADA: Times Square Complex, Ph 3 - Shuttle	Construction	\$219,796,378	97	1.01	■	0	■	G
T7041404	Reconstruction: Times Sq Complex, Ph3 - Shuttle	Construction	\$29,816,315	97	.00	■	0	■	G
T7050286	2018 Mainline Track Repl: Times Square Shuttle	Construction	\$5,684,280	98	1.00	■	0	■	G
All Other Stations Projects									
T7041331	ADA: Livonia Ave CNR	Construction	\$87,290,194	85	1.00	■	1	▲	G
T7041332	ADA: 170 Street JER	Construction	\$61,939,167	100	1.00	■	0	■	G
All Other Stations Projects									
Bundle BL01-1893									
T7040708	Replace 2 Escalators: Pelham Pkwy WPR	Construction	\$15,770,603	27	1.00	■	0	■	G
T7040709	Replace 6 Escalators / Various	Construction	\$46,244,598	30	1.00	■	0	■	G
Bundle BL01-5300									
T6040706	Replace 2 Hydraulic Elevators at GCT LEX	Construction	\$17,213,187	40	1.00	▼	-7	▼	G
T7040714	Replace 1 Hydraulic Elevator: Grand Central FLS	Construction	\$6,861,795	40	1.00	▲	0	■	G
Circulation Enhancements - Flushing-Main St									
T7041422	Station Capacity Enhancements: Main St FLS	Construction	\$54,568,753	3	1.00	■	0	■	G
T8041213	Station Components: Main St / FLS	Construction	\$4,088,088	3	1.00	■	0	■	G
Escalator Replacement Bundle									
T7040707	Replace 6 Escalators / Various (Bx/M)	Construction	\$47,595,038	5	1.00	■	0	■	G
T7040707	Replace 1 Escalator at Intervale / WPR	Construction	\$7,484,500	5	1.00	■	0	■	G
T7040713	Replace 5 Escalators / Various (Bk/M)	Construction	\$33,788,248	5	1.00	■	0	■	G

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Construction & Development									
Stations									
All Other Stations Projects - cont'd									
Grand Central Bundle									
T7041402	Access Improvements: Grand Central, Phase 2	Construction	\$23,849,317	4	1.00	■	0	■	G
T8040713	Replace 8 Escalators: Grand Central - 42 St / FLS	Construction	\$90,857,244	2	1.00	■	0	■	G
T8041226	Station Ventilators: Grand Central / FLS	Construction	\$18,465,825	4	1.00	■	0	■	G
All Other Stations Projects									
ET040339	Sandy Mitigation: 138 St / JER	Construction	\$8,091,329	46	.92	■	0	■	G
ET060332	Sandy Resiliency: 3 Pump Rooms (53rd St Tube)	Construction	\$27,076,354	25	1.64	▲	0	■	R
T7040701	Replace 11 Hydraulic Elevators / Various	Construction	\$73,783,585	67	1.00	■	0	■	G
T7040702	Replace 12 Traction Elevators BW7	Construction	\$109,733,900	95	1.00	■	-2	▼	G
T7040703	Replace 8 Traction Elevators / Various	Construction	\$56,071,874	40	1.01	▼	0	■	G
T7160729	RTO Facility Repair: 3 Avenue-138 Street PEL	Construction	\$15,262,920	94	1.00	■	3	▲	R
T8040711	4 Escalators at 2 Locs Dekalb 4Av & 181 St BXC	Construction	\$51,134,817	5	1.00	■	0	■	G
T8041210	Water Condition Remedy: Various Locations	Construction	\$27,535,370	0	1.00	■	0	■	G
T8160711	EFR Consolidation: 2 Ave / 6Ave	Construction	\$17,916,657	0	1.00	■	0	■	G
T7041322	ADA: 95 St 4AV	Design	\$48,608,009	40	1.38	■	0	■	R
T8041209	Livonia Av-Junius St Station Connector	Design	\$41,118,651	90	1.07	▲	0	■	G
Infrastructure									
207th St Yard Rehab									
ET100210	Power Cable Replacement- 207th Street Yard	Construction	\$42,710,741	99	1.00	■	0	■	R
ET100218	Sandy Repairs: 207th St Yard Signals	Construction	\$298,232,916	56	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	94	.62	■	0	■	G

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Construction & Development									
Infrastructure									
207th St Yard Rehab - cont'd									
ET100310	Long Term Perimeter Protection: 207th St Yard	Construction	\$171,213,153	62	1.03	■	0	■	G
ET100312	Sandy Mitigation: 207th Street Yard Portal	Construction	\$54,881,539	76	2.02	■	0	■	G
Bus Radio System									
T6120403	Replace Bus Radio System	Construction	\$219,935,125	66	.98	■	6	▲	R
U6030226	Bus Radio System	Construction	\$32,057,283	72	1.00	▼	6	▲	R
U7030211	Bus Radio System - MTA Bus Share	Construction	\$39,516,593	66	1.00	■	6	▲	R
Central Substation Bundle									
T7090203	Substation Rnwl & New Rectifier: Centr SS 6AV	Construction	\$43,260,960	84	.99	■	0	■	G
T8090405	Rebuild Ducts: Central Platform	Construction	\$7,348,335	94	1.00	■	0	■	G
Clifton Shop									
S7070111	Relocate HQ to Clifton Shop	Construction	\$9,127,751	92	.99	■	4	▲	R
ES070211	Flood Repairs- Clifton Shop (Long-Term)	Construction	\$34,657,710	92	.99	■	4	▲	R
ES070302	SIR Mitigation: Clifton Shop / Yard	Construction	\$161,348,190	92	.99	■	4	▲	R
Clifton Shop Track and Switch									
S7070113	SIR Clifton Yard Track and Switch Replacement	Construction	\$16,916,973	74	.97	■	0	■	G
S8070109	Track and Switch Rehab: SIR Mainline (Addnl Work)	Construction	\$34,357,067	31	.97	■	0	■	G
S8070109	Track and Switch Rehab: SIR Mainline (Addnl Work)	Construction	\$15,113,650	31	.97	■	0	■	G
Component Repairs - Concourse Line									
T8070318	LSCRCP 161 -192 Sts BXC	Construction	\$127,988,147	0	1.00	■	-9	▼	G
T8070319	Vents 161 - 192 Sts BXC	Construction	\$11,715,519	0	1.00	■	-9	▼	G
T8080640	Antenna Cable Concourse Line (IND)	Construction	\$9,758,422	0	1.00	■	-9	▼	G

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Construction & Development									
Infrastructure									
Coney Island Yard Flood Mitigation									
ET100211	Power Cable/Comm. Equipt. Repl- Coney Island Yard	Construction	\$163,512,094	80	.99	■	0	■	(R)
ET100307	Coney Island Yd: Long Term Perimeter Protection	Construction	\$339,611,552	80	.97	■	0	■	(R)
New Substations at New Dorp and Clifton Stations									
S7070106	New Power Substation: New Dorp	Construction	\$24,976,307	96	1.02	■	8	▲	(R)
S7070107	New Power Substation: Clifton	Construction	\$30,646,073	96	1.00	■	8	▲	(R)
Rockaway Line Flood Protection									
ET070310	Rockaway ROW Debris Shielding	Post Des to Const Awd	\$30,884,842	30	1.71	▼	0	■	(G)
ET070311	Sandy Mit: New Crossover at Beach 105th St. / RKY	Post Des to Const Awd	\$85,541,632	30	1.44	▼	0	■	(G)
ET070312	Rockaway Line Long Term Protection	Post Des to Const Awd	\$34,552,879	30	12.54	▼	0	■	(G)
ET070313	Rockaway Park Yard Compressor Room (ROW)	Post Des to Const Awd	\$16,505,037	30	2.12	■	0	■	(G)
Steinway Tunnel Portal Resiliency									
ET060338	Sandy Resiliency: 2 Pump Rooms (Steinway Tube)	Post Des to Const Awd	\$15,000,000	0	1.00	▼	3	▲	(R)
ET070308	Sandy Mitigation: Steinway Portal	Post Des to Const Awd	\$24,820,042	100	1.24	▼	3	▲	(R)
Structural Component Repairs - Jamaica Line									
T8050241	Jamaica Direct Fixation	Construction	\$57,617,884	0	1.00	■	0	■	(G)
T8050242	63rd Street Direct Fixation	Construction	\$107,548,150	0	1.00	■	0	■	(G)
T8090213	63 St 84C Contact Rail	Construction	\$9,545,612	0	1.00	■	0	■	(G)
Structural Repairs - Eastern Parkway Line									
T7070323	LSCR: Brooklyn (EPK)	Construction	\$82,731,099	72	.99	■	0	■	(G)
T8070311	Plenum Plate Demo & Struct. Rehab EPK	Construction	\$497,251	80	1.00	■	0	■	(G)
Tiffany Warehouse Mitigation									
ET160312	Sandy Mitigation: Tiffany Central Warehouse	Construction	\$25,049,789	0	1.00	■	0	■	(G)

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Construction & Development									
Infrastructure									
Tiffany Warehouse Mitigation - cont'd									
T7160723	Tiffany Warehouse Exterior Wall Structural Repair	Construction	\$18,652,541	0	1.00	▲	0	■	G
T7160727	Roof Replacement: Tiffany Central Warehouse	Construction	\$18,881,566	0	1.02	■	0	■	G
All Other Infrastructure Projects									
ET040317	Upgrade Emergency Booth Comm System (EBCS)	Construction	\$77,368,275	75	.00	▼	0	■	G
ET070209	Sandy Repairs: Rockaway Line Wrap Up	Construction	\$48,978,971	11	.98	■	0	■	G
ET090304	Mitigation: Montague Substations - Various Locs	Construction	\$9,039,422	52	.88	■	6	▲	R
ET100314	Sandy Mitigation: 207th Street Sewers	Construction	\$142,889,091	30	1.00	■	0	■	R
T6100454	207th St. OH Shop: Boiler Upgrades & Site Remed	Construction	\$13,357,856	90	1.04	■	3	▲	R
T6160611	Replace Fire Alarm Systems at 13 Locations	Construction	\$27,529,906	88	.99	■	0	■	G
T6160717	Livingston Plaza Repairs	Construction	\$26,420,913	99	.53	■	4	▲	R
T7060503	Replace Supervisory Vent Controls - Var Locs	Construction	\$30,122,072	60	1.00	■	0	■	R
T7060506	Rehab Forsyth St Vent Plant	Construction	\$93,548,145	44	1.03	■	0	■	R
T7070303	Struct Rehab: Livonia Yard Overpass & Retain Wall	Construction	\$27,083,332	100	1.00	■	0	■	R
T7070316	Overcoat: Broadway - End of Line MYR	Construction	\$58,258,534	55	.99	■	0	■	G
T7080602	Upgrade Async Network to SONET, Rings A and C	Construction	\$30,961,649	98	1.00	■	0	■	R
T7080603	PBX Upgrade	Construction	\$48,564,396	93	1.17	■	0	■	R
T7080651	Help Point: Upgrades and CAI Removals	Construction	\$21,050,860	100	1.04	■	-3	▼	R
T7090202	Substation Renewal: Av Z CUL	Construction	\$32,172,288	91	.99	■	-1	▼	R
T7090206	Replace HT Switchgear - Various Locs	Construction	\$30,476,773	90	1.00	■	0	■	R
T7090223	New Substation: Harrison PI CNR	Construction	\$52,773,517	99	.89	■	2	▲	R
T7100402	207th St Maint & OH Shop Roof & Component Repl	Construction	\$59,951,102	69	1.00	■	0	■	R

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Construction & Development									
Infrastructure									
All Other Infrastructure Projects - cont'd									
T7100403	DCE Shop Components Ph 2: 239 St, Concourse, ENY	Construction	\$49,322,515	97	1.00	■	5	▲	R
T7160716	RCC and PCC Power Upgrade	Construction	\$63,370,962	98	1.00	■	4	▲	R
T8060505	Rehab Deep Wells & Control Upgrade Nostrand Line	Construction	\$22,695,247	8	1.01	■	0	■	G
T8060506	Rehab Fan Plant Damper Systems - 7 Locations	Construction	\$33,771,531	25	1.00	■	0	■	G
T8060514	Fan Plant SCADA Head-End Upgrade	Construction	\$18,757,610	3	1.00	■	0	■	G
T8060517	Deep Wells Back-flushing - Lenox Line	Construction	\$12,112,658	3	1.00	■	0	■	G
T8080605	Antenna Cable Replacement: Various Locations	Construction	\$24,899,548	15	1.36	■	8	▲	G
T8080615	Liftnet Transition to Ethernet; Ph. 2 - Package 1	Construction	\$8,903,483	12	1.00	■	0	■	G
T8080641	Asych Fiber Optic Network Ring F	Construction	\$27,039,952	7	1.00	■	0	■	G
T8080642	PA/CIS Electronics Replacement - Canarsie Line	Construction	\$7,544,786	56	1.00	■	0	■	R
T8090207	Negative Cables:4th Ave Line - 36St to Pacific Ph3	Construction	\$56,241,442	0	1.31	▲	0	■	G
T8100412	Livonia Maint Shop Phase I	Construction	\$21,955,333	10	1.00	■	0	■	G
T8160705	Livingston Plz Elec, Mechanical, Generator Phase B	Construction	\$69,028,494	7	1.00	■	0	■	G
T8160706	EMD Facility: Hoyt-Schermerhorn FUL	Construction	\$14,001,893	48	1.00	■	5	▲	R
ET060327	Existing Pump Room Enhancements	Design	\$22,636,885	3	.56	■	0	■	G
ET090244	Traction Power Repairs: Various Locations	Design	\$137,300,000	5	1.00	■	0	■	G
ET100315	Sandy Mitigation: Protection of Additional Yards	Design	\$77,715,821	16	1.00	■	0	■	G
ET100315	Sandy Mitigation: Protection of Additional Yards	Design	\$17,165,058	16	1.00	■	0	■	G
T8080603	Fiber Optic Cable Replacement: Various Locations	Design	\$42,475,134	77	1.00	■	0	■	G
ET090307	Hardening of Substations at 24 Locations	Post Des to Const Awd	\$98,063,572	30	.99	■	3	▲	R
ET090310	Sandy Mitigation: Back-up Power Control Center	Post Des to Const Awd	\$14,184,567	75	.84	■	0	■	G

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Construction & Development									
Signals / Train Controls									
200th and 207th Street Interlocking Repairs									
ET050217	Sandy Repairs: ML Track 200-207 St/8AVE	Construction	\$46,785,995	7	1.00	■	0	■	G
ET050218	Sandy Repairs: ML Switches 200-207 St/8AVE	Construction	\$33,765,637	7	1.00	■	0	■	G
ET080207	Signals: 200 St - 207 St / 8th Ave	Construction	\$70,633,973	7	1.01	■	0	■	G
CBTC - 8th Ave Line									
T7080304	CBTC: 8AV (59 St - High St)	Construction	\$219,578,312	43	1.00	■	0	■	G
T7080335	Interlocking Modernization: 30 St & 42nd St / 8AV	Construction	\$258,886,569	57	1.00	■	0	■	G
T7080344	2019 M/L Switch Repl: 10 Switches CBTC 8AV	Construction	\$27,563,382	57	1.00	■	0	■	G
T8080313	CBTC: Flushing Line Equipment Removals	Construction	\$19,813,812	97	1.00	■	1	▲	R
CBTC - Culver Line									
T7080307	Interlocking Modernization: Ditmas CUL	Construction	\$132,474,754	78	1.01	■	0	■	R
T7080332	CBTC: CUL (Church Av to W8 St)	Construction	\$128,321,374	78	1.03	▲	0	■	R
T7080333	Interlocking Modernization: Ave X CUL	Construction	\$181,490,640	78	.96	▼	0	■	R
T7080343	2018 M/L Switch Repl: 7 Switches CBTC CUL	Construction	\$39,929,364	78	1.01	■	0	■	R
CBTC - QBL East									
T8050321	Queens Blvd East Track/Switch	Construction	\$22,147,497	2	1.00	■	0	■	G
T8080317	SigMod: Queens Blvd and East 3 Interl. - Furnish	Construction	\$98,808,870	2	1.00	■	0	■	G
T8080318	SigMod: Queens Blvd and East 3 Interl. - Install	Construction	\$409,580,018	2	1.00	■	0	■	G
CBTC - QBL West									
T50803QB	CBTC QBL Phase 1	Construction	\$80,085,069	88	1.37	■	6	▲	R
T6080319	CBTC Queens Blvd Ln West Ph 1	Construction	\$115,225,996	88	.97	■	6	▲	R
All Other Signals / Train Controls Projects									
T6080661	ISIM-B Module 3A RCC Build Out	Construction	\$25,405,019	83	1.00	■	2	▲	R

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Construction & Development									
Signals / Train Controls									
All Other Signals / Train Controls Projects - cont'd									
T7080301	CBTC: QBL West Ph2 (50 St - Union Tpke)	Construction	\$471,239,306	88	1.11	■	-2	▼	G
T7080324	Code Cable Replacement BW7	Construction	\$41,314,985	54	1.00	■	2	▲	G
T7080326	Life Cycle Replacement of Code Systems	Construction	\$51,725,537	61	1.00	■	0	■	G
T7080327	Life Cycle Mod - Speed Enforcement Systems	Construction	\$65,429,183	31	1.00	■	0	■	G
T7080342	CBTC: 8AV Equip 316 R179 Cars (73 units)	Construction	\$36,910,323	15	1.00	■	0	■	G
T7080342	CBTC: 8AV Equip 460 R211 Cars (92 units)	Construction	\$36,654,101	20	1.00	■	0	■	G
T7080342	CBTC: 8AV Equip 112 R160 Cars (26 units)	Construction	\$11,900,000	38	1.00	■	0	■	G
T7080349	Signal Quality Enhancements (SAP)	Construction	\$18,195,000	73	1.00	■	0	■	G
T7080614	ISIM-B Module 3: Rail Traffic Systems	Construction	\$82,947,705	66	1.00	■	0	■	G
T7080614	ISIM-B Module 3: Rail Traffic Systems	Construction	\$8,749,000	66	1.00	■	-3	▼	G
T8080314	Single Chip UWB Interoperability (Proof of Concept)	Construction	\$21,731,996	55	1.00	■	0	■	G
T8080314	Single Chip UWB Interoperability (Proof of Concept)	Construction	\$13,415,259	45	1.00	■	0	■	G
New York City Transit									
ET160310	Sandy Mitigation: Consolidated Revenue Facility	Construction	\$11,366,424	18	1.00	■	0	■	G
T6040401	MetroCard-Electronic Components Replacement	Construction	\$16,340,035	89	1.00	■	2	▲	R
T6120323	Flatbush & Ulmer Park: Window Replacement	Construction	\$9,312,141	4	1.00	■	0	■	G
T7120306	Generator: Yukon Depot	Construction	\$11,816,772	61	1.00	■	5	▲	R
T7120307	Roof, Office, HVAC: Fresh Pond Depot	Construction	\$15,166,684	42	1.00	■	2	▲	G
T7120321	Artic Modification Windows/Façade: ENY Depot	Construction	\$18,061,652	45	1.00	■	0	■	G
T8040404	Wide Turnstiles: Procurement/Installation	Construction	\$25,018,512	10	1.00	■	0	■	G
T8041223	Station Ventilators Ph 21 - 4 Locs/ Manh & BX	Construction	\$10,260,856	37	1.00	■	0	■	G

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Construction & Development									
New York City Transit									
T8041235	Station Ventilators Ph 20 - 4 Locations MHTN	Construction	\$10,478,119	0	1.00	■	0	■	G
T8050206	Mainline Track Replacement 2020 / 8th Avenue	Construction	\$20,726,225	90	1.00	■	0	■	R
T8050207	Mainline Track Replacement 2020 / Broadway-7th Ave	Construction	\$34,109,977	92	.96	■	2	▲	R
T8050208	Mainline Track Replacement 2020 / Flushing	Construction	\$59,886,344	72	1.00	■	3	▲	R
T8050209	Mainline Track Replacement 2020 / Lexington	Construction	\$28,056,117	96	1.27	■	2	▲	R
T8050210	Mainline Track Replacement 2020 / Brighton	Construction	\$15,212,679	43	1.00	■	0	■	R
T8050211	Mainline Track Replacement 2020 / Jamaica	Construction	\$28,061,426	63	1.00	■	0	■	R
T8050213	Mainline Track Replacement 2020 / 6th Avenue	Construction	\$19,911,465	92	1.00	■	1	▲	R
T8050214	Mainline Track Replacement 2020 / Astoria	Construction	\$21,026,790	58	1.00	■	0	■	R
T8050223	Continuous Welded Rail 2020	Construction	\$35,009,063	84	1.00	■	0	■	R
T8050227	Mainline Track Replacement 2021 / 11th st Cut	Construction	\$19,926,544	56	1.00	■	10	▲	R
T8050230	Mainline Track Replacement 2021 / Concourse	Construction	\$15,611,732	53	1.00	■	7	▲	R
T8050231	Mainline Track Replacement 2021 / Bway-7th	Construction	\$21,656,471	88	.79	▼	3	▲	R
T8050232	Mainline Track Replacement 2021 / Jamaica	Construction	\$27,039,948	29	1.00	■	0	■	G
T8050234	Mainline Track Replacement 2021 / Jerome	Construction	\$8,621,107	47	1.00	■	0	■	G
T8050235	Mainline Track Replacement 2021 / Flushing	Construction	\$29,054,120	0	1.00	■	3	▲	R
T8050236	Mainline Track Replacement 2021 / Pelham	Construction	\$12,980,700	94	1.57	■	0	■	R
T8050237	Mainline Track Replacement 2021 / Lenox - WPR	Construction	\$8,079,477	0	1.00	■	0	■	R
T8050243	Mainline Track Replacement 2021 / Lexington	Construction	\$18,522,746	74	.96	■	0	■	R
T8050247	Mainline Track Replacement 2022 / 6th Ave-Culver	Construction	\$25,964,750	45	1.00	■	0	■	G
T8050248	Mainline Track Replacement 2022 / 8th Avenue	Construction	\$26,264,960	39	1.00	■	0	■	G
T8050249	Mainline Track Replacement 2022 / 7th Avenue	Construction	\$16,042,944	0	1.00	■	0	■	G

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Construction & Development									
New York City Transit									
T8050306	Mainline Track Switches 2020 / Queens	Construction	\$7,531,710	5	1.00	■	0	■	G
T8050310	Mainline Track Switches 2020 / White Plains Rd	Construction	\$17,850,168	95	.84	▼	2	▲	R
T8050317	Mainline Track Switches 2021 / Pelham	Construction	\$10,461,600	65	.90	■	0	■	G
T8050318	Mainline Track Switches 2021 / 6th Ave / Culver	Construction	\$8,459,970	91	.94	▼	0	■	G
T8050322	Mainline Switches - 2022 DES/EFA	Construction	\$15,713,385	0	1.00	■	0	■	G
T8070320	Rehab of Emergency Exits	Construction	\$7,500,000	69	1.00	■	5	▲	R
T8070330	LSCR: Repair of Priority Column Bases/JER&WPR	Construction	\$7,470,786	17	1.00	■	0	■	G
T8070334	Rehab of Emergency Exits - 2022	Construction	\$12,507,676	1	1.00	■	0	■	G
Long Island Rail Road									
Long Island City Yard Resiliency									
EL0603ZS	Long Island City Yard Resiliency - CR	Construction	\$26,562,327	3	1.01	■	0	■	G
L606016J	LIC Phase 3B Construction	Construction	\$15,200,000	3	1.03	■	0	■	G
All Other Long Island Rail Road Projects									
EL0303ZH	Emergency Management Equipment Mitigation	Construction	\$28,949,776	63	.96	■	18	▲	R
EL0602ZD	West Side Storage Yard Restoration	Construction	\$43,986,089	64	1.00	▼	0	■	G
L60304TU	Jamaica Capacity Improvements - Phase One	Construction	\$301,653,239	90	1.00	■	6	▲	R
L60701AR	Replacement of Richmond Hill Substation	Construction	\$16,617,791	98	1.00	■	1	▲	R
L70204VZ	Elmont Station	Construction	\$106,050,000	80	1.00	■	0	■	G
L70502LH	Babylon Interlocking Renewal	Construction	\$32,646,400	80	1.00	■	0	■	G
L70502LN	Babylon to Patchogue	Construction	\$45,610,421	16	.99	■	0	■	G
L70701XB	Substation Components	Construction	\$36,820,000	60	1.00	▲	0	■	G
L70701XU	Substation Repl Pkg 2: Construction	Construction	\$27,687,990	25	1.14	▲	0	■	R
L8020417	Tactile Strips - Various Locations	Construction	\$12,800,000	27	2.28	■	0	■	G

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Construction & Development									
Long Island Rail Road									
All Other Long Island Rail Road Projects - cont'd									
L8020418	Mets-Willets EIC Relocation	Construction	\$28,866,050	0	1.00	▬	0	▬	R
L8020701	GCT Facility Needs	Construction	\$18,703,952	1	1.04	▼	0	▬	G
L8030101	Construction Equipment	Construction	\$40,290,798	16	1.00	▼	0	▬	G
L8030102	Various Right of Way Projects	Construction	\$10,000,000	5	1.00	▬	0	▬	G
L8030105	Queens Interlocking	Construction	\$81,467,443	12	1.14	▼	0	▬	R
L8030107	2022- Annual Track Program	Construction	\$82,000,000	8	1.00	▼	0	▬	G
L8040107	Bridge Repl & Rehab: Cherry Valley Rd	Construction	\$40,800,000	1	1.81	▬	0	▬	G
L8050204	Centralized Train Control	Construction	\$30,000,000	0	1.00	▼	0	▬	G
L8050205	Positive Train Control	Construction	\$41,000,000	0	1.30	▲	0	▬	G
L8050205	Signal Replacement and Interlocking Improvements	Construction	\$19,693,456	34	.98	▬	0	▬	G
L8050207	Positive Train Control (ESA)	Construction	\$33,000,000	0	1.00	▲	0	▬	G
L8060105	Mid Suffolk Yard Phase 2	Construction	\$30,000,000	0	5.71	▬	0	▬	G
L8070102	Atlantic Avenue Tunnel Lighting	Construction	\$10,000,000	2	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	0	1.00	▬	0	▬	G
L8070103	Signal Power & Power Pole Line Replacement	Construction	\$8,000,000	20	1.00	▬	0	▬	G
L8070104	3rd Rail - Protection Board & Aluminum Rail	Construction	\$27,000,000	2	1.00	▬	0	▬	G
L8070104	3rd Rail - 2000 MCM Feeder Cable Upgrade	Construction	\$13,000,000	1	1.00	▬	0	▬	G
L8070106	Substation Component Renewal	Construction	\$20,000,000	0	1.93	▬	0	▬	G
EL0402ZA	East River Tunnel Signal Sys & Infra Restoration	Design	\$179,871,202	90	1.00	▬	0	▬	G
L70304WU	JCI PH 2 3P DES	Design	\$42,490,000	90	1.06	▬	0	▬	R

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Construction & Development									
Long Island Rail Road									
All Other Long Island Rail Road Projects - cont'd									
L80204DD	ADA Accessibility and Components 24 Stations DES	Design	\$10,000,000	2	.67	■	0	■	G
L8070101	Substation Replacements	Design	\$20,950,000	2	.26	▲	0	■	G
Metro-North Railroad									
86th and 110th St Substations									
M6050103	H&H Power (86th St / 110th St)	Construction	\$18,754,481	92	1.01	■	6	▲	R
M7050113	H&H Power (86th St / 110th St)	Construction	\$13,578,279	97	1.17	▲	6	▲	R
Customer Service Initiative									
M6020208	Customer Communication / Connectivity Improvements	Construction	\$16,520,172	100	.98	■	0	■	G
M7020211	Customer Communication-Systems	Construction	\$12,702,514	94	.95	■	4	▲	R
M7080113	Customer Communication-CM	Construction	\$12,658,667	98	.99	■	4	▲	R
Hudson Line Power, Communication, and Signal Restoration									
EM040205	Comm & Signal Infrastructure Restoration-Ph. 1 & 2	Construction	\$110,496,673	82	1.12	■	2	▲	R
EM040301	Power and Signals Mitigation Phase 1	Construction	\$31,555,909	82	1.13	■	2	▲	R
EM040302	Hudson Line Power and Signal Resiliency	Construction	\$38,373,937	82	1.09	■	2	▲	R
EM050206	Power Infrastructure Restoration-Ph. 1 & 2	Construction	\$175,178,255	82	.99	■	2	▲	R
EM050210	Power Infrastr Restoration-Remote Terminal Houses	Construction	\$770,036	82	.60	■	2	▲	R
All Other Metro-North Railroad Projects									
EM050208	Power Infrastructure Restoration-Substations	Construction	\$47,862,479	97	1.04	■	2	▲	R
EM050209	Power Infrastructure Restoration-HRLB	Construction	\$8,209,735	95	.98	■	0	■	R
M6050101	Substation Bridge 23 - Construction	Construction	\$41,452,052	98	.99	■	3	▲	R
M7020204	Harlem Line Station Improvements	Construction	\$20,844,253	0	.96	■	0	■	G

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Construction & Development									
Metro-North Railroad									
All Other Metro-North Railroad Projects - cont'd									
M7020217	Purdy's Elevator Improvements	Construction	\$7,494,780	0	.92	■	0	■	G
M7030109	Purchase MoW Equipment	Construction	\$19,807,994	66	1.00	■	0	■	R
M7030203	Willet Ave Bridge	Construction	\$18,803,320	83	1.02	■	0	■	G
M7030203	Highland Ave Bridge	Construction	\$15,601,618	83	.97	■	0	■	G
M7030209	Harlem River Lift Bridge	Construction	\$9,577,878	65	.92	■	0	■	G
M7030303	Undergrade Bridge Rehabilitation	Construction	\$9,340,315	46	1.03	▼	0	■	G
M7040102	Harmon to Poughkeepsie SignalSystem	Construction	\$150,052,520	58	1.48	▲	4	▲	R
M7040112	Harlem Wayside Comm & Signal Improvements	Construction	\$72,793,590	85	1.39	■	0	■	R
M7050101	Replace MA's in Signal Substations	Construction	\$22,668,445	49	.93	■	0	■	R
M7050104	Harlem & Hudson Power Rehabilitation	Construction	\$13,286,001	80	.88	■	2	▲	G
M7050105	Harlem and Hudson Power Improvements	Construction	\$31,984,490	90	1.37	▲	12	▲	R
M7060101	Harmon Shop Replacement - Phase V	Construction	\$427,546,746	62	.99	■	0	■	G
M8020208	North White Plains Station Rehab	Construction	\$11,683,340	3	.96	■	0	■	G
M8030103	Mainline Turnouts 2021	Construction	\$11,400,000	69	1.00	■	0	■	G
M8030108	2020 Cyclical Track Program	Construction	\$19,260,000	37	1.00	■	0	■	G
M8030110	2021 Cyclical Track Program	Construction	\$21,000,000	72	1.00	■	0	■	G
M8030211	Park Avenue Viaduct Interim Repairs	Construction	\$10,180,000	100	.95	■	-6	▼	G
M7060103	Brewster YD Improvements - Design	Design	\$5,129,117	76	.68	■	0	■	G
M7060104	West of Hudson Capacity Improvements	Design	\$16,415,000	14	1.00	■	0	■	G
M7060104	West of Hudson Capacity Improvements	Design	\$6,415,924	30	.82	■	0	■	G
M8030201	Park Avenue Viaduct Replacement	Design	\$512,610,309	20	1.36	▼	0	■	G

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Construction & Development									
Bridges & Tunnels									
RFK Bridge Sidewalk Connection and Fender Upgrades									
D702RK23	Construction of New Harlem River Drive Ramp	Construction	\$21,977,632	0	.26	■	0	■	G
D801RK83	Lift Span Fender Upgrades	Construction	\$28,567,314	0	.87	■	0	■	G
BW Bridge Structural Rehab and Painting									
D801BW14	Miscellaneous Structural Rehabilitation	Construction	\$24,218,719	3	.87	▲	0	■	G
D807BWPT	BW Facility-Wide Painting Program	Construction	\$8,480,507	2	.85	▼	0	■	G
HH Bridge Structural Rehab and Painting									
D701HH07	Structural Rehabilitation	Construction	\$33,893,764	100	.82	■	0	■	R
D707HH30	Replacement of HHB Overcoat System	Construction	\$16,992,470	100	.86	■	0	■	R
RFK Bridge Structural Rehab									
D701RK19	Seismic/Wind Retrofit & Structural Rehab Ph1	Construction	\$48,150,231	99	.84	■	0	■	G
D701RK70	Miscellaneous Structural Rehabilitation	Construction	\$29,038,619	75	.88	■	0	■	G
D707RK70	Paint Suspended Span/Bronx Truss Steel	Construction	\$2,184,294	75	.54	■	0	■	G
TN Bridge Orthotropic Deck Replacement									
D702TN49	Replacement of Grid Decks on Suspended Span	Construction	\$284,128,730	67	.90	■	-4	▼	G
D707TN49	Painting of Suspended Span	Construction	\$17,644,527	67	.82	■	-4	▼	G
All Other Bridges & Tunnels Projects									
D701TN53	Approach Viaduct Seismic Retrofit/Structural Rehab	Construction	\$190,213,553	39	.84	■	0	■	G
D701VN32	Steel Repair & Concrete Rehabilitation	Construction	\$35,805,892	87	.84	■	0	■	G
D702VN84	Reconstruction of VN Approach Ramps - Phase1	Construction	\$190,429,595	81	.85	■	2	▲	G
D801HH36	Dyckman Street Substations Upgrade	Construction	\$43,466,910	1	.89	▼	0	■	G
D801RK70	Structural Repairs/Flag Repairs	Construction	\$57,518,670	86	.92	■	0	■	G
D804MP09	Electrical Rehabilitation (Elevator)	Construction	\$21,701,443	11	.86	▲	0	■	G

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Construction & Development									
Bridges & Tunnels									
All Other Bridges & Tunnels Projects - cont'd									
D806VNX1	Install Safety Fencing on Both Levels of the VNB	Construction	\$36,380,463	45	.83	■	0	■	G
D807MPPT	MP Facility-Wide Painting Program	Construction	\$15,928,677	57	.76	▼	0	■	G
D807RKPT	RK Facility-Wide Painting Program	Construction	\$75,415,328	54	.95	■	0	■	G
ED040308	Power Resiliency at RFK Bridge: Substation Upgrade	Construction	\$33,945,959	99	.91	■	0	■	G
D801RK04	Ward's Island/Queens Anchorage Rehabilitation	Design	\$127,162,248	95	.73	■	1	▲	G
D801RK93	Reconstruct / Relocate RI Ramps (QR & RM)	Design	\$77,673,778	10	.84	■	-1	▼	G
D801TN52	Miscellaneous Structural Rehabilitation	Design	\$24,376,962	10	.89	■	-3	▼	G
D804BW96	Lighting, Power Redundancy & Resiliency Imprv	Design	\$38,656,173	30	.70	■	-5	▼	G
D804VN12	Misc. Bridge Lighting & Electrical Improvemen	Design	\$23,644,542	23	.90	■	0	■	G
D807RK19	Zone/Maintenance Painting of Suspended Spans	Design	\$34,200,000	50	.90	■	0	■	G
D807VNPT	VN Facility-Wide Painting Program	Design	\$142,871,594	5	.79	▼	0	■	G
ED010307	BWB Mitigation - Flood Wall & Other	Post Des to Const Awd	\$9,635,150	30	1.16	▲	0	■	G
MTA Bus									
U6030232	HVAC Upgrade at College Point Bus Depot	Construction	\$9,521,950	86	1.00	■	0	■	G
U7030207	Storerooms and Depot Reconfiguration: LaGuardia	Construction	\$7,418,500	25	1.00	■	3	▲	R
U7030209	Rehab and Facility Upgrade: College Point	Construction	\$9,364,126	81	1.00	■	0	■	G
Cross Agency									
OMNY									
T7040401	New Fare Payment System, Phase 2	Construction	\$463,323,580	42	1.00	■	0	■	G
L70204UV	NEW FARE PAYMENT SYSTEM	Construction	\$8,920,000	0	1.00	■	0	■	G
L8020406	Fare Collection Program	Construction	\$61,402,521	0	1.75	▲	0	■	G

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Cross Agency OMNY - cont'd									
M6020207	New Fare Payment	Construction	\$2,280,618	95	.86	■	0	■	G
M7020208	New Fare Payment	Construction	\$6,276,879	95	1.00	■	0	■	G
M8020206	New Fare Payment Equipment	Construction	\$33,434,305	0	1.00	■	0	■	G
Rolling Stock									
MNR Cars									
M7010101	Locomotive Purchase	Construction	\$291,750,993	16	1.13	■	0	■	R
M8010102	Locomotive Replacement	Construction	\$121,873,148	16	1.00	■	0	■	R
Purchase of 135 Diesel Buses - Nova									
U7030219	Purchase 25 Standard Diesel Buses	Construction	\$16,419,960	0	.97	■	0	■	G
U8030216	Purchase 25 Standard Diesel Buses	Construction	\$17,682,210	0	1.00	■	0	■	G
U8030217	Purchase 85 Standard Diesel Buses	Construction	\$61,917,132	0	1.00	■	0	■	G
Purchase of 194 Hybrid and 139 Diesel Buses - New Flyer									
T7030223	Purchase 110 Standard Hybrid Buses (New Flyer)	Construction	\$99,287,668	85	1.00	■	1	▲	G
T8030210	Purchase 84 Hybrid-Electric (New Flyer)	Construction	\$71,210,653	5	1.00	■	1	▲	G
T8030211	Purchase 139 Standard Diesel (New Flyer)	Construction	\$98,808,397	1	1.00	■	0	■	R
Purchase of 291 Hybrid and 209 Diesel Buses - Nova									
T7030203	Purchase 165 Standard Hybrid Buses (Nova)	Construction	\$146,174,452	73	.99	■	0	■	R
T8030208	Purchase 126 Hybrid (Nova)	Construction	\$107,949,896	29	1.00	■	0	■	R
T8030209	Purchase 209 Standard Diesel (Nova)	Construction	\$141,211,796	4	1.00	■	0	■	R
Purchase of 60 Battery Electric Buses - New Flyer									
T7030216	Purchase 45 Standard Electric Buses	Construction	\$55,902,073	2	1.02	■	0	■	G
T8030213	Purchase 15 Standard All-Electric Buses	Construction	\$17,264,987	0	1.00	■	0	■	G

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Cross Agency Rolling Stock									
Purchase of 69 Express Buses - Prevost									
T7030206	Purchase 50 Express Buses	Construction	\$34,002,485	58	1.00	—	0	—	G
T8030206	Purchase 19 Express Buses	Construction	\$14,270,653	3	1.00	▼	2	▲	G
Purchase of R211 B-Division Cars - Kawasaki									
T7010101	Purchase 440 B-Division Cars	Construction	\$1,402,231,935	12	1.00	—	0	—	G
T7010102	Purchase 20 Open Gangway Prototype Cars	Construction	\$79,905,106	10	1.00	—	0	—	G
All Other Rolling Stock Projects									
ET060317	Sandy Resiliency: Conversion of 2 Pump Trains	Construction	\$30,056,595	6	1.00	—	0	—	G
T7030215	AVLM for Paratransit Vehicles	Construction	\$26,828,317	60	1.00	—	3	▲	R
T7130208	Purchase 12 3-Ton Crane Cars	Construction	\$32,794,585	30	1.00	—	0	—	G
T7130211	Purchase Locomotives	Construction	\$256,092,473	22	1.00	—	0	—	G
T7130215	Conversion of 10 R77E Locomotives	Construction	\$34,272,847	33	1.00	—	0	—	G
U7030202	Purchase 257 Express Buses	Construction	\$166,665,518	48	1.00	—	0	—	R
L70101ME	M-9 Procurement (110 Cars)	Construction	\$611,800,000	57	1.00	—	0	—	R
M7010102	M-8 Fleet Purchase	Construction	\$113,867,497	85	.96	—	34	▲	R

Stations BU Program Overview

The Stations Business Unit currently oversees 203 active projects, including 64 projects in construction, with a budget of \$9.8B. Notable projects under construction include ADA: 14th St Complex on the 1,2,3, F, and M lines; and ADA Package 2 at 181st St Station on the A line, 8th Ave Station on the N line, Court St Station on the G line, Woodhaven Blvd Station on the J line, Queensboro Plaza Station on the 7 line with elevator replacements at Marcy Ave and Flushing Ave Stations on the J line.

The IEC's Traffic Light Report currently tracks 152 tasks (ACEPs), in the Stations program, across multiple capital programs and 65 fall within the TLR guidelines and are included in the published report. Of the tasks in the final TLR, one was flagged red, representing one project. The report below describes why the project was flagged and what C&D is doing to remediate.

The BU also seeks to identify and remediate issues at the program level. The team is working with Procurement and other departments on mitigation strategies to avoid future delays caused by supply chain issues. This includes weighing alternative solutions to deliver the projects on time, on budget, and with the highest quality possible.

Stations Business Unit Response to the IEC Traffic Light Report

Individual project descriptions

T7160729: RTO Facility Repair: 3rd Avenue-138th Street PEL (Construction phase)

Trigger: Schedule

This project converts the underutilized back-of-house space at the 3rd Avenue - 138th Street station into an Employee Facility for the Department of Subways (DOS). Part of the scope of work is for the in-house staff Infrastructure Capital Construction (ICC) and Electronic Maintenance Division (EMD) to provide a communications closet, which requires the procurement of communications equipment. The three month substantial completion slip, to June 2022, was due to component shortages causing a delay in the delivery of the communications equipment. Moreover, the sole supplier of the specified Fire alarm equipment, has not been responsive. DOS and ICC are working closely with Procurement, Designers, and the User groups to mitigate further delays and is actively exploring alternative equipment for the Fire Alarm system and suppliers.

Subsequent to the reporting period, the substantial completion date slipped an additional three months to September 2022.

Infrastructure BU Program Overview

The C&D Infrastructure Business Unit currently oversees 378 active projects with a budget of \$11B, including 116 projects in construction, with a budget of \$4B, as of May 2022.

The IEC's Traffic Light Report currently tracks 183 tasks (ACEPs), in the Infrastructure program, across multiple capital programs and 77 fall within the TLR guidelines and are included in the published report. Of the tasks in the final TLR, 12 were flagged red, representing seven projects. The reports below describes why these projects were flagged, and what C&D is doing to remediate.

The C&D Infrastructure Business Unit is responsible for all infrastructure construction projects on the NYCT 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 yards, depots, and other 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 the Coney Island Yard, rehabilitating the Forsyth Street Fan Plant, upgrading the Power Control Center & Rail Control Center, and rehabilitating HVAC systems at College Point.

The Infrastructure Business Unit continues to identify and remediate issues at the program level. Several projects, for instance, were impacted by COVID 19 and Con Ed delays. Project leadership has developed mitigation strategies to make back the time and keep projects within budget. For Con Ed delays, regular meetings are scheduled with Con Ed management.

Infrastructure Business Unit Response to the IEC Traffic Light Report

Individual project descriptions

ES070211 Flood Repairs – Clifton Shop (Construction Phase)

ES070302 SIR – Staten Island Railway Mitigation – Clifton Shop/Yard (Construction Phase)

S7070111 SIR – Relocate Headquarters to Clifton Shop (Construction Phase)

Trigger: Schedule

Staten Island's Clifton Shop services the entire Staten Island Railway and diesel locomotive fleet. The facility flooded in Hurricane Sandy, and its location, in a marshy area, makes it vulnerable to flooding in the long term. This project is to fortify infrastructure and equipment against heavy rainfall and/or storm surges. The project entails constructing a new maintenance facility to replace the existing obsolescent buildings.

The C&D forecast for Substantial Completion has slipped four-months to October 2022 due to developing delays associated with the acceptance of the facility for move-in and completion of the move-in process, as well as concerns over potential delays for deactivating existing utility services and the abatement of hazardous materials from buildings yet to be demolished; the possibility of exceeding planned durations for activities in Phases 4 and 5; and the potential discovery of additional hazardous soil or unknown underground storage tanks. Should any of these delay issues materialize, it will be necessary to reevaluate the C&D forecast with the possibility of extending it further.

T6120403 Replace Bus Radio System (Construction Phase)
U6030226 Bus Radio System – MTA Bus Share (Construction Phase)
U7030211 Bus Radio System – MTA Bus Share (Construction Phase)
Trigger: Schedule

These projects will replace the existing radio system for NYC Transit and MTA Bus Company with a digital state of the art Bus Radio System (BRS). The BRS project includes design and construction of base stations, retrofit of buses with the new equipment, and provision and setup of equipment at the new Bus Command Center (BCC) in East New York.

This project had a six-month schedule slippage, from June 2023 to December 2023, due to in part to poor contractor performance and quality, third party site agreements and utility issues.

S7070106 New Power Substation: New Dorp (Construction Phase)
S7070107 New Power Substation: Clifton (Construction Phase)
Trigger: Schedule

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

This project had an eight-month schedule slippage, from April 2022 to December 2022, due to difficulties in scheduling track outages and obtaining qualified signal engineers for both locations. Three-day weekend outages are required for the final cable connections and subsequent signal testing by the contractor and Staten Island Railway. Track outages have been scheduled for July 4th and Labor Day Sept 5th long-weekends. Accredited signal engineers have been assigned by the contractor for these periods. Currently no budget impact is anticipated for this additional delay.

ET090304 Mitigation: Montague Substations at Various Locations (Construction phase)
Trigger: Schedule

This project will provide repair and resiliency work at Montague Furman Substation in the borough of Brooklyn. The scope includes the replacement of High-Tension Switch gear and the installation of watertight manhole covers and sealing ducts to make them watertight.

This project had a six-month schedule slippage, from June 2022 to December 2022, due to a Con Ed de-energizing delay of the High-Tension Switchgear. Con Ed is unable to schedule this until mid-December 2022 based upon their operations schedule. A budget modification has been requested for Engineering Force Account and TA Labor for the extension of time to the contractor.

T6160717 Livingston Plaza Repairs (Construction phase)**Trigger: Schedule**

This project's scope includes new roofing, the installation of perimeter protection for the 130 Livingston Plaza building, which includes sidewalk bollards and wedge barriers, and the upgrade of the facade.

This project had a four-month schedule slippage, from February 2022 to June 2022, due to the need to install a reinforced concrete slab to cover an unforeseen hidden vault discovered when the sidewalk was demolished at the Boerum Place sidewalk. Substantial Completion will be further extended to address COVID-related supply chain delays for the procurement of the sidewalk bollards, and the need to bring in third parties to remedy unforeseen field conditions relating to the 130 Livingston Plaza fire standpipe and water systems requiring modification, which is delaying the granite panel facade work. There is no budget impact.

T7100403 Division of Car Equipment Shop Components Phase 2: 239th St, Concourse, and East New York (Construction phase)**Trigger: Schedule**

This project will replace components at three maintenance shops, 239th St, Concourse, and East New York, in order to upgrade these facilities to a state-of-good repair. The project's scope includes electrical system upgrade, new exhaust fans, installation of trench drains along pits and partial roof replacements.

Substantial Completion slipped five months, from January 2022 to June 2022, due to a shortage of roofing materials because of COVID-related supply chain issues. No additional delays are expected. This delay will not impact the budget.

ET090307 Hardening of Substations at 24 Locations (Procurement phase)**Trigger: Schedule**

This project will provide hardening of the 24 Substations in the flood prone area in the boroughs of Manhattan and Queens. The scope involves the replacement of existing conventional doors for personnel access with flood doors, roll-up doors for equipment and vehicular access with hydraulic flood gates or erectable logs and personnel access hatch and ventilation.

The award date slipped three months, to June 2022 due to additional geotechnical investigation requested by qualified Design-Builders and coordination with MTA Real Estate to obtain construction access and easement with private owners which is taking longer time than expected.

Signals and Train Controls Program Overview

The Signals Business Unit currently oversees 27 active projects, including 15 projects in construction, with a budget of \$3.3B. Notable projects under construction include CBTC QBL West, Culver and 8th Avenue lines.

The IEC's Traffic Light Report currently tracks 44 tasks (ACEPs), in the Signals and Train Controls program, across multiple capital programs and 29 fall within the TLR guidelines and are included in the published report. Of the tasks in the final TLR, 2 were flagged red, representing one project. The report below describes why these tasks 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 and Train Controls Response to the IEC Traffic Light Report

Individual Project Descriptions

T50803QB: Communication Based Train Controls (CBTC) Queens Blvd Line Phase 1 (Construction)

T6080319: CBTC Queens Blvd Line West Ph 1 (Construction phase)

Trigger: Schedule

This project will provide CBTC on the Queens Boulevard Avenue West Line (QBL-W) consisting of three separate contracts, broken out into two phases, each with a different contractor (hence the different ACEPs). QBL-W is the first interoperable CBTC project implemented for NYCT, allowing trains with CBTC from different suppliers (Siemens and Thales) to run on the same line at the same time. The Thales contract is to furnish, test, and commission CBTC Equipment within the 71st Ave-Forest Hills Relay Room control limits.

This quarter, the Substantial Completion for Siemens/Thales contracts slipped six months, from June 2022 to December 2022, due to remaining Automatic Train Supervision functions, delivering Automatic Train Operation functions, commissioning Health Check locations, training, and maintenance tools. While CBTC, along QBL-W, is in full operation, car stability issues and the remaining 4 units to go into revenue service continue to be an area of concern.

NYCT Department of Subways Program Overview

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

NYCT 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.

The description below describes why these track projects were flagged, and what NYCT is doing to remediate.

NYCT Department of Subways Response to the IEC Traffic Light Report

Individual project descriptions

T8050208: 2020 Mainline Track Replacement – Flushing Line (Construction phase)

Trigger: Schedule

This Mainline Track Replacement project had a three-month schedule slippage, from February 2022 to May 2022, due to delayed inspections and completion of remaining punch list work as a result of limited staff to perform inspections. Track Engineering is currently in the process of hiring additional personnel. In addition, there is also a portion of work in this contract that has not started because of ongoing DOT Bridge work. At this time, the work located between Main St. to Willets Points will not be scheduled in 2022. Therefore, the milestone goals for Substantial Completion and Closeout must be reassessed and updated accordingly since these dates will go beyond this year.

T8050209: 2020 Mainline Track Replacement – Lexington Line (Construction phase)

T8050230: 2021 Mainline Track Replacement – Concourse Line (Construction phase)

Trigger: Schedule

Both Mainline Track projects noted above had schedule slips of nine and seven months respectively.

These two Mainline Track Replacement projects slipped due to challenges in getting additional track access required in the tube and due to a portion of work that is located south of 161st Street. For the Concourse Line Replacement project, track access is now forecasted for the 4th quarter of 2022 and Substantial Completion by April 2023.

Subsequent to the reporting period, the Substantial Completion date, for the Lexington Line project, slipped another month to May 2022.

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

Trigger: Schedule

This Mainline Track Replacement project had a ten-month schedule slippage, from April 2022 to February 2023, due to a scope change from Ekki-Hilti ties to Type II-IIM track panels. The scope change was necessary because the concrete was compromised, and the ties would not be effective.

T8050231: 2021 Mainline Track Replacement – Broadway-7th Ave (Construction phase)**Trigger: Schedule**

This Mainline Track Replacement project's substantial completion date slipped three-months, from January 2022 to April 2022, because pre-final inspections are still needed for a portion of work. This delay is due to the limited staff available to perform the inspections required.

Subsequent to the reporting period, the Substantial Completion slipped an additional two months to June 2022.

T8050235: 2021 Mainline Track Replacement – Flushing Line (Construction phase)**Trigger: Schedule**

This Mainline Track Replacement project had a three-month schedule slippage, from August 2022 to November 2022 due to the prioritization of 2020 projects due to available staffing. Additionally, there are impacts from DOT bridge work and DOS will not start their work, located north of Willets Point, until 2023 and the current substantial completion date is being reassessed and will be updated accordingly.

T8070320: Rehab of Emergency Exits (Construction phase)**Trigger: Schedule**

This project will rehab six emergency exits, at various locations systemwide, and bring them to a state of good repair. The work is being performed by Maintenance of Way Infrastructure Capital Construction (ICC). This quarter the substantial completion date moved back 5 months, from April 2022 to September 2022.

This project delay is due to the prioritization of manpower between projects because of overall manpower availability. ICC reorganized their existing crews with the manpower available according to the mix of maintainers, prioritizing projects based on which project had the best chance of moving forward with the available trades and manpower.

NYCT Department of Buses Response to the IEC Traffic Light Report**Individual project description****T7120306: Generator: Yukon Depot (Construction phase)****Trigger: Schedule**

This project is for the replacement of the existing 300kW emergency generator with a new 1000kW standby generator and the associated critical electrical infrastructure. This project will provide electrical power for continuous operation of the Yukon Bus Depot in the event of a utility power loss and support the participation of NYCT Department of Buses in the Demand Response Management program.

The six-month schedule slip this quarter, from January 2022 to July 2022, is due to the following reasons:

- Request for in-house personnel (TAL) to perform lead paint abatement work was delayed and ultimately cancelled. It was then reassigned to a contractor. The contractor's Lead Placard package was submitted and is still pending approval by NYCT Office of System Safety.
- The contractor obtained the FDNY plan review and acceptance of the new fuel oil delivery system but is awaiting FDNY appointment for inspection.

The project manager is currently following up on a weekly basis to track the progress of the lead placard and the FDNY inspection appointment.

Subsequent to the reporting period, the Substantial Completion slipped an additional two months, to September 2022.

Long Island Rail Road Program Overview

The LIRR Business Unit currently oversees 108 active projects with a budget of \$3.06B, including 43 projects in construction. Notable projects under construction include Jamaica Capacity Improvements, Ocean Avenue Substation, Queens Interlocking, and the Annual Track Program. Non-C&D LIRR projects tracked by the LIRR Business Unit include 43 active projects with a budget of \$476M (18 in construction, \$172M).

The IEC's Traffic Light Report currently tracks 115 tasks (ACEPs), in the LIRR program, across multiple capital programs and 35 fall within the TLR guidelines and are included in the published report. Of those, three tasks were flagged red, representing three projects. The reports below describe why these tasks were flagged, and what C&D is doing to remediate.

Long Island Rail Road Business Unit Response to the IEC Traffic Light Report

Individual project descriptions

L60304TU: Jamaica Capacity Improvements (Construction phase)

Trigger: Schedule

This project is the first phase of a multi-decade initiative to dramatically improve track configuration at Jamaica, where 10 of LIRR's 11 lines converge. The 6-month Substantial Completion slip, from June 2022 to December 2022 is due to other higher priority system-wide track work, such as Third Track, East Side Access, and State-of-Good-Repair-Work, pushing the planned install date of the final JCI Phase 1 high-speed crossover (Union-87). Signal Construction has completed the preliminary activities in preparation for the switch installation to minimize the duration of the install. The project team is working to meet the December 2022 Substantial Completion date, but it may be delayed further.

Subsequent to the reporting period it was determined, due to escalation costs associated resequencing of some construction activities, headcount issues, loss of track outages, and Phase 1 budget contingency being reallocated previously to fund JCI Phase 2 design efforts, the project will encounter a funding shortfall and a budget modification for \$20M will be required.

L70701XU: Substation Replacement Package 2 (Construction phase)

Trigger: Cost

This project includes replacing Ocean Avenue Substation, which is beyond the useful life and in need of replacement. Some of the scope included is the removal of existing switchgear, rectifiers, and transformers; demolition of existing buildings/structures; construction of new foundations; and installation of new prefabricated modular substation buildings which house pre-installed AC switchgear, rectifiers, DC switchgear, control cabinets, and associated equipment.

This project's cost overrun is due to the need for additional funding to pay for revisions to the utility company means and methods to increase safety and of the Force Account(F/A) Labor cost increases. During site meetings with Public Service Enterprise Group (PSE&G), it was determined using track outages and de-energization of lines would be safer than working with live feeders. Because of this, funding allowances were added for the required bussing, track outages, and F/A transportation to support the installation of the new high voltage feeders. The increased F/A costs are due to an increase in overhead rates for F/A work and materials. NYS Overhead rates rose

significantly in both 2021 and 2022. The Project Management team is working on requesting additional funding based on the revised project needs.

L8030105: Queens Interlocking (Construction phase)**Trigger: Cost**

This project is for the improvement of the three queens interlockings, between the Main Line and the Hempstead Branch, required for operation of the increased service due to East Side Access and the new Elmont Station. The scope includes modification of the track geometry, replacement of the existing signal system, and power modifications. Original budget figures were based upon preliminary designs. The cost overrun for this project is due to additional funding required to cover acceleration costs and construction resequencing in support of the opening of Elmont Station and ESA opening day service. Revisions and cutover to the existing Queens two signal system were introduced into the project, making it possible to incorporate the new Elmont ladder track prior to the delivery of the new signal system. This step allowed LIRR to provide service to the new station earlier as well as meet its commitments to the NY Arena Partners.

Subsequent to the reporting period the EAC was updated and has taken into account all additional costs to the project.

Metro-North Railroad Program Overview

The MNR Business Unit currently oversees 67 active projects, including 29 projects in construction, with a budget of \$2.4B. Notable projects under construction include the Superstorm Sandy Power and Communication & Signals Restoration project, Harmon Shop Improvements, and the Grand Central Trainshed project.

The IEC's Traffic Light Report currently tracks 74 tasks (ACEPs), in the MNR program, across multiple capital programs and 35 fall within the TLR guidelines and are included in the published report. Of the tasks in the final TLR, three were flagged red, representing two projects. The reports below describe why these tasks were flagged and what C&D is doing to remediate.

Metro-North Railroad Response to the IEC Traffic Light Report

MNR project descriptions

M7010102: M8 Fleet Purchase

Trigger: Schedule

This M8 Fleet Purchase Project is for the procurement of Electric Multiple Unit (EMU) cars for the Metro-North Railroad New Haven Line. The project consists of three main components, of which the first two have been completed. The original scope, dating back to 2006, for the manufacture, test, and delivery of 405 cars, which includes 380 married pairs and 25 single cars. The second component is for the supporting scope of the 405 cars which includes Capital Spare Parts, Bench Test Equipment, etc. The third component is for the manufacture, test, and delivery of 66 additional New Haven Line M8 EMU cars, which was executed as a change order to the original scope in 2017.

The primary reasons for the 34-month project schedule slippage, from February 2022 to December 2024, are due to the Car-builder's continued struggle with manufacturing plant shutdowns, reduction in personnel, overall quality, and supply chain issues due to the global Coronavirus Pandemic as reported by the Car-builder in multiple formal contract correspondence. 30 M8 cars have been delivered, to date, and are in varying stages of acceptance. The remaining 36 are in various stages of assembly and shipment.

MNR has issued a formal letter requesting the Car-builder to submit justification for excusable delays. To mitigate a further delay, the new M8 Project Team continues to work closely with the Car-builder and has implemented the following: actively supporting the Car-builder's request for weekend production work; a second full-time Resident Inspector to expedite work at the new car acceptance site; and weekly calls to discuss and resolve critical issues. MNR has also informed the Car-builder of accrued Liquidated Damages due to the delay in the delivery of the additional 66 M8 Cars.

M7020211 Customer Communication - Systems

M7080113 Customer Communication – Construction Management

Trigger: Schedule

The Customer Communication - Systems (Package 7), is to design, furnish, deliver, install, test, and integrate new security systems and is an integral part of the multi-part, multi-phase Customer Service Initiative (CSI) Program in Grand Central Terminal and other outlying passenger stations and facilities. The four-month project delay, from February 2022 to June 2022, is due to the HVAC system (built under Package 6) not providing reliable HVAC to cool the equipment (servers) properly in Room 217 at 525 North Broadway. The project team is currently working

with the Package 6 Design-Builder to complete the HVAC repairs, which are under warranty and the completion date of Package 7 was modified to sync with the completion of the repairs.

The Customer Communication - CM is a single task for construction management and system integration services being provided by the consultant for the overall CSI Program. There are seven contracts in the CSI that this consultant has been managing and providing the resources to construct and implement the new systems and devices. In the First Quarter of 2022, the completion date of Package 7 was extended four months from February 2022 to June 2022. In turn, the consultant services had to be extended to continue supporting the closeout of the CSI program of all 7 projects. No mitigation has been implemented since these services are required to continue managing the CSI program through close-out.

Subsequent to the reporting period, the substantial completion dates for both of these contracts slipped an additional two months to August 2022.

MTA Bus Business Unit Response to the IEC Traffic Light Report**Individual project description****U7030207: Storerooms and Depot Reconfiguration: LaGuardia (Construction phase)****Trigger: Schedule**

This project will reconfigure the LaGuardia Bus Depot facility to accommodate a new storeroom location within the existing bus circulation and maintenance bay areas. The reconfiguration will ensure the logical use of and sufficient space to store all materials and parts needed to support an efficient and thorough maintenance program that is necessary to maintain timely bus routes.

This project had a three-month schedule slippage, from July 2022 to October 2022, due to a change order for an issue with the underground pipe connection to the Oil-Water Separator. Also, due to Covid 19, there is a general delay in the delivery of parts and materials. In order to mitigate a further delay, the project manager will continue to follow-up with upcoming deliveries.



Projects in CPOC's Risk-Based Monitoring Program
(1st Quarter 2022 Traffic Light Report – Period Ending March 31, 2022)

The following projects in CPOC's Risk-based Monitoring Program are currently reported on by the responsible MTA Business Unit in accordance with the CPOC Work Plan schedule and are continually monitored by the Independent Engineering Consultant. Monitored 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 CPOC'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		ADA Reconstruction Times Square Station – 42 Connection Project
	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 CPOC’s Risk-Based Monitoring Program
(1st Quarter 2022 Traffic Light Report – Period Ending March 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 Reconstruct Clifton Repair Shop
			Sandy Program Coney Island Yard Long Term Perimeter Protection
			Sandy Program 207 th Street Yard Long Term Perimeter Protection

Contracts Department

Stephen Plochochi, Senior Vice President

**PROCUREMENT PACKAGE
June 2022**

PROCUREMENTS

The Procurement Agenda this month includes one (1) action for a proposed expenditure of \$1.2M.

Subject Request for Authorization to Award a Procurement Action					
Contract Department Stephen Plochochi, Senior Vice President					
Board Action					
Order	To	Date	Approval	Info	Other
1	Capital Program Committee	6/27/22	X		
2	Board	6/29/22	X		

Date: June 22, 2022			
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 ratify a procurement action and to inform the Capital Program Committee of this procurement action.

Discussion

MTA Construction & Development proposes a Ratification in the following category:

<u>Schedules Requiring Majority Vote</u>	<u># of Actions</u>	<u>\$ Amount</u>
K. Ratification of Completed Procurement Actions	1	\$ 1,235,001
	TOTAL 1	\$ 1,235,001

Budget Impact

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

Recommendation

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

MTA Construction & Development

BOARD RESOLUTION

WHEREAS, in accordance with Sections 1209 and 1265-a of the Public Authorities Law and the All Agency 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 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.

JUNE 2022
LIST OF RATIFICATIONS FOR BOARD APPROVAL

Procurements Requiring Majority Vote:

Schedule K. Ratification of Completed Procurement Actions (Involving Schedule E – J)
(Staff Summaries required for all items)

- | | | | |
|-----------|---|---------------------|--------------------------------------|
| 1. | T. Moriarty & Son Inc.
Contract No. B-62032.20 | \$ 1,235,001 | <u>Staff Summary Attached</u> |
|-----------|---|---------------------|--------------------------------------|

MTA Construction and Development requests that the Board ratify Modification No. 20 to the Contract for a redesigned flood roller gate at the MJ Quill Bus Depot.

Schedule K - Ratification of Completed Procurement Actions

Item Number: 1

Vendor Name (Location) T. Moriarty & Son Inc. (Brooklyn, NY)
Description Flood Mitigation at Three Bus Depots in the Boroughs of Manhattan, Queens & Staten Island.
Contract Term (including Options, if any) December 28, 2018 – January 5, 2021
Option(s) included in Total Amt? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> n/a
Procurement Type <input checked="" type="checkbox"/> Competitive <input type="checkbox"/> Noncompetitive
Solicitation Type <input type="checkbox"/> RFP <input type="checkbox"/> Bid <input checked="" type="checkbox"/> Other: Modification
Funding Source <input type="checkbox"/> Operating <input checked="" type="checkbox"/> Capital <input type="checkbox"/> Federal <input type="checkbox"/> Other:
Requesting Dept./Div., Dept./Div. Head Name: Delivery/Mark Roche

Contract Number B-62032	AWO/Mod. # 20
Original Amount:	\$ 15,267,600
Prior Modifications:	\$ 1,122,860
Prior Budgetary Increases:	\$ 0
Current Amount:	\$ 16,390,460
This Request:	\$ 1,235,001
% of This Request to Current Amt.:	7.5%
% of Modifications (including This Request) to Original Amount:	15.4%

Discussion:

Contract B-62032 (the “Contract”) is for the implementation of flood mitigation measures, including flood protection walls, stop logs, flood barriers/panels, flood roller gates, replacement of manhole covers, sump pumps, and other measures at the MJ Quill Bus Depot in Manhattan, the Casey Stengel Bus Depot in Queens, and the Castleton Bus Depot in Staten Island. MTA Construction and Development (“C&D”) requests that the Board ratify Modification No. 20 to the Contract for a redesigned flood roller gate at the MJ Quill Bus Depot.

A flood roller gate deploys during a flood event to form a watertight barrier at an entryway. Flood mitigation measures designed for the M.J. Quill Bus Depot included the installation of a custom flood roller gate at its 41st Street entrance that would have reduced the width of the entrance from 18 feet to approximately 15 feet. However, upon commencement of the flood roller gate installation, NYCT Department of Buses (“DOB”) expressed concern that the precision required to maneuver buses through the narrower entrance would adversely affect Depot operation. They also noted that the frequent presence of parked vehicles or snow in the parking lane opposite the 41st Street entrance would further decrease the turning radius envelope making it even more difficult for buses to enter the Depot. For those reasons, DOB requested a redesign. C&D is investigating whether this modification is the result of a design error and if it intends to seek recovery from the designer.

The redesign required modifications to the roller gate, hoisting system and support structure, including modifications to the depot entrance and mezzanine floor slab as well as the application of paint striping on the opposite side of 41st Street for additional demarcation of a no parking/no standing zone to prevent parked vehicles from obstructing buses turning into the Depot entrance. To allow the condition to be addressed immediately so as not to further delay the completion of the Contract, C&D’s Infrastructure Business Unit Lead authorized a direction to the Contractor to proceed with the work on June 21, 2021.

The Contractor submitted a cost proposal of \$1,868,031 (\$613,865 for direct costs and \$1,254,166 for impact costs), including a time extension of 359 calendar days. Negotiations were held and the parties agreed to a lump sum price of \$1,235,001 (\$560,000 for direct costs and \$675,001 for impact costs) and a compensable time extension of 359 calendar days associated with the time needed to investigate DOB’s concerns, mock-up and test a revised flood roller gate configuration at the Depot, develop the revised design and shop drawings, and modify, install and test the revised flood roller gate. The time extension results in a revised Substantial Completion date of December 30, 2021. The agreed upon price has been determined to be fair and reasonable.