



Metropolitan Transportation Authority

Capital Program Oversight Committee Meeting

December 2020

Committee Members

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N. Zuckerman, Vice Chair
A. Albert
J. Barbas
N. Brown
M. Fleischer
R. Glucksman
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D. Mack
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V. Tessitore

Capital Program Oversight Committee Meeting

2 Broadway, 20th Floor Board Room

New York, NY 10004

Wednesday, 12/16/2020

10:00 AM - 5:00 PM ET

1. PUBLIC COMMENTS PERIOD

2. APPROVAL OF MINUTES NOVEMBER 18, 2020

Minutes from November '20 - Page 3

3. COMMITTEE WORK PLAN

2021 CPOC Committee Work Plan - Page 4

4. C&D CAPITAL PROGRAM UPDATE

Update on Integrated Projects - Page 6

IEC Project Review on 42 Street Connection - Page 12

IEC Project Review on East Side Access - Page 18

IEC Project Review on LIRR Expansion - Page 25

5. LIRR and MNR UPDATE ON POSITIVE TRAIN CONTROL (PTC)

Update on Positive Train Control - Page 30

IEC Project Review on Positive Train Control - Page 46

6. CAPITAL PROGRAM STATUS

Commitments, Completions, and Funding Report - Page 52

7. QUARTERLY TRAFFIC LIGHT REPORTS

Third Quarter 2020 Core & Sandy Traffic Light Reports - Page 65

MINUTES OF MEETING
MTA CAPITAL PROGRAM OVERSIGHT COMMITTEE
November 18, 2020
New York, New York
10:00 A.M.

Because of the ongoing COVID-19 public health crisis, the MTA Chairman convened a one-day, virtual Board and Committee meeting session on November 18, 2020, which included the following committees:

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

To see a summary of the CPOC Committee meeting, please refer to the November 18, 2020 Board minutes in the December Board Book available here on the Board materials website:

<https://new.mta.info/transparency/board-and-committee-meetings/december-2020>



2021 CPOC Committee Work Plan

I. Recurring Agenda Items

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

II. Specific Agenda Items

January

Rolling Stock Procurement Update

February

C&D Capital Program Update

- B&T

March

C&D Capital Program Update

- Stations Projects

Quarterly Traffic Light Reports

April

C&D Capital Program Update

Update on Capital Program Security Projects (in Executive Session)

May

C&D Capital Program Update

June

Update on OMNY Program

Update on Minority, Women and Disadvantaged Business Participation

Quarterly Traffic Light Report

July

C&D Capital Program Update

September

C&D Capital Program Update
Quarterly Traffic Light Reports

October

C&D Capital Program Update
Update on Capital Program Security Projects (in Executive Session)

November

C&D Capital Program Update
Update on Minority, Women and Disadvantaged Business Participation
Update on Small Business Development Program

December

C&D Capital Program Update
Update on OMNY Program
Quarterly Traffic Light Reports

C&D's last report to CPOC on Integrated Projects was in July 2020. Integrated projects are complex projects with multiple interdependent sub-projects. Three integrated projects are under construction now (42 St Connection, East Side Access and LIRR Main Line Expansion). Two more integrated projects are in the planning stages (Second Avenue Subway Phase Two and Penn Station Access). This document presents an executive summary of the progress of these projects since July, and identifies primary factors influencing the projects' performance.

42 St Connection *The 42 St Connection Project is improving the station experience at three stations along 42 St Street (Grand Central, Bryant Park and Times Square), with redesigned passageways and platforms, new elevators, and widened stairways. The project also involves making the 42 St Shuttle train into a fully accessible service.*
Combined Original Budget: \$521.4 M EAC: \$531.3 M

1. The overall Connection Project is a bundling of 8 contracts, all administered by one PCEO. So far, the Contractors include MLJ and Halmar. The Shuttle project is currently approximately 55% complete with an overall (close out) end date of 09/22 and a substantial completion date expected around 3/22, months ahead of schedule. The ADA platform will be in service by 9/21.
2. An unforeseen tunnel settlement condition at the Times Sq Station, discovered earlier this year, threatened to delay the project by 3-4 months. The closure of the Shuttle closure, from April to August, allowed the contractor to make up for lost time and maintain the project's aggressive completion schedule.
3. Some major milestones achieved since July:
 - The replacement of the busiest escalators in the entire MTA network was completed in just 36 weeks. Set of escalators was out of service from 9/30/19 to 6/5/20 with Substantial Completion declared on 9/2/20, eight months ahead of schedule.
 - The project team executed an MTA License Agreement that requires the developers of One Times Square to fund the construction and future maintenance of a brand-new ADA elevator in Times Square Station, as well as a new subway entrance canopy.
 - At Grand Central Station, the developers of One Vanderbilt have completed and put into service an entirely new transit hall with entrances to Grand Central Station and the NYCT subway system, new and modified stairs, new elevators, and 5,400 SF of new mezzanine space. This effort, which includes many other upgrades to the Grand Central Station subway system, was the first major transit improvements provision of the East Midtown Rezoning.

East Side Access

ESA will provide LIRR passengers with direct service into Grand Central Terminal. Project involves building out an 11.5 Mile underground tunnel with a new station and concourse below the existing Grand Central Terminal.

Current budget: \$11,133 M EAC: \$11,133 M

1. The program consists of 16 active contracts. Project is currently approximately 85% complete against a planned completion of 96% with a public Revenue Service Date of December 2022.
2. The ESA program has achieved some significant milestones including:
 - Completion of the track structure, including third rail, throughout the tunnel
 - Signal power energization is forecast to be complete by the end of the month. This step is critical to advancing the FRA signal testing.
 - Completed the installation and local testing of numerous systems within the facilities for a portion of the ESA Tunnels.
3. Project has suffered from poor performance by some of the contractors, primarily Tutor Perini Corporation (on CS179, CM007) and Grand Central Terminal Contractors, a Joint Venture (CM014B). In all three contracts the contractors are not supplying adequate manpower or production rates for the remaining tasks in addition to poor management of subcontractors.
4. Work progresses in the following major categories:
 - Tunnel work – All track structure has been installed but the Contractor is behind in testing of the systems and finishing the platform work. Contractor needs to increase production and get more manpower on the project to stay on schedule.
 - Station work: GCTC is behind schedule nearly a year and has the potential now to affect the program substantial completion. This is due to late testing and issues with mechanical systems within the station. Most of the architectural finishes are completed (90%).
 - Mid-Day Storage Yard: Installation is 97% complete and will begin progressing the systems testing elements for security, communications, FRA signal testing and traction power.
 - JP Morgan Chase Building: JPMC restoration of the ESA space in the station concourse is currently showing a late delivery of three months which has put pressure on Tutor Perini, the contractor doing the final systems work under CS179. C&D is working closely with JPMC to provide value engineering and direction of 24/7 work effort (as provided for in the construction agreement between JPMC and MTA). Also, JPMC will be funding modification (change order) to offset delays they have caused.
 - Preparation for opening: LIRR continues to prepare for the opening and has completed the operational readiness plan. Critical to that plan are key hires initially and then operations personnel, all delayed by the hiring freeze.

-
5. Major effort currently underway is the negotiation of a modification (CPR 320) with TPC. CPR 320 is the work required by CS179 to finish installation and testing with the reconfigured Zone 4 within the station concourse. Negotiations include the ability of the CS179 contractor to enter the work zone and do parallel activities with the JPMC Contractor.
 6. The program though suffers from the late delivery of installation and testing on CM014B, CM007 and CS179. CM007 is scheduled to finish in May 2021, nearly a year late, as is CM014B. Subsequently, the late dates put significant pressure on CS179 which will deliver late interim milestones for various systems that support other contracts. The key for the management of the program is to provide necessary mitigations for subsequent and adjacent contract milestones to move forward (such as portable cooling to allow for communication equipment installation and testing).
 7. C&D has taken/ is taking the following actions to keep the project on schedule and on budget:
 - Coordinated with LIRR to manage segregated delivery of track and concourse
 - Holding daily meetings with the contractor to discuss production rates and six-week schedule – outreach has been made to contractor leadership to assist and enforce our legal rights
 - Actively monitoring progress and productivity of the contractor's subcontractors
 - Conducted engineering workshops to reduce timeframes for reviews and resolution of issues.
 - Provided pre-default notices to CM014B contractor.
 - Processed change orders only for compliance and safety issues
 - Directed JPMC to engage a 24/7 approach to work activities.
 - Close coordination between JPMC and CS179 to allow for parallel activities within the same workspace

**LIRR Main Line
Expansion**

Project is to add a 10-mile-long third track on the LIRR Main Line to reduce train congestion and enable bi-directional service during peak hours. LIRR Expansion

also includes several related projects, including the elimination of eight street-level grade crossings, improvements to rail bridges, and new parking garages.

Original budget: \$2,588 M EAC: \$2,588 M

Project remains on schedule for in-service 3rd track in Q4 2022.

1. Project is approximately 58% complete and remains on target for cost and schedule (SC expected April 2023). Current project status:
 - Grade Crossings: seven out of eight grade crossings have been eliminated. Four have re-opened as Undergrade Crossings.
 - Stations: Active construction at 5 of 6 stations
 - Parking Structures: Harrison Avenue scheduled to open 12/2020
 - Track and Systems:
 - New Nassau 1 & Nassau 3 Interlocking switches installed
 - Backbone/Motor Generators/Master Locations from Queens to Mineola
 - Retaining and attenuation walls: More than 44,000 LF completed to date (compared to a target of 40,000 LF by end of 2020)
2. 2021 Look-Ahead
 - Grade Crossing Eliminations: Complete all grade crossings, including at Willis Avenue and Main Street in Mineola
 - Bridges: Construct new bridge at Denton Avenue in Garden City
 - Stations: Complete 4 of 6 Stations
 - Parking Structures: Open Westbury North Parking Garage
 - Track & Systems:
 - Commission new Nassau 1 and Nassau 3 Interlockings
 - Continue installing third track
 - Substations
3. Looking ahead:
 - Project is largely nearing completion of heavy civil work, and moving more towards a focus on track, signal systems installation.
 - Remaining civil work is mainly in Mineola, where the close proximity of interlockings, facilities, Mineola Station and town activities make construction complex.

**Second Avenue
Subway Ph 2 (in
design)**

SAS Phase 2 will extend service from 96th Street, utilizing the exiting tunnel segments built in the 1970s, and create three new ADA accessible stations at 106th Street, 116th Street, and 125th Street.

1. Design Status

- The design of an Advanced Utility Relocation contract has been completed.
- Contract documents for two Civil/Structural Design/Build (DB) contracts have been developed and are being finalized with updates to incorporate cost containment items and to address ongoing developer coordination at 125th Street.
- We anticipate completion of a draft of the last DB design package, which includes the systems, MEP and architectural finishes, during Q1 of 2021. Completion of these documents is expected by end of 2021.

2. Cost Containment

- Previous cost containment efforts have already reduced project cost by up to \$1B.
- All cost containment ideas developed by the Joint NYCT/Project Team Cost Containment Task Force have now been evaluated. Savings to be incorporated into final contract documents total \$100 M to \$ 170 M.

3. Federal Funding Status

- The project entered the Project Development phase of the Capital Investment Grant (CIG) program in November 2016. We received the FTA's approval of the environmental re-evaluation (FONSI) in November 2018 and completed the Preliminary Engineering in June 2019.
- After completing the FTA's Risk & Readiness workshop in August 2019, we submitted a request to advance into the next phase ("Engineering" phase) of the grant program.
- In February 2020, the project received a Medium-High rating from FTA which meets eligibility threshold for a grant. The FTA has not taken action on our application for over a year, however, and we have not yet received approval into the Engineering phase which is required before we can request a Full Funding Grant Agreement (FFGA).
- We continue to meet with and share project documents with the FTA's consultant to expedite the FFGA once we have entered Engineering.

**Penn Station
Access (in design)**

Penn Station Access will utilize an existing Amtrak line to introduce a one-seat Metro-North ride into Penn Station. The project will include four new ADA-accessible stations in the East Bronx at Hunts Point, Parkchester/Van Nest, Morris Park, and Co-op City. Penn Station Access includes over 19 miles of new and rehabilitated track work; new and reconfigured interlockings; and the modernization of signal, power, and communication infrastructure.

Project is in the design/procurement phase but the unprecedented financial strain to the MTA caused by COVID-19 has put the project on hold. C&D nevertheless continues to advance the project's environmental review and preliminary engineering design, so that a design-build procurement can move forward once a funding source is identified. Recent activities include:

- Continued coordination with key stakeholders including Metro-North Railroad, Amtrak and freight operators
- Advancing the Environmental Assessment, now under Federal Transit Administration review
- The MTA's Major Construction Review Unit has completed a review of the project with a final report expected in December 2020
- Obtained \$30M in federal funding for the catenary system replacement
- Preliminary design expected to be completed in Q1 2021

December 2020 CPOC Independent Engineering Consultant Project Review

42 St Connection - Integrated Project



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42 St Connection

Program Scope

The 42 Street Connection Project is comprised of 8 contracts designed to improve the customer experience when traversing the 42nd Street Corridor from Grand Central Station to Times Square. The scope includes:

- ADA Accessibility compliance at the 42 Street Shuttle
- Transforming the Shuttle from the current configuration into a two track, six car consist
- Circulation improvements at Grand Central, Times Square, and Bryant Park Stations via new stairs, widening platforms, mezzanines, and existing stairs
- Replacement of escalators and ADA elevators
- Structural Repairs
- New station finishes
- New ADA elevators at Bryant Park
- Fare control improvements to provide free transfer to the 6th Avenue subway Line



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42 St Shuttle

Budget

- IEC has analyzed the project related costs and forecasts the EAC as \$225.6M.
- The project has used the allotted contingency funds but forecast to finish within the budget of \$253.2M due to the large risk reserve.

Schedule

- Project is slightly ahead of the contractual Substantial Completion date of March 2022.
- The project has done a commendable job mitigating potential delays, due to added scope from unforeseen conditions, by taking advantage of the Shuttle shutdown during MTA's Essential Service Plan and accelerating future work when possible.



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42 St Shuttle

IEC Observations

- Most long lead items have been procured and are on site. Some communication cables have been delayed but this currently has no schedule impact.
- Programmatically, this project has demonstrated the need for more invasive field testing and more thorough site surveys in future preliminary design efforts.



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42 St Connection

- Additional Project Currently in Construction
 - Elevator and Escalator Replacement – GCT/Lexington Line
 - Schedule: The contract duration was reduced by 5 months and Substantial Completion was achieved Sept 2020 and is in Closeout.
 - Budget: A \$7M budget modification was required primarily due to increased TA Labor and an acceleration directive. The project finished within the amended budget of \$36.4M.
- Future Projects
 - Access Improvements Grand Central Station
 - Forecast award June 2021 – Original Award March 2020
 - Current Project Budget - \$42.6M



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42 St Connection

- Future Projects (Continued)
 - Grand Central Station Capacity & Accessibility Improvements
 - Forecast award September 2021 – on schedule
 - Bundle Total Budget - \$83.8M
 - Replacement of Lex Line Platform Elevators and Final Completion of Flushing Line Elevator
 - Forecast award March 2021 - Original Award March 2019
 - Current Bundle EAC - \$36.4M
 - Current budget shortfall of approximately \$10M
 - Bryant Park & 5th/6th Ave Station Complex
 - Currently no award forecast
 - Bundle Total Budget - \$53.3M



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December 2020 CPOC Independent Engineering Consultant Project Review

East Side Access



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Budget and Schedule Review

□ Budget

- The Independent Engineering Consultant's (IEC's) analysis indicates the current budget of \$11.13B, with the established allocated and unallocated contingencies, remains sufficient to complete the work required to enter Revenue Service in December 2022.
- The IEC's Estimate at Completion analysis yields a projected cost of \$10.99B, which is \$0.14B under the current budget.

□ Schedule

- The IEC considers the rail systems installation and testing, followed by LIRR takeover period, as critical to the program.
- Provided that recovery efforts for the systems installation, testing, and rail remediation work are implemented, the IEC maintains the forecast of 3.5 months of program contingency remaining to the December 2022 Revenue Service Date.
- Further delays may result in the compression of the LIRR takeover period and/or consumption of program contingency.



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Program Observations

□ Management

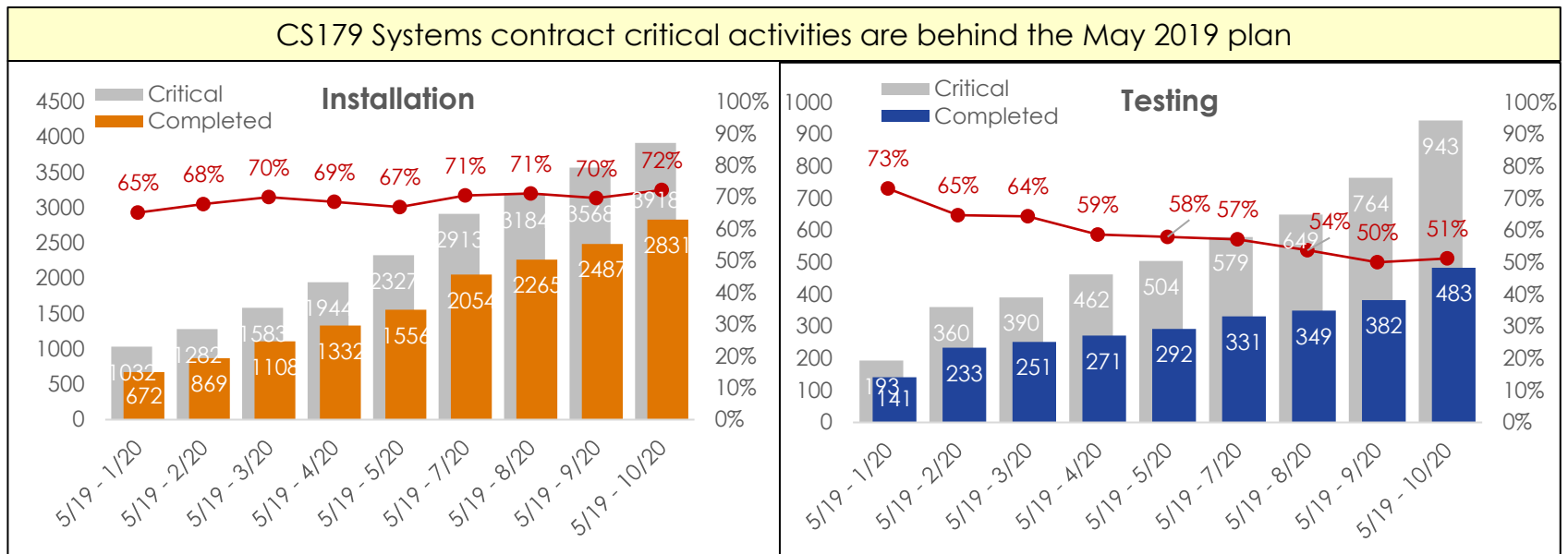
- The IEC has observed improvement in the following program areas led by the Program Management Office (PMO), Construction Management (CM) and Testing and Commissioning (T&C) Group:
 - Tunnel access coordination
 - Water intrusion/ leak remediation efforts
 - Establishing testing readiness mechanisms across all contracts
- Quality and Code Compliance Groups have improved their Quality Assurance Processes, which are facilitating the identification and resolution of the quality issues across all contracts.
 - The IEC has observed numerous incidents where equipment has been damaged and required repairs/replacement. These issues, including the corroded rail, booster fans, and switch machines, are currently being addressed at the contractors' expense. The time period to address the corrective actions should be improved to avoid schedule impacts.
- Challenge remains in getting the GCT Caverns (CM007), GCT Concourse (CM014B) and Facilities Systems (CS179) contractors to achieve the installation and testing productivity rates required to support the program.
- The project team is making efforts to improve the detail of systems testing metrics on a contract level. However, a comprehensive tool should be used to manage and report the testing work against plan for the overall program.



Program Observations

Systems

- Installation and testing work performed by CM007, CM014B, and CS179 continues to be delayed due to contractors' performance, quality issues, and change order work.
- Facility Systems (CS179) Contract
 - Several Local Systems Testing (LST) milestones established in the May 2019 Acceleration/Settlement Agreement have been missed and the upcoming Integrated Systems Testing (IST) milestones indicate delays up to 14 months.
 - The critical installation and testing work remains behind the May 2019 plan, at 28% and 49% respectively, based on the latest risk-informed project schedule (10/1/2020 MCS).



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Risks

- ❑ Contractors' performance (CM007, CM014B and CS179) on installation and testing remains a schedule risk to the program. Continued delays can impact subsequent LIRR takeover of ESA and risk consumption of program contingency.
- ❑ Partial testing work is being performed for specific systems, such as the Backbone Communication System (BCS) IST and Power SCADA LST, to advance the program. The deferral of systems testing is a risk to the overall systems' performance and acceptance by LIRR, which may result in schedule impacts to the program.
- ❑ Lack of protection of equipment by the contractors may compromise the functionality of the equipment and require refurbishment or replacement. This may result in delays to the testing work and subsequent acceptance of equipment by LIRR.
- ❑ Delays to the work performed by JP Morgan Chase may further impact subsequent Integrated Systems Testing and handover of the concourse systems to LIRR.
- ❑ As the amount of concurrent testing activities increases, there is a risk that LIRR, ESA and contractor may not have sufficient resources required to perform and witness local testing and IST across all contracts.
- ❑ Potential delays resulting from the rail remediation work may add schedule pressure to LIRR training of Train and Engine (T&E) crews, and risk consumption of program contingency.



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Recommendations

- With less than 9 months remaining to start the handover of key systems to LIRR, the CM007, CM014B and CS179 contractors should take the opportunity to increase work shifts and/or crews to maximize the installation and testing productivity. This will reduce the risk of further compression of LIRR takeover period and consumption of schedule contingency.
- In addition to the contractors' interim maintenance efforts, the IEC recommends that a robust equipment protection process be instituted. This will ensure the reliability of the equipment and facilitate the acceptance of the equipment by LIRR.
- Observations/ issues logs are being maintained on a contract level. However, as systems and assets cross several contracts, an integrated program-wide log should be developed to track critical issues that are required to be addressed prior to the handover of the systems to LIRR and subsequent Revenue Service.



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Recommendation Log

ESA – IEC Recommendations / Observations Log

Recommendations (April 2018)	Agency Response/ Action	Status
Perform a Systems Risk Assessment and identify mitigations based on the incremental testing approach.	A system risk refresher will be performed, once the impacts of 270 Park work on the program schedule are fully known; in the meantime the system risk are being monitored through a risk register and monthly risk meetings with IEC and OCO.	Ongoing
Manage in-house Force Account (FA) to balance resources between East Side Access and other projects.	LIRR Department of Program Management is refreshing their 5-year outlook to determine what resources will be needed leading to revenue service, to ensure it will be supported.	Ongoing
Recommendations (July 2019)	Agency Response/ Action	Status
LIRR and ESA finalize the required duration for LIRR Takeover of ESA and further develop the existing Takeover Plan. Detail for specific takeover criteria for the required elements and final acceptance of the various assets should be provided.	The Operational Readiness (OpR) Group and LIRR have agreed on handover durations, which are being reflected in the Integrated Project Schedule (IPS) and Master Coordinated Schedule (MCS); the OpR Group continues to coordination meetings to develop LIRR takeover procedures to address outstanding issues, such as the 90-day burn-in period and Positive Train Control (PTC) testing.	Ongoing
Re-introduce Key Performance Indicators (KPI) to measure the progress of installation and testing of critical systems against plan, including: Facility Power, Track and Third Rail, Traction Power, Signal, and Communications.	The project team has created a SQL-based database to track installation and test progress in the field, as well as test-related submittals. Summary reports are being developed. The team is working on populating historical data, focused on HVAC and Fire Detection first.	Ongoing
Recommendations (December 2019)	Agency Response/ Action	Status
To support the project team's efforts to accelerate systems work, the IEC recommends additional resources to strengthen project management and quality control, in particular: <ul style="list-style-type: none"> • Increase Quality Control/ Assurance and Inspection staff. • Identify a Phase Lead/ Manager for all tunnel installation and testing work, including track, signal and traction power. 	Additional resources have been deployed within the systems testing organization, in addition to the new Lead Systems Integrator/Testing Director. For the accelerated Signal Installation (CS086) and Traction Power (CS084) contracts, resources have been strengthened within both teams. As an overview, across CS086, CS084 and CS179, field inspectors have increased by 38% and test engineers by 80% against the December 2019 numbers.	Closed

December 2020 CPOC Independent Engineering Consultant Project Review

Long Island Railroad Expansion



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Long Island Railroad Expansion

Project Scope

The primary purpose of the LIRR Expansion Project is to improve rail service, reliability, and public safety along the LIRR Main Line segment between Floral Park and Hicksville by constructing a third track; eliminating seven grade crossings; various station improvements and modifications; and other related railroad infrastructure improvements.

■ Cost

- Upon review of the design, construction and soft costs, the IEC finds the project budget and EAC are \$2.58B. Project expenditures to date of \$1.22B are in line with plan. Based on expenditures to date, project contingency and estimated future costs, the IEC forecasts an EAC of \$2.49B.



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Long Island Railroad Expansion

□ Schedule

- The IEC's review verifies that the project's Substantial Completion date of April 2023 remains on schedule with D-B invoiced to date at 58% complete vs. 51% of the time expended.
- The critical path goes through the design and construction of Divide 1 and Nassau 2 interlockings.
- Nassau 1 interlocking has been re-sequenced from November 2020 to February 2021 to allow more time for pre-testing and testing acceptance activities. Because there was sufficient float, The IEC agrees this as an effective mitigation approach.
- Underpass construction of Willis Avenue for the Main Line and Oyster Bay Lines have been re-sequenced from October 2020 to March 2021. In the opinion of the IEC, this provides more time for utility relocation efforts.
- Major sub-critical path activities with less than 60 days of float:
 - Hitachi Divide 1 and Nassau 2 design and testing activities
 - MG transformer testing and commissioning
 - Westbury North Parking Garage



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Long Island Railroad Expansion

- **Risks:**
 - **Long lead items:** Delay in procurement of Long lead system items (e.g. signal, substation equipment, track, switches and concrete ties) could impact schedule.
 - The project team is conducting design workshops with Hitachi to focus on progress and advance critical design activities for Nassau 1 cutover.
 - **Utility relocations:** Extensive temporary and permanent utility relocation work is required to advance civil and track construction at Mineola and Willis Avenue.
 - Some progress has been made (soldier piles placed, south side of Willis Avenue utility relocations in progress).
 - Advance closing of Willis avenue for better coordination of utility work.
 - **Force Account support availability:** Several other LIRR projects compete for common services and have similar substantial completion dates. Timely availability of resources is essential.
 - Project Team is proactive in obtaining commitments for resources from stakeholders needed to support planned work.



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Long Island Railroad Expansion

Observations:

- In the opinion of the IEC, the project management team continues to effectively mitigate risks associated with achieving milestones. Furthermore, the effort expended in extensive project controls has yielded positive results in the project's ability to maintain project cost and schedule.
- The IEC observes that the track and signal work scheduled for the end of this year and 1st quarter of 2021, will be challenging.
- Manufacturing delays due to COVID-19 have largely been mitigated however, Hitachi Nassau 3 signal equipment and Myers substation deliveries may be affected if increased restrictions are put in place.
- Project is transitioning from civil construction work to system work, and appropriately, the project is shifting focus to Nassau 1 and PTC activities.



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Joint MNR/LIRR Committee & CPOC Monthly PTC Project Update



December 16, 2020
(Data date of 12/9/2020)



LIRR/MNR Overall PTC Project Status

Schedule

Both LIRR and MNR are on target to meet FRA compliance by the December 31, 2020 deadline

MNR has 100% of their 244.3 route miles in PTC

LIRR has 100% of their 305 route miles in PTC

LIRR/MNR received FRA conditional approval of their Safety Plans in November

LIRR/MNR are interoperable with Tenant Railroads

Budget

\$1.159B Current Budget



LIRR PTC ERSD Timeline and Look-ahead

November 2020

- ✓ Conditional approval of Safety Plan

December 2020

- ✓ Harold ERSD (Mile Post 0 to 5) (previously November)
- ✓ Commence NYAR into PTC operations
- ✓ Commence M9 fleet and work trains (E15) into PTC operations
- ✓ Interoperability between LIRR and Amtrak (previously November)
 - HMAC deployment on Amtrak/NJT trains pending Amtrak/NJT readiness
 - Operational STS-STIS interface pending Amtrak readiness

After PTC Deadline

- Two-year RAMS (Reliability, Availability, Maintainability, Safety) period in 2021-2022
- Update of Amtrak's b2b on-board software so Amtrak trains can be fully interoperable with LIRR.
- Updates to system software to make operational improvements and correct variances
- Warranty Program and on-going maintenance and training activities.



LIRR Project Update

ERSD

- Achieved ERSD on 100% of LIRR's 305 route miles.
- Harold ERSD commenced on December 5, 2020.

Fleet Deployment

- The entire LIRR fleet has been updated with the latest version of its on-board and communications software to operate in PTC.
- NYAR locomotives have started to operate in PTC with full ramp through December.
- M9 fleet approved to operate in PTC on Amtrak territory.

Safety Plan

- Received conditional approval by FRA of Safety Plan on November 16, 2020.
- New PTC requirements set forth in FRA's conditional approval may require additional funding.
- LIRR's PTC system is safety certified by FRA and no longer considered in ERSD.



LIRR Project Update (continued)

Interoperability between LIRR and Amtrak

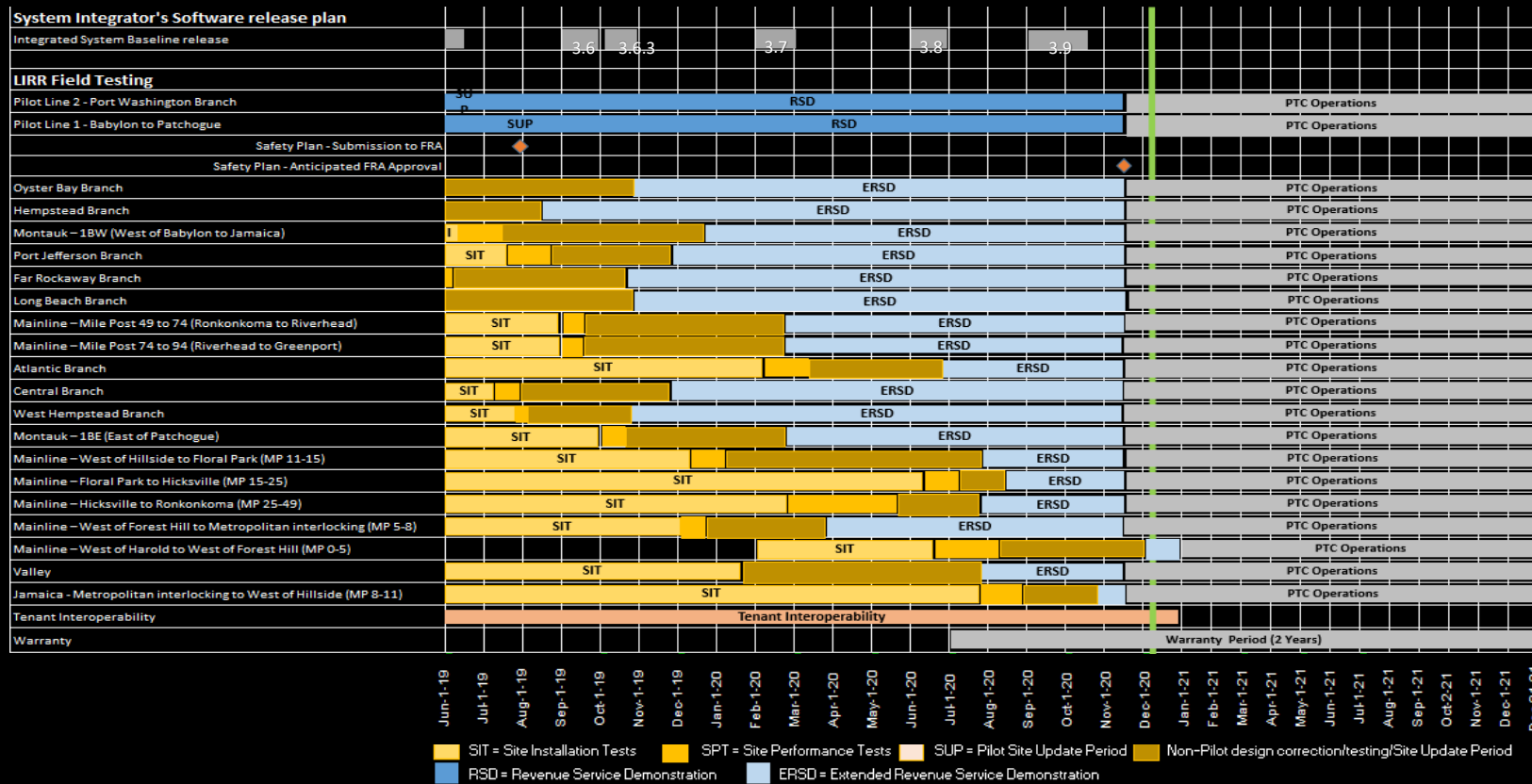
- LIRR and Amtrak are interoperable on joint PSCC territory (F interlocking and Harold).
- TSR enforcement of Amtrak trains through Joint PSCC territory successfully tested.
- Amtrak fleet (ACS64, Acela Legacy, Diesel switcher) approved to operate on LIRR territory.
- LIRR M9 fleet approved to operate on Amtrak territory.
- Field testing of STS-STS interface completed using Amtrak’s production server.

Pending Amtrak activities for full interoperability to be completed in December include:

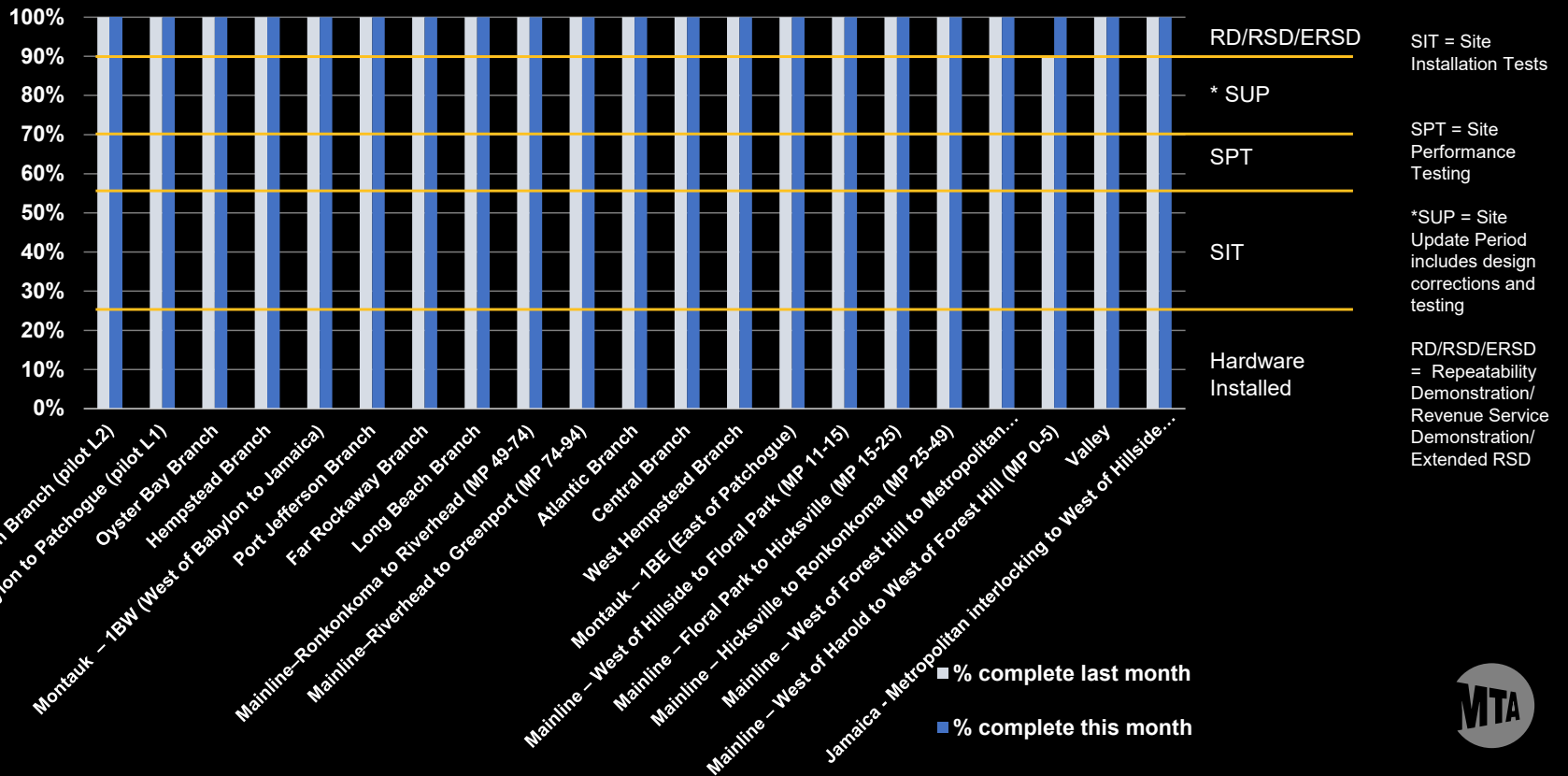
- Commissioning of Amtrak Safety server at PSCC for an operational STS-STS safety server interface
 - *No issues anticipated, but an operational workaround (see slide 8) in place as back-up.*
- Activation of HMAC keys on all Amtrak/NJT revenue trains
 - *Only trains with HMAC will be allowed to operate on LIRR for December 31, 2020 deadline.*
 - *A subset of Amtrak/NJT trains have already been tested to validate proper configuration.*
 - *Full deployment planned in mid-December.*
- TSR enforcement of NJT trains (through Amtrak’s F interlocking area) – pending NJT readiness.
 - *NJT is Amtrak’s tenant and will not be allowed to operate if not ready by December 31, 2020 deadline.*



LIRR Working Schedule and Sequence



LIRR Segment RSD Readiness (Previous vs Current Month)



Key Milestones and Issues (LIRR & MNR)

Status	Activity	Issues		
<p style="text-align: center;">● Green (Current)</p> <p style="text-align: center;">● Green (Previous)</p> <p style="text-align: center;">● Red</p> <p style="text-align: center;">● Yellow</p> <p style="text-align: center;">● Green</p> <p style="font-size: small;">Significant impact to Project Schedule and ability to meet PTC deadline.</p> <p style="font-size: small;">Impact to Project Schedule or interim project milestone and may impact ability to meet PTC deadline.</p> <p style="font-size: small;">No Near Term Impact to Project Schedule and on target to meet PTC deadline.</p>	<p>Delivery and implementation of System Software for STS-STS safety server interface for Interoperability with Amtrak</p> <p>Baseline 3.9</p> <tr style="background-color: #FFD700;"> <td colspan="2" style="text-align: center;">Date Needed</td> </tr> <p>November 2020</p>	Date Needed		<p>Issues:</p> <ul style="list-style-type: none"> Timely delivery of System Software Release 3.9 for the STS-STS safety server interface for FRA compliance and interoperability with Amtrak. <p>Monthly Update:</p> <ul style="list-style-type: none"> The physical connectivity between LIRR and Amtrak safety servers are installed, tested and ready. Static testing and database validation (pending review of live data captured in logs) for production configuration successfully completed. Operational STS-STS safety server interface scheduled for completion in mid-December. <p>Drivers:</p> <ul style="list-style-type: none"> Changes to MTA’s design for the safety server interface was modified to align with an updated specification from Amtrak in early 2018. <p>Mitigations:</p> <ul style="list-style-type: none"> The Railroads have an operational workaround (already discussed with FRA) should interface fail to be operational at end of 2020. This mitigation does not impact MTA trains. <p>Potential Impacts:</p> <ul style="list-style-type: none"> MTA will need to implement an operational mitigation if interface is not available at the end of the year.
Date Needed				



MNR Project Update

Segment in full PTC Functionality:

Total route miles in full PTC – 244.3 miles (100%)

- Hudson Line (GCT – CP75) – 74.8 miles
- Harlem Line (CP106 – CP182) – 76.9 miles
- New Haven Line (CP212 – CP274) – 61 miles
- Danbury Branch – 24.2 miles
- New Canaan Branch – 6.3 miles

PTC Implementation Summary:

- All trains for Hudson & Harlem Lines and Danbury Branch are operating with full PTC Functionality.
- Over 151,500 Revenue Trains ran in full PTC mode from August 2019 – Nov 2020
- Waterbury Branch is currently operating under PTC Main Line Track Exclusion Addendum
- Amtrak passenger trains (Rev10 & 11) are interoperable on the Hudson and New Haven Lines.
- CSX and P&W freights (Rev10 & 11) are interoperable on the Hudson & New Haven Lines and Danbury Branch



MNR Project Update (continued)

Field Installation & Testing

- Completed activation of Over the Air Security (HMAL) on MNR Wayside and Fleets
 - Activations for Amtrak and Freight trains commenced, remaining to be completed by Dec 2020
- New Haven Boundary integration route testing is completed and commissioned on Dec 4th 2020
- Onboard OBC Software Update for release 5.2.17 is completed
- Continue to mitigate technical and operational issues

Amtrak Boundary Installation & Commissioning

- Poughkeepsie – Completed and commissioned December 5th 2019
- Spuyten Duyvil - Completed and commissioned May 28th 2020
- New Rochelle – Completed and commissioned Sept 12th 2020
- New Haven – Completed and commissioned on Dec 4th 2020
- STS-STIS Interface – Testing commenced, commissioning scheduled for completion in Mid Dec 2020

MNR received Safety Plan Conditional Approval from the FRA on Nov 25th 2020



MNR M8 Project Update

Current Project Status

- Received Alstom Safety Case and Software Safety Delivery Sheet for ERSD OBC Software release P2
- Bombardier Wayside Integration field testing of RC2 report completed and submitted to the FRA in preparation for ERSD. FRA Approval received to begin ERSD
- Received Bombardier M8 Safety Certification on Dec 1st 2020
- M8 Fleet ERSD commenced on Dec 3rd 2020
- Continued replacement of upgraded ATC/ACSES hardware, 114 out of 125 required married pairs completed
- Implemented MCM Software w/HMAC security features – 99 pairs upgraded
- Implemented Operational Mitigations due to differences between the Alstom and Siemens OBC systems

Upcoming Milestones

- Continue ERSD of the M8 fleet and upgrade fleet to meet service needs for full PTC head-end service
- Continue replacement of upgraded ATC/ACSES hardware on M8 fleet
- Commence variance resolution and establish target of next OBC Software Release in 2021

MNR Port Jervis and Pascack Valley Line Update

Port Jervis Line

Current Project Status

- MNR commissioned the Cab Signaling with last segment completed in March 2020
- MNR completed PTC Wayside (Transponder, WIU and Radio Case) installations
- NJT completed PTC Office and Onboard installations
- Transponder, WIU and Communications configuration and installation testing is completed
- Functional testing and error free runs of the integrated system are completed
- ERSD commenced between Suffern and Campbell Hall on Dec 5th

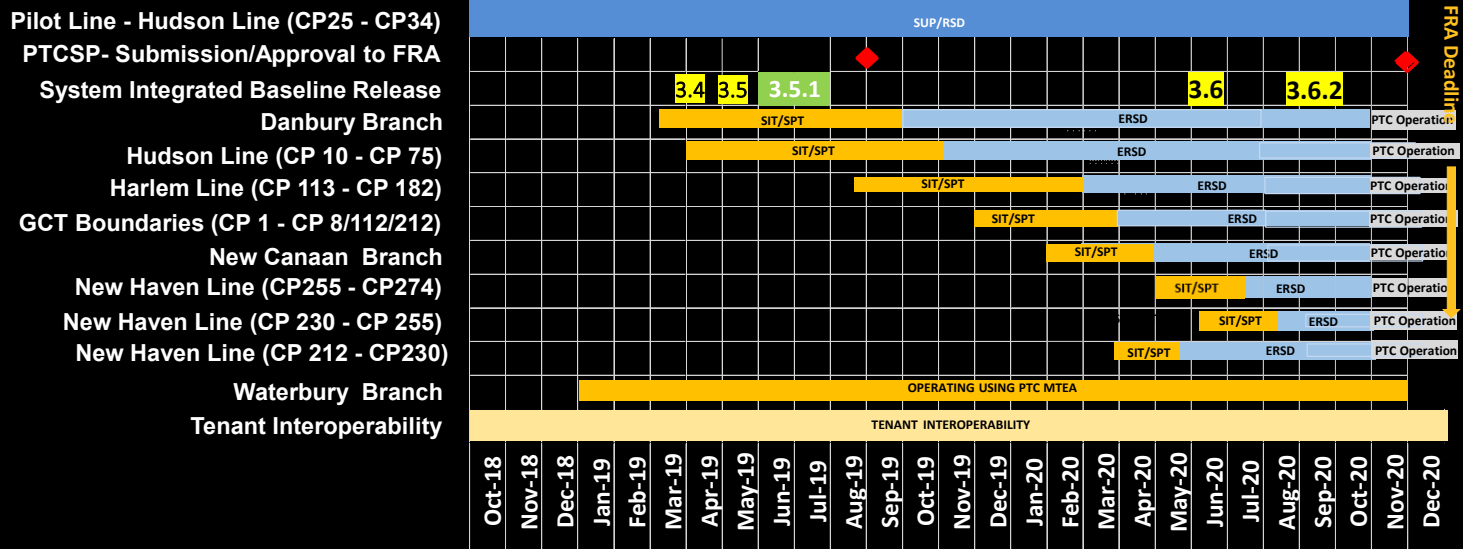
Upcoming Milestones

- ERSD on the remaining section of Port Jervis Line between Campbell Hall and Port Jervis by Dec 2020

Pascack Valley Line

- Entered ERSD in Sept 2020

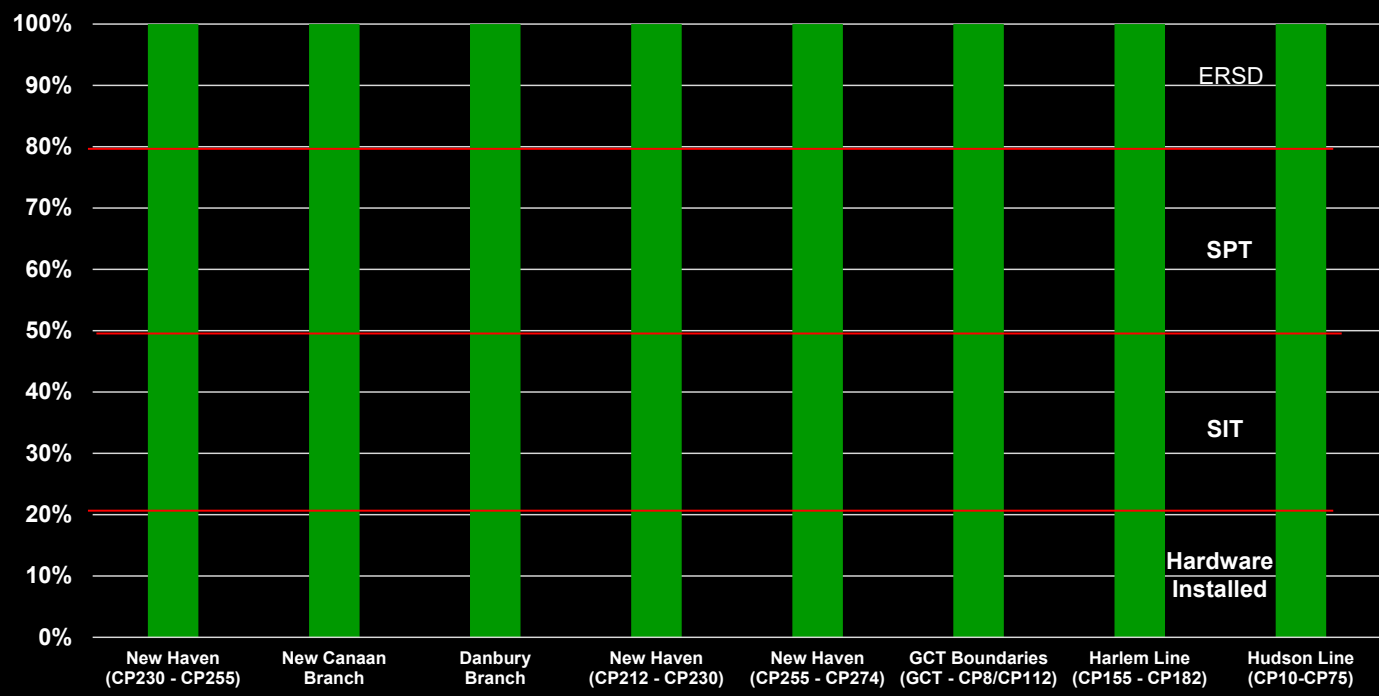
MNR Schedule and Sequence



SIT - Site Installation Testing/SUP -Site Update Period/RSD - Revenue Service Demonstration/SPT – Site Performance Test
 ERSD - Extended Revenue Service Demonstration
 Waterbury Branch – Operating under Main Line Track Exclusion Addendum (MTEA). Installation of Signal System ongoing



MNR Segment ERSD Readiness



SIT = Site Integration Testing, SPT = Site Performance Testing, ERSD = Extended Revenue Service Demonstration.

■ % complete ■ Remaining



Key Milestones and Issues (MNR Only)

Status	Activity	Issues
<p>● Green (Current)</p> <p>● Yellow (Previous)</p>	<p>Integration for the M8 OBC into the MNR Wayside for ERSD</p>	<p>Issues:</p> <ul style="list-style-type: none"> • Complete M8 Fleet Hardware and Software Upgrade for full PTC Operability • Complete Gap analysis, design and implement mitigating measures • Complete M8 OBC Qualification and Integration Testing in MNR / BT Wayside Environment <p>Monthly Update:</p> <ul style="list-style-type: none"> • Alstom completed field qualification testing and provided Safety Case and Software Safety Delivery Sheet for ERSD OBC Software release P2. • Bombardier Wayside Integration field testing of RC2 report completed and submitted to the FRA in preparation for ERSD. FRA Approval received to begin ERSD the week of 11/30th. • M8 Fleet ERSD commenced on December 3rd 2020. • Continued replacement of upgraded ATC/ACSES hardware, 114 out of 125 pairs completed. • Review and provide documentation required by Bombardier for M8 Safety Certification • Implemented MCM Software w/HMAC security features – 99 pairs upgraded
<p>● Significant impact to Project Schedule and ability to meet PTC deadline. Red</p> <p>● Impact to Project Schedule or interim project milestone and may impact ability to meet PTC deadline. Yellow</p> <p>● No Near Term Impact to Project Schedule and on target to meet PTC deadline. Green</p>	<p>Date Needed</p> <p>December 2020</p>	<p>Drivers:</p> <ul style="list-style-type: none"> • Continued production schedule adherence for upgraded ATC/ACSES Mechanisms for replacement • Safety Certification of OBC and to MNR Wayside Environment by both Alstom and Bombardier, respectively. • Submission of Safety Documentation to FRA for M8 Fleet to Enter ERSD <p>Mitigations:</p> <ul style="list-style-type: none"> • Complete Operational mitigations identified in the Gap analysis and qualified through field testing • Develop Operational mitigations for implementation prior to ERSD Start <p>Potential Impacts:</p> <ul style="list-style-type: none"> • Potential risk of not completing entire M8 fleet with both hardware and software PTC upgrades



MNR PTC ERSD Timeline

Sept – Nov 2020

- ✓ New Rochelle Line Boundary with Amtrak
- ✓ Pascack Valley ERSD
- ✓ HMAC Over the Air Security Implementation

Dec 2020

- ✓ New Haven Line Boundary with Amtrak (Previously September)
- STS – STS Amtrak Boundary Interface (Previously September)
- Port Jervis Line ERSD

After PTC Deadline

- Two-year RAMS (Reliability, Availability, Maintainability, Safety) period in 2021-2022
- Updates to system software to make operational improvements and correct variances
- PTC for Waterbury Branch and New Haven Signal Upgrades



December 2020 CPOC Independent Engineering Consultant Project Review

Positive Train Control



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IEC Conclusion

Both LIRR and MNR are in good position to achieve PTC Compliance by December 2020. The Railroads were successful in extending revenue service demonstrations to 100% of their territories with minimum impact from COVID-19. The IEC commends the Project Management Team on this major achievement. Further, the Railroads have been effective in mitigating identified risks and implementing operational workarounds to address technical issues. However, recent delay by Amtrak has depleted schedule contingency for compliance with interoperability requirement. The deployment of the STS-STS interfaces with Amtrak is now scheduled for mid December.



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Budget Review

- The current budget and EAC is \$1.159B.
- Additional funds (\$41M for LIRR and \$32M for MNR) to support project needs until substantial completion (December 2022) are included in the current budget.
- Based on the IEC budget analysis, the current budget is sufficient to fund post compliance project activities. However, additional funds may be required to implement FRA requirements set forth in its conditional approvals of the PTC safety plans.



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Schedule Review

- Both LIRR and MNR have been successful in implementing E-RSD on 100% of their territories with minimum impact from COVID-19:
- MNR made significant progress to integrate M8 fleet into PTC operation.
 - Testing of the M8 Alstom software has uncovered a number of variances, which were addressed using operational workaround
 - Safety certification of the M8 software was achieved on December 1,
 - Commenced E-RSD operation for M-8 trains on December 3.
- Amtrak delayed compliance with interoperability requirements:
 - Amtrak technical issues delayed full PTC implementation at Harold from November to December,
 - Deployment of STS-STS software was also delayed to December due to unavailability of Amtrak safety servers,
 - Activation of HMAC keys on Amtrak and NJ Transit trains has been delayed and is currently scheduled for mid December.



IEC Observations

- The project team and the SI have taken actions to mitigate the risks identified by the IEC in previous reports, including:
 - Improving software development and testing processes,
 - Working closely with Amtrak to comply with interoperability requirements,
 - Developing and implementing a plan to integrate M8 Fleet into PTC operation,
 - Establishing, implementing and monitoring a plan to resolve Non Conformance Report issues that are needed for compliance.
- LIRR & MNR received FRA conditional approval of their safety plans.
- Extensive work is required post compliance to achieve Substantial Completion by December 2022, including:
 - Achieve full interoperability with Amtrak at Harold,
 - Software development to address operational issues,
 - Addressing remaining software variances,
 - Maintenance, training and asset management activities.



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Project Risks

- Amtrak delay in providing connectivity to its safety server has delayed the deployment of the STS-STS interfaces, and has depleted the remaining schedule contingency for compliance. Any further delay in STS-STS deployment could impact compliance and would necessitate the implementation of an operational workaround that is acceptable to the FRA.
- Both Amtrak and NJ Transit have not completed the activation of the HMAC Keys (encryption function) on trains operating through Harold. Any further activation delays will impact the operation of these trains on LIRR territory.



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MTA Capital Program Commitments & Completions

through November 30, 2020

Capital Projects – Major Commitments – November 2020

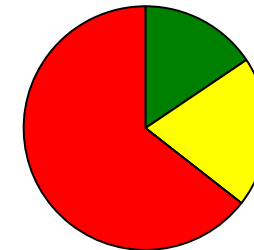
In 2020, agencies have a goal of \$13.5 billion in overall commitments. 51 major commitments are included; 29 for NYCT, eleven for LIRR, four for MNR, one for B&T, four for Network Expansion, and two for MTA Bus.

The MTA's Chairman Pat Foye announced at the March 25th Board meeting that capital work commitments will only be considered on an exception basis. This action has impacted commitments since then. As a result, the MTA's \$13.5 billion 2020 commitment plan is under review.

Through November, agencies have committed \$4.3 billion including \$535 million of unplanned commitments versus a \$11.7 billion YTD goal. The shortfall is mainly due to slips of twenty-nine major commitments pursuant to the moratorium on new commitments announced by the MTA Chairman. The twenty-nine major slips are explained on the following pages.

Since the last report to the MTA Board in November 2020, the year end 2020 forecast is now 42%, which reflects the anticipated movement of \$6.7 billion of commitments into 2021 and 2022.

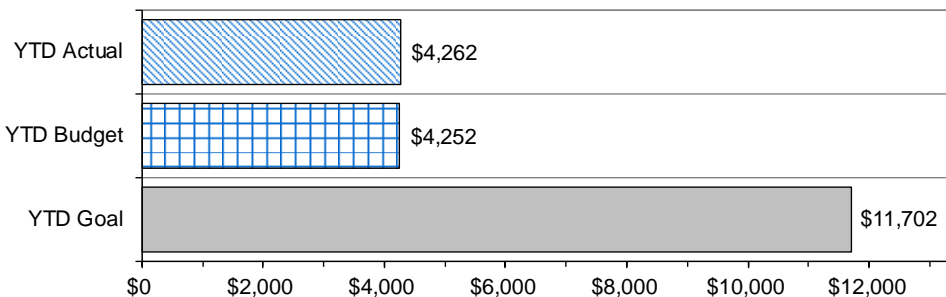
Year-to-Date Major Commitments



	Count	Percent	Change from Prior Month
GREEN = Commitments made/forecast w/in Goal	7	16%	-
YELLOW = Commitments delayed beyond Goal (already achieved)	9	20%	-
RED = Commitments delayed beyond Goal (not yet achieved)	29	64%	↑ 3
Total	45	100%	↑ 3

Budget Analysis

2020 Annual Goal	\$13,497	(\$ in millions)
2020 Forecast	42%	of Annual Goal
Forecast Left to commit	25%	(\$1,422)



Year-to-Date Agency Breakdown

2020 Goals	Prior month variance		
	GREEN	YELLOW	RED
New York City Transit			
4 GREEN, 3 YELLOW, 19 RED	---	---	+1 RED
Long Island Rail Road			
2 GREEN, 2 YELLOW, 6 RED	---	---	---
Metro-North Railroad			
2 GREEN, 2 YELLOW	---	---	+1 RED
Bridges and Tunnels			
	---	---	---
Capital Construction Company			
1 GREEN, 1 YELLOW, 2 RED	---	---	+1 RED
MTA Bus Company			
1 GREEN	---	---	---
MTA Police Department			
	---	---	---

Capital Projects – Major Commitments – November 2020 – Schedule Variances

Project	Commitment	Goal	Forecast
29 All-Agency Red Commitments (3 New Items)			
NYCT			
<i>Passenger Stations</i>			
Replace 8 Escalators / Various	Construction Award	Mar-20	Jan-21
		\$62.0	\$61.0
The award is delayed due to the financial impact on the MTA as a result of the COVID-19 pandemic. Cost decrease reflects favorable bids.			
Replace 12 Escalators	Construction Award	May-20	Jul-21
		\$111.9	\$114.1
The award is delayed due to the financial impact on the MTA as a result of the COVID-19 pandemic. Cost increase reflects latest estimates.			
ADA and Station Improvements: Westchester Square / PEL	Construction Award	May-20	Mar-21
		\$90.0	\$94.4
The award is delayed due to necessary coordination with other projects. Cost increase reflects additional scope.			
Overcoating: 17 Bridges & East 180 Street Flyover / Dyre Av	Construction Award	Aug-20	Nov-21
		\$132.5	\$143.7
The award is delayed due to the financial impact on the MTA as a result of the COVID-19 pandemic. Cost increase reflects latest estimates and additional scope.			
Replace 8 Traction Elevators / Various	Construction Award	Jun-20	Jul-21
		\$65.4	\$65.9
The award is delayed due to the financial impact on the MTA as a result of the COVID-19 pandemic. Cost increase reflects latest estimates and additional scope.			
ADA: 14 St Complex Bundle	Construction Award	Jul-20	Mar-21
		\$231.5	\$374.0
The award is delayed due to necessary coordination with other projects. Cost increase reflects additional scope.			
Flushing (ADA/ Renewals/ Components) Bundle	Construction Award	Sep-20	Jul-21
		\$520.7	\$605.0
The award is delayed due to the financial impact on the MTA as a result of the COVID-19 pandemic. Cost increase reflects additional scope.			
Replace 11 Hydraulic Elevators / Various	Construction Award	Mar-20	Jan-21
		\$65.9	\$69.6
The award is delayed due to the financial impact on the MTA as a result of the COVID-19 pandemic. Cost increase reflects project complexity and unfavorable bids.			

Project	Commitment	Goal	Forecast
NYCT			
<i>Passenger Stations</i>			
ADA: Wave A1 Bundle	Construction Award	Sep-20	Jul-21
		\$391.7	\$235.4
The award is delayed due to the financial impact on the MTA as a result of the COVID-19 pandemic. Cost decrease reflects reduced number of stations now to be awarded under ADA: 8 Stations (Pkg A) (see below) and latest estimates.			
ADA: Wave A2 Bundle	Construction Award	Sep-20	Jul-21
		\$788.8	\$402.1
The award is delayed due to the financial impact on the MTA as a result of the COVID-19 pandemic. Cost decrease reflects reduced number of stations now to be awarded under ADA: 8 Stations (Pkg A) (see below) and latest estimates.			
ADA: Wave A3 Bundle	Construction Award	Sep-20	Jul-21
		\$592.3	\$444.7
The award is delayed due to the financial impact on the MTA as a result of the COVID-19 pandemic. Cost decrease reflects reduced number of stations now to be awarded under ADA: 8 Stations (Pkg A) (see below) and latest estimates.			
ADA: 8 Stations (Pkg A)	Construction Award	Sep-20	Dec-20
		\$0.0	\$582.0
Eight (8) ADA stations from Wave A bundles are now packaged to be awarded separately in a new (Pkg A) bundle.			
ADA: Woodhaven and Jamaica Renewals	Construction Award	Sep-20	Feb-21
		\$239.2	\$313.2
The award is delayed due to the financial impact on the MTA as a result of the COVID-19 pandemic. Cost increase reflects project complexity and market conditions and the addition of Court Square ADA project to the bundle.			
Culver ROW (Painting) Bundle	Construction Award	Oct-20	Feb-22
		\$161.8	\$161.8
The award is delayed due to changes in specifications/methodology. Prior delay was due to the financial impact on the MTA as a result of the COVID-19 pandemic.			
Jamaica Painting Bundle (New Item)	Construction Award	Nov-20	May-22
		\$98.4	\$98.4
The award is delayed due to changes in specifications/methodology.			

Capital Projects – Major Commitments – November 2020 – Schedule Variances

Project	Commitment	Goal	Forecast	Project	Commitment	Goal	Forecast
29 All-Agency Red Commitments (continued)							
NYCT				LIRR			
<i>Shops and Yards</i>				<i>Rolling Stock</i>			
Rail Car Acceptance and Testing Facility, Brooklyn	Construction Award	Jul-20	Apr-21	M-9 Rolling Stock Procurement - 54-Car (Option)	Construction Award	Jun-20	Mar-21
		\$78.9	\$78.9			\$243.0	\$243.0
The award is delayed due to unresolved ground lease agreement issues.				The LIRR continues to negotiate with the vendor. Board approval is required to exercise this option.			
<i>Rolling Stock</i>				<i>Work Locomotives</i>			
Purchase 84 Hybrid-Electric & 139 Standard Buses (New Flyer)	Construction Award	Mar-20	Jul-21			Sep-20	Mar-21
		\$161.8	\$162.6			\$35.2	\$35.2
The award is delayed due to the financial impact on the MTA as a result of the COVID-19 pandemic. Cost increase reflects final negotiated price.				The award was delayed due to a review of the procurement by the MTA Office of the Inspector General. LIRR Legal notified the project team that MTA OIG closed their investigation without issuing a report. The procurement is now proceeding with an anticipated task opening date of March 2021.			
<i>Track</i>				<i>Power</i>			
8th Ave ROW (Misc.) Bundle	Construction Award	Oct-20	Jan-21	Substation Repl Package II-3P Construction	Construction Award	Sep-20	Dec-20
		\$201.2	\$230.6			\$18.0	\$18.0
The award is delayed due to the financial impact on the MTA as a result of the COVID-19 pandemic. Cost increase reflects the addition of platform component and Mezzanine Structural Rehab & Water Remedy at Canal St/8Av projects to the bundle.				The award is delayed due to the financial impact on the MTA as a result of the COVID-19 pandemic.			
<i>Hurricane Sandy</i>				<i>Hurricane Sandy</i>			
Sandy Repairs: Mainline Track - 200 St - 207 St / 8th Ave	Construction Award	Oct-20	Mar-21	LIC Yard Restoration (wall/pump)	Construction Award	Oct-20	Mar-21
		\$122.8	\$137.0			\$13.4	\$13.4
The award is delayed due to the financial impact on the MTA as a result of the COVID-19 pandemic. Cost increase reflects latest estimates.				The award is delayed to allow more time to resolve project budget and real estate acquisition issues.			
LIRR				MNR			
<i>PSNY</i>				<i>Stations</i>			
PNSY 33rd St Corridor- Phase 1A	Construction Award	Jun-20	Dec-20	Harlem Line Station Improvements	Construction Award	Apr-20	Apr-21
		\$24.0	\$24.0			\$16.3	\$16.3
This award is the balance of Phase I and II support costs. The award is delayed to reflect timing of Phase II award.				The award is delayed due to the financial impact on the MTA as a result of the COVID-19 pandemic.			
PNSY 33rd St Corridor- Phase II	Construction Award	Jun-20	Dec-20	GCT Trainshed (New Item)	Construction Award	Nov-20	Mar-21
		\$380.0	\$380.0			\$168.3	\$168.3
The award is delayed to finalize legal terms and conditions.				The award is delayed due to the financial impact on the MTA as a result of the COVID-19 pandemic.			

Capital Projects – Major Commitments – November 2020 – Schedule Variances

Project	Commitment	Goal	Forecast
29 All-Agency Red Commitments (continued)			
Network Expansion			
<i>East Side Access</i>			
Rolling Stock Procurement M-9A Cars	Construction Award	Jun-20 \$367.0	Mar-21 \$367.0
The request for proposals was modified to maximize competition and as a result the associated negotiations have extended the procurement phase.			
<i>Penn Station Access</i>			
Track & Structures, Communications & Signals, Power, Stations, Shops & Yards (Penn Station Access) (New Item)	Construction Award	Nov-20 \$1069.7	Apr-21 \$1071.1
The award is delayed due to the financial impact on the MTA as a result of the COVID-19 pandemic.			

Capital Projects – Major Commitments – November 2020 – Schedule Variances
Actual Results Shaded

Project	Commitment	Goal	Actual
9 All-Agency Yellow Commitments			
NYCT			
<i>Line Structures</i>			
Eastern Parkway (Line Structures)	Construction Award	Apr-20 \$135.6	Jun-20(A) \$77.1
The original award was delayed due to the financial impact on the MTA as a result of the COVID-19 pandemic. Completion date was advanced as part of the MTA's acceleration program. Cost decrease reflects favorable bids.			
<i>Rolling Stock</i>			
Purchase 25 Hybrid Locomotives	Construction Award	Apr-20 \$225.3	Aug-20(A) \$257.8
The award was delayed due to additional technical review of alternate battery proposals. Cost increase reflects final negotiated bid price.			
<i>Passenger Stations</i>			
ADA: Tremont & 149 Street - Grand Concourse Complex	Construction Award	Jun-20 \$161.8	Aug-20(A) \$160.4
The award was delayed due to the financial impact on the MTA as a result of the COVID-19 pandemic. Cost decrease reflects favorable bids.			
MTA Bus			
<i>MTA Bus Company</i>			
Depot Rehab - College Point	Construction Award	Mar-20 \$9.5	Oct-20(A) \$9.4
The award was delayed due to the financial impact on the MTA as a result of the COVID-19 pandemic.			

Project	Commitment	Goal	Actual
LIRR			
<i>PSNY</i>			
PNSY 33rd St Corridor- Phase 1A	Construction Award	Mar-20 \$24.0	May-20(A) \$24.0
This award is the first half of Phase I support costs. The balance of Phase I and II support costs is delayed to November to reflect timing of Phase II award.			
PNSY 33rd St Corridor- Phase 1B	Construction Award	Mar-20 \$44.4	Jul-20(A) \$42.5
A Memorandum of Understanding (MOU) was executed with NYS for its contribution to the project budget.			
MNR			
<i>Track and Structures</i>			
Harlem River Lift Bridge SuperStructure/Pier Repair	Construction Award	Mar-20 \$15.0	Aug-20(A) \$15.0
The award was delayed due to the financial impact on the MTA as a result of the COVID-19 pandemic.			
Harlem River Fender	Construction Award	Mar-20 \$6.0	Aug-20(A) \$6.0
The award was delayed due to the financial impact on the MTA as a result of the COVID-19 pandemic.			
Network Expansion			
<i>East Side Access</i>			
Harold Interlocking Catenary	Construction Award	Jun-20 \$63.9	Sep-20(A) \$90.4
The award was delayed due to an extended RFQ period to permit more time for proposers to assemble qualified teams and obtain more competitive bidders, the addition of contract modification to include the CH064 scope for the Mid-Day Storage Yard connections and additional track work, and COVID-19 related procurements pause.			

Capital Projects – Major Completions – November 2020

In 2020, agencies have a goal of \$5.4 billion in overall completions. 40 major completions are included, including 19 for NYCT, eight for the LIRR, seven for MNR, four for B&T, one for Network Expansion, and one for MTA PD.

Through November, agencies have completed \$3 billion versus a \$4.3 billion YTD goal. This includes the recent on-time completion of NYCT’s Canarsie Tube Sandy repair work (\$781 million). The overall shortfall is primarily due to slips of fourteen major completions explained on the following pages.

Since the last report to the MTA Board in November 2020, the year end 2020 forecast has slipped from 80% to 76%, which relies on achieving \$697 million of completions in December 2020.

Year-to-Date Major Completions

	Count	Percent	Change from Prior Month
GREEN = Completions made/forecast within Goal	14	39%	↑ 4
YELLOW = Completions delayed beyond Goal (already achieved)	8	22%	↑ 2
RED = Completions delayed beyond Goal (not yet achieved)	14	39%	-
Total	36	100%	↑ 6

Budget Analysis

2020 Annual Goal	\$5,390	(\$ in millions)
2020 Forecast	76%	of Annual Goal
Forecast left to complete	27%	(\$1,104)

Category	Rolling Stock	Total
YTD Actual	\$334	\$2,993
YTD Goal	\$334	\$4,348

Year-to-Date Agency Breakdown

2020 Goals	Prior month variance		
	GREEN	YELLOW	RED
New York City Transit			
7	+2 GREEN	+2 YELLOW	---
Long Island Rail Road			
4	---	---	---
Metro-North Railroad			
1	+1 GREEN	---	---
Bridges and Tunnels			
2	+1 GREEN	---	---
Capital Construction Company			
1	---	---	---
MTA Bus Company			
	---	---	---
MTA Police Department			
1	---	---	---

Capital Projects – Major Completions – November 2020 – Schedule Variances

Project	Completion	Goal	Forecast	Project	Completion	Goal	Forecast
14 All-Agency Red Completions (2 New Items)				LIRR			
NYCT				<i>Shops and Yards</i>			
<i>Traction Power</i>				<hr/>			
New Substation & CBHs: Maspeh Av-Humboldt St / Canarsie (New item)	Construction	Nov-20	Mar-21	Diesel Locomotive Shop Improvements	Construction	May-20	Dec-20
		\$59.2	\$59.5			\$89.8	\$94.4
Project completion slippage due to Ground & Test device modifications to address Con Edison comments/concerns and a subsequent High Tension (HT) energization delay.				Project completion delayed due to the design and fabrication of a diesel fire pump and emergency generator as well as delays related to the COVID-19 pandemic.			
New Substation: Harrison Pl / Canarsie (New Item)	Construction	Nov-20	Mar-21	<i>Track</i>			
		\$52.1	\$52.0	Massapequa Pocket Track	Construction	Feb-20	Jul-22
Project completion delayed due to Con Edison finalizing comments on Ground & Test device.						\$19.6	\$19.6
<i>Passenger Stations</i>				The cutover of the signal systems was completed on schedule. Additional work remains to resurface and realign track before putting this asset into service. A schedule for addressing this work is under development.			
ADA: Gun Hill Rd / Dyre	Construction	Jul-20	Dec-20	<i>Rolling Stock</i>			
		\$54.5	\$55.3	Rolling Stock: M-9 Procurement	Rolling Stock Purchase	May-20	Apr-22
Project completion delayed due to field conditions requiring design changes of Mezzanine Canopy structure and additional GOS.						\$300.8	\$300.8
ADA: Greenpoint Avenue / Crosstown	Construction	Oct-20	Dec-20	Project completion delayed due to issues in testing first cars and the production facility temporarily closing due to the COVID-19 pandemic.			
		\$38.3	\$36.4	<hr/>			
Project completion delayed due to COVID-19 pandemic impact on fabrication and delivery of elevator glass activity which lies on critical path of this project. Cost decrease reflects latest estimates.							
ADA: Eastern Parkway-Brooklyn Museum / EPK	Construction	Oct-20	Dec-20				
		\$38.6	\$39.3				
Project completion delayed due to unanticipated field issues during final testing of the communications systems. Cost increase due to latest estimates.							
<i>Staten Island Railway</i>							
SIR: Mainline & Clifton Yard Track and Switch Reconfiguration	Construction	Oct-20	Sep-21				
		\$63.0	\$63.3				
Project completion delayed due to scope change for additional two (2) miles of track.							

Capital Projects – Major Completions – November 2020 – Schedule Variances

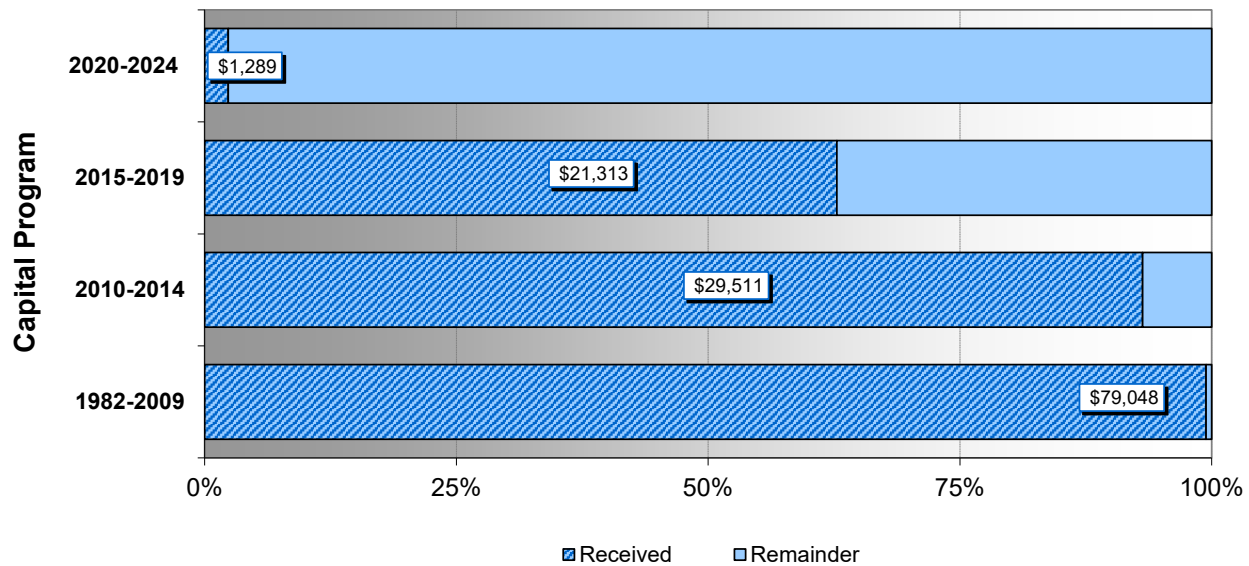
Project	Completion	Goal	Forecast
14 All-Agency Red Completions (continued)			
MNR			
<i>Hurricane Sandy</i>			
Power Infrastructure Restoration - Substations	Construction	Jun-20 \$43.8	Jan-21 \$43.8
Project completion delayed due to the recent power failure during the cutover/energization at Riverdale.			
<i>Power</i>			
Substation Bridge 23 - Construction	Construction	Jun-20 \$41.7	Apr-21 \$41.7
Project completion delayed due to the COVID-19 pandemic.			
H & H Power (86th St. / 110th St.)	Construction	Sep-20 \$12.3	Jun-21 \$12.3
Project completion delayed due to reduced F/A availability as a result of the COVID-19 pandemic. Coordination of existing manpower levels is being done to adequately support on-going projects.			
Harlem & Hudson Lines Power	Construction	Sep-20 \$42.5	Jun-21 \$42.5
Project completion delayed due to the COVID-19 pandemic.			
Network Expansion			
<i>East Side Access</i>			
GCT Caverns (CM007)	Construction	Oct-20 \$708.3	Feb-21 \$724.0
Project slippage due to delays in completion of ceiling installation in the East Upper Cavern as a result of COVID-19, which is impacting testing of HVAC/Automated Temperature Control (ATC) systems.			

Capital Projects – Major Completions – November 2020 – Schedule Variances				Actual Results Shaded			
Project	Completion	Goal	Actual	Project	Completion	Goal	Forecast
8 All-Agency Yellow Completion (2 New Items)				B&T			
NYCT				Skew back Retrofit at HH			
<i>Buses</i>				Construction			
Purchase 15 Articulated Electric Buses and Depot Chargers	Bus Purchase	Mar-20	Jun-20(A)			Aug-20	Sep-20(A)
		\$32.9	\$32.9			\$100.4	\$100.4
There was a delay due to the COVID-19 pandemic and the related reduced workforce at New Flyer Industries. All buses have been delivered.				Project completion was delayed due to unforeseen steel conditions requiring repair.			
<i>Passenger Stations</i>				MTA Police Department			
ADA: 86 Street / 4th Avenue				<i>MTA PD</i>			
	Construction	May-20	Aug-20(A)	Staten Island District Office	Construction	Aug-20	Oct-20(A)
		\$33.1	\$33.1			\$13.5	\$13.5
Project completion was delayed due to the COVID-19 pandemic.				Project completion was delayed due to Con Edison's inability to provide permanent power until October 2020.			
ADA: Chambers Street / Nassau Loop							
	Construction	Aug-20	Oct-20(A)				
		\$43.6	\$43.4				
Project completion was delayed due shut down of off-site steel fabrication as a result of the COVID-19 pandemic. Cost decrease reflects latest estimates.							
ADA: Bedford Park Boulevard / Concourse (New Item)							
	Construction	Jun-20	Nov-20(A)				
		\$32.6	\$32.7				
Project completion was delayed due to the COVID-19 pandemic, the delivery of access nodes, elevator glass and metal enclosures, and the relocation of existing electrical equipment.							
<i>Hurricane Sandy</i>							
Sandy Mitigation: 9 Stations (9 Stns BK/Q Initiative)	Construction	May-20	Sep-20(A)				
		\$33.1	\$33.1				
Project completion was delayed due to additional column base repairs.							
Sandy Mitigation: 14 Fan Plants, LT - 4 Locations (New Item)							
	Construction	May-20	Nov-20(A)				
		\$34.1	\$34.1				
Project completion was delayed due to fabrication and delivery delays related to the COVID-19 pandemic.							

Status of MTA Capital Program Funding

Capital Funding (November 2020)

\$ in millions



Capital Funding Detail (November 30, 2020)

\$ in millions

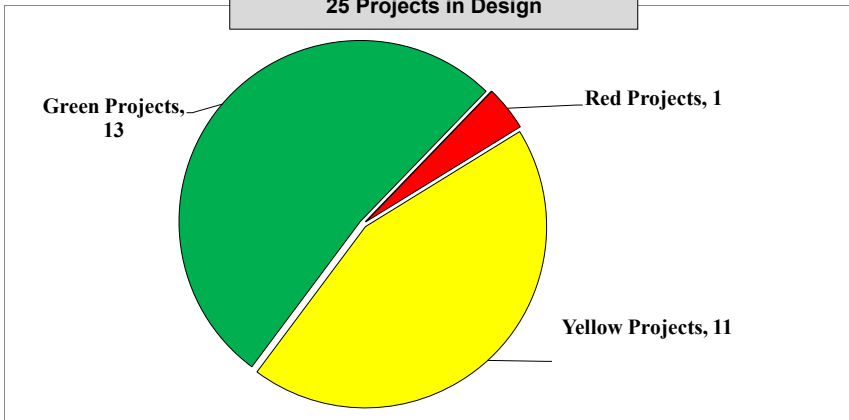
	Funding Plan		Receipts	
	Current	Thru Oct	This month	Received to date
2010-2014 Program				
Federal Formula, Flexible, Misc	\$5,844	\$5,839	\$ -	\$5,839
Federal High Speed Rail	173	173	-	173
Federal New Start	1,271	1,257	-	1,257
Federal Security	89	89	-	89
Federal RRIF Loan	-	-	-	-
City Capital Funds	719	608	-	608
State Assistance	770	770	-	770
MTA Bus Federal and City Match	132	112	-	112
MTA Bonds (Payroll Mobility Tax)	11,625	10,450	-	10,450
Other (Including Operating to Capital)**	1,284	1,273	-	1,273
B&T Bonds	2,175	2,019	-	2,019
Hurricane Sandy Recovery				
<i>Insurance Proceeds/Federal Reimbursement</i>	6,697	6,697	-	6,697
<i>PAYGO</i>	18	18	-	18
<i>Sandy Recovery MTA Bonds</i>	659	182	-	182
<i>Sandy Recovery B&T Bonds</i>	230	23	-	23
Total	31,685	29,511	-	29,511
2015-2019 Program				
	Current	Thru Oct	This month	Received to date
Federal Formula, Flexible, Misc	\$6,704	\$4,989	\$ -	\$4,989
Federal High Speed Rail	\$122	\$122	-	\$122
Federal Core Capacity	100	-	-	-
Federal New Start	500	-	-	-
Federal Security	19	15	-	15
State Assistance	9,064	3,573	-	3,573
City Capital Funds	2,667	1,235	-	1,235
MTA Bonds	8,474	7,818	-	7,818
Asset Sales/Leases	959	306	-	306
Pay-as-you-go (PAYGO)**	2,145	1,572	-	1,572
Other	250	38	-	38
B&T Bonds & PAYGO/Asset Sale	2,942	1,644	-	1,644
Total	33,946	21,313	-	21,313
2020-2024 Program				
	Current	Thru Oct	This month	Received to date
Capital from Central Business District Tolling	\$15,000	\$ -	\$ -	\$ -
Capital from New Revenue Sources	10,000	-	-	-
MTA Bonds and PAYGO	9,782	80	-	80
Federal Formula	7,500	1,119	-	1,119
State of New York	3,000	-	-	-
City of New York	3,000	40	40	80
Federal New Start (SAS Ph2)	2,905	-	-	-
Federal Flexible	275	-	-	-
Federal Security	10	-	10	10
B&T Bonds (Self-Funded)	3,327	1	-	1
Total	54,799	1,240	50	1,289



3rd Quarter 2020 Traffic Light Report on MTA Core Capital Program Projects

A total of 282 Projects were Reviewed for the 3rd Quarter 2020

25 Projects in Design

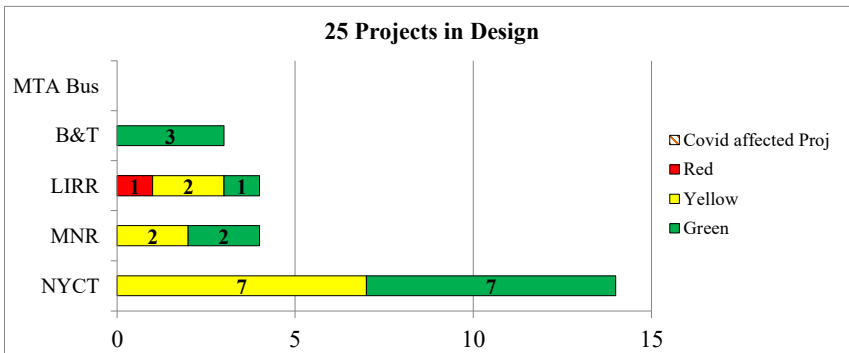


Projects in Design: 25 projects were reviewed in the design phase with 13 (52%) projects designated green, 11 yellow, and 1 red. This is an decrease of 9 red projects from the 2nd quarter 2020. The one red project was for a contingency variance. The high contingency index was due to the issuance of a change order for a Power Load Study.

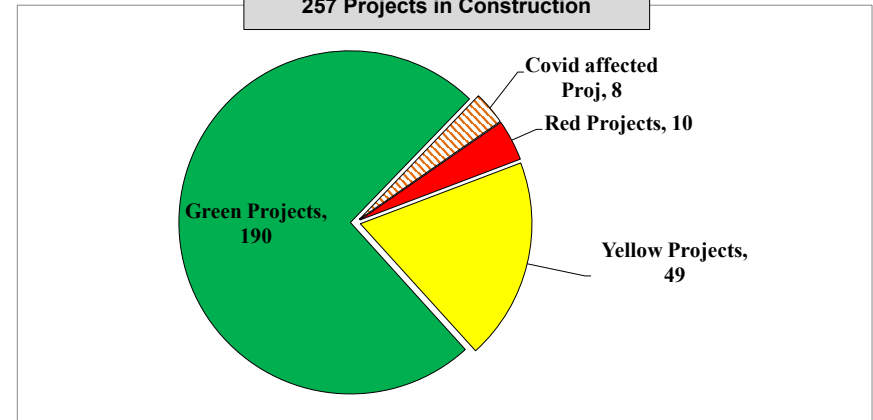
Covid impacts to Design Projects: No projects in design were impacted by Covid-19 this quarter.

Last Quarter: 24 projects were reviewed in the design phase with 8 (33%) projects designated green, 6 (25%) yellow, and 10 (42%) red.

25 Projects in Design



257 Projects in Construction

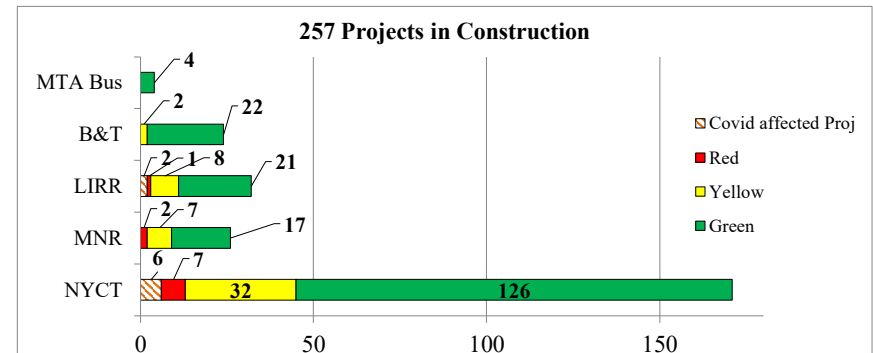


Projects in Construction: 257 projects were reviewed in the construction phase with 189 (74%) designated green, 49 yellow and 10 red. Of the 10 red projects, 5 (50%) were red for a schedule variance, 4 for a contingency variance, 1 for a cost variance and 1 for both contingency and cost variances. For the 11 projects designated red for schedule, the variances ranged from 3 to 14 months. The schedule variances were due in part to a rephrasing of work, added scope, and additional system testing.

Covid impacts to Construction Projects: 8 projects in construction were impacted by Covid-19 and designated with an Orange lined TL. 7 of the 8 projects had schedule variances which were due in part to jobsite shutdowns, travel restrictions, new safety protocols and a reduction in manpower availability.

Last Quarter: 206 projects were reviewed in the construction phase with 134 (65%) designated green, 55 (27%) yellow and 17 (8%) red.

257 Projects in Construction







Terms and Definitions

3rd Quarter 2020 Traffic Light Report on MTA Core Capital Program Projects





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 three performance indicators: cost, contingency and schedule. A project is designated a "**red light project**" when one or more of the three indicators exceed a specified threshold. Agencies are required to produce follow-up variance reports for all qualified red light projects. Included in these reports are one-page agency 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 "**yellow light project**" after one or more performance indicators had triggered a red in a previous quarter. A yellow project may revert back to green after four consecutive quarters if the performance indicators have not worsened. A project is designated a "**green light project**" when no performance indicator has exceeded the Traffic Light Reports specified thresholds.

Traffic Light Report Project Terms and Definitions


Projects in Design: 25



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

Projects in Construction: 257

-  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 or Contingency Index: An increase of 10% (or index movement of 10% or more since last Traffic Light Report).
-  Red: Schedule Variance: An increase of 3 months or more to substantial completion since last Traffic Light Report.
-  Yellow: Previously indicated as **red** with no new substantial change since the last Traffic Light Report / A project in construction that has been designated Yellow may be returned to Green when it has been in compliance with the three performance indicators for (four consecutive quarters) one year.

Projects impacted by Covid-19 (Temporary TLR Criteria): 8

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

-  Orange Lined: Schedule Variance: An increase of 3 months or more to substantial completion since the last Traffic Light Report.
-  Yellow: Previously indicated as **Orange Lined** with no new substantial change since the last Traffic Light Report / A project in construction or design that has been designated Yellow may be returned to Green when it has been in compliance with the three performance indicators for (four consecutive quarters) one year.

Report Index Formulas and Criteria:
➤ Cost Index = Total Project EAC / Current Approved Budget (Note: Current Budget is not Budget at Award)
➤ Schedule Variance = Number of months of change in schedule since last Traffic Light Report
➤ Contingency Index = % Contingency used / % 3rd Party Contract Completion (contingency used includes expended & pending AWOs). Triggered when project has reached 25% or higher. Threshold for NYCT is \$15M or more, other agencies \$7M or more.
➤ Excludes projects in CPOC's Risk-Based Monitoring Program listed at end of report
Report Index Formulas and Criteria:
➤ Only projects with budgets of \$7M or greater are included in the report

**3rd Quarter 2020 Traffic Light Report
Projects in Design and Construction**

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

ACEP	Description	Phase	Total Project EAC	% Phase Complete	Contingency Index	Cont. Trend	Cost Index	Cost Trend	Schedule Variance (Months)	Sched. Trend	Traffic Light
NYCT - New York City Transit Program											
NYCT - ADA Accessibility Program - Projects in Construction											
T6041311	ADA Phase 2 at 57 St Station-Broadway Line	Construction	\$35,857,557	76	.00	■	1.00	■	1	▲	Y
T7041301	ADA: Bedford Av CNR	Construction	\$74,823,712	98	.12	■	1.00	■	0	■	G
T7041302	ADA: Astoria Blvd AST	Construction	\$43,319,216	95	1.19	▲	.97	■	0	■	G
T7041303	ADA: Bedford Pk Blvd BXC	Construction	\$37,119,638	95	.61	▼	1.00	■	2	▲	Y
T7041304	ADA: 86 St 4AV	Construction	\$36,180,077	99	.49	■	1.00	■	1	▲	Y
T7041305	ADA: Gun Hill Road DYR	Construction	\$61,019,265	86	.23	▼	1.00	■	2	▲	Y
T7041306	ADA: Eastern Pkwy-Bklyn Museum EPK	Construction	\$42,294,609	75	1.47	▲	1.00	■	1	▲	R
T7041307	ADA: Times Square Complex, Ph 3 - Shuttle	Construction	\$218,740,693	51	1.95	▲	1.00	■	0	■	G
T7041308	ADA: Chambers St NAS	Construction	\$46,617,359	94	.75	▲	.98	■	0	■	G
T7041309	ADA: Greenpoint Av XTN	Construction	\$39,356,249	86	.33	▲	.95	■	0	■	G
T7041310	ADA: 59 St 4AV	Construction	\$58,733,105	76	.93	▼	1.00	■	-3	▼	Y
T7041312	ADA: 1 Av CNR	Construction	\$33,969,390	98	-3.56	▲	.99	■	0	■	G
T7041323	ADA: 57 Street BWY Additional Support Costs	Construction	\$51,038,195	76	1.48	▼	1.04	■	1	▲	Y
T7041331	ADA: Livonia Ave CNR	Construction	\$87,290,193	16	.00	■	.99	■	0	■	G
T7041332	ADA: 170 Street JER	Construction	\$62,229,252	24	.00	■	1.00	■	0	■	G
All Other NYCT Projects											
T50803QB	CBTC QBL Phase 1	Construction	\$69,919,994	76	.13	▲	1.19	■	0	■	G
T6040401	MetroCard-Electronic Components Replacement	Construction	\$16,340,035	89	.00	■	1.00	■	7	▲	R
T60412C2	Components: Aqueduct-North Conduit Av RKY	Construction	\$7,297,627	67	1.55	▲	.99	■	-1	▼	G
T6041304	Imprve Platfrm Horizntl/Vertical Clearance-Var Loc	Construction	\$14,745,538	93	.00	■	1.37	▲	0	■	R
T6070306	Demolish Abandoned Structures	Construction	\$15,116,583	74	1.11	■	1.00	■	0	■	Y
T6080319	CBTC Queens Blvd Ln West Ph 1	Construction	\$120,453,417	82	.36	■	1.02	■	-16	▼	G
T6080602	Application Cutover to SONET Phase 1	Construction	\$13,044,136	60	.00	■	1.00	■	0	■	G
T6080661	ISIM-B Module 3A RCC Build Out	Construction	\$25,425,919	34	.13	■	1.00	■	0	■	G
T6100454	207th St. OH Shop: Boiler Upgrades & Site Remed	Construction	\$10,823,059	79	.56	▲	1.00	■	3	▲	R

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**3rd Quarter 2020 Traffic Light Report
Projects in Design and Construction**

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ACEP	Description	Phase	Total Project EAC	% Phase Complete	Contingency Index	Cont. Trend	Cost Index	Cost Trend	Schedule Variance (Months)	Sched. Trend	Traffic Light
NYCT - New York City Transit Program											
All Other NYCT Projects											
T6120403	Replace Bus Radio System	Construction	\$211,739,147	100	.39	■	1.01	■	0	■	G
T6130202	Purchase 65 Flatcars	Construction	\$47,597,644	60	.00	■	.89	▼	0	■	G
T6160402	NYCT-Wide Storage Area Network/Disaster Recovery	Construction	\$22,268,148	85	.00	■	.99	■	5	▲	R
T6160611	Replace Fire Alarm Systems at 13 Locations	Construction	\$27,545,620	30	.00	■	1.00	■	0	■	Y
T6160717	Livingston Plaza Repairs	Construction	\$51,620,490	57	-4.45	▲	1.00	■	0	■	Y
T7010101	Purchase 440 B-Division Cars	Construction	\$1,402,231,935	7	4.02	▲	1.00	■	0	■	G
T7010102	Purchase 20 Open Gangway Prototype Cars	Construction	\$79,905,106	7	.16	■	1.00	■	0	■	G
T7030203	Purchase 165 Standard Hybrid Buses (Nova)	Construction	\$151,025,925	2	.00	■	1.00	■	0	■	G
T7030206	Purchase 50 Express Buses	Construction	\$33,947,611	3	.00	■	.99	■	0	■	G
T7030215	AVLM for Paratransit Vehicles	Construction	\$26,938,276	35	-1.09	▼	1.00	■	5	▲	R
T7030223	Purchase 110 Standard Hybrid Buses (New Flyer)	Construction	\$95,573,078	2	.00	■	.96	■	0	■	G
T7040401	New Fare Payment System, Phase 2	Construction	\$463,323,580	42	.02	■	1.00	■	0	■	G
T7040702	Replace 12 Traction Elevators BW7	Construction	\$109,807,900	62	3.17	▲	1.11	▲	0	■	R
T7040704	Replace 6 Traction Elevators 8AV	Construction	\$45,936,633	55	.94	▲	.99	■	0	■	G
T7040705	Replace 2 Hydraulic Elevators: Borough Hall CLK	Construction	\$13,632,111	16	.00	■	1.00	■	0	■	G
T7040706	Replace 2 Escalators: Grand Central-42 St LEX	Construction	\$29,863,318	93	1.05	▼	1.00	■	0	■	Y
T7040710	Escalator Relocation: Jay St-MetroTech FUL	Construction	\$21,724,370	70	.00	■	1.00	■	0	■	G
T7040711	Replace 2 Hydraulic Elevators: Franklin Av FRK	Construction	\$13,987,851	20	.00	■	1.00	■	0	■	G
T7040712	Replace 3 Escalators: Main St FLS	Construction	\$27,368,587	19	.24	▲	1.00	■	0	■	G
T7041202	Renewal: 138 St-Grand Concourse JER	Construction	\$25,606,623	95	.00	■	1.00	■	0	■	G
T7041204	Renewal: Astoria Blvd AST	Construction	\$54,576,042	85	.72	▲	.98	■	0	■	G
T7041236	Platform Components: Longwood Ave PEL	Construction	\$9,975,676	95	.42	■	.99	■	0	■	G
T7041237	Platform Components: 2 Locs LNX	Construction	\$7,845,231	93	1.03	▼	1.00	▼	0	■	G
T7041251	Platform Components: 5 Locs CNR	Construction	\$19,460,670	100	.07	▼	.80	■	-1	▼	Y
T7041274	Station Lighting: 7 Locs / Various	Construction	\$7,686,619	1	.00	■	1.00	■	0	■	G

3rd Quarter 2020 Traffic Light Report Projects in Design and Construction

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ACEP	Description	Phase	Total Project EAC	% Phase Complete	Contingency Index	Cont. Trend	Cost Index	Cost Trend	Schedule Variance (Months)	Sched. Trend	Traffic Light
NYCT - New York City Transit Program											
All Other NYCT Projects											
T7041275	Station Ventilators: Various Locs (2019)	Construction	\$7,824,430	3	.00	■	.94	■	0	■	G
T7041315	ADA: 149 Street-Grand Concourse Complex	Construction	\$114,841,381	3	.00	■	.98	■	0	■	G
T7041338	ADA: Tremont Ave BXC	Construction	\$54,391,702	4	.00	■	.99	▼	0	■	G
T7041345	Station Enhancements: Canarsie Line	Construction	\$10,756,622	98	.00	■	1.00	■	0	■	G
T7041401	Station Signage Improvements	Construction	\$10,225,624	47	.00	■	.94	■	0	■	G
T7041404	Reconstruction: Times Sq Complex, Ph3 - Shuttle	Construction	\$28,866,315	51	.00	■	1.00	■	0	■	G
T7041408	2017 Water Condition Remedy	Construction	\$9,228,231	94	.00	■	.93	▼	6	▲	G
T7041411	New Street Stairs: 2 Locs CNR	Construction	\$6,973,332	98	1.00	■	.92	■	0	■	G
T7041416	Circulation Improvements: Union Square CNR	Construction	\$17,786,333	100	1.07	▲	1.01	■	2	▲	Y
T7050240	2016 Mainline Track Repl: Canarsie Tube	Construction	\$64,255,907	98	.00	■	1.00	■	0	■	G
T7050272	2018 Mainline Track Repl: Jamaica	Construction	\$29,770,731	100	.00	■	1.09	■	2	▲	Y
T7050276	2018 Mainline Track Repl: Eastern Parkway	Construction	\$15,860,857	100	.00	■	1.05	■	-1	▼	Y
T7050284	2018 Mainline Track Repl: Lenox-White Plains Rd	Construction	\$9,278,772	100	.00	■	.77	■	0	■	Y
T7050290	2019 Mainline Track Repl: Myrtle	Construction	\$6,940,754	82	.00	■	.96	■	2	▲	Y
T7050293	2019 Mainline Track Repl: Astoria	Construction	\$15,112,635	94	.00	■	.86	■	2	▲	Y
T7060503	Replace Supervisory Vent Controls - Var Locs	Construction	\$30,183,479	43	1.36	▲	1.00	■	0	■	R
T7060506	Rehab Forsyth St Vent Plant	Construction	\$90,374,945	17	.16	▲	.99	■	0	■	G
T7060514	Tunnel Lighting: Roosevelt Av to Elmhurst Av QBL	Construction	\$15,083,640	78	.00	■	1.00	■	0	■	G
T7070303	Struct Rehab: Livonia Yard Overpass & Retain Wall	Construction	\$27,083,332	36	.12	■	1.00	■	0	■	Y
T7070307	Rehab Emergency Exits (ICC) - Various Locs	Construction	\$16,997,741	95	.00	■	1.00	■	0	■	G
T7070308	Rehab Emergency Exits (3rd Party) - Var Locs	Construction	\$20,665,352	10	.28	▼	1.00	■	-3	▼	Y
T7070313	Overcoat: 72 St - 104 St FLS	Construction	\$60,965,120	100	-1.61	▲	1.00	■	-2	▼	Y
T7070316	Overcoat: Broadway - End of Line MYR	Construction	\$58,258,534	13	.00	■	.99	■	0	■	G
T7070317	Overcoat: 48 St - 72 St FLS	Construction	\$57,133,383	60	-.07	■	1.00	■	0	■	G
T7070323	LSCRP: Brooklyn (EPK)	Construction	\$82,731,099	0	.00	■	.99	■	0	■	G

**3rd Quarter 2020 Traffic Light Report
Projects in Design and Construction**

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ACEP	Description	Phase	Total Project EAC	% Phase Complete	Contingency Index	Cont. Trend	Cost Index	Cost Trend	Schedule Variance (Months)	Sched. Trend	Traffic Light
NYCT - New York City Transit Program											
All Other NYCT Projects											
T7070344	Repairing 'A' and 'B' Column Base Conditions WPR	Construction	\$17,401,817	60	.00	■	1.00	■	0	■	Y
T7080301	CBTC: QBL West Ph2 (50 St - Union Tpke)	Construction	\$455,228,646	71	.82	▲	1.07	■	0	■	G
T7080304	CBTC: 8AV (59 St - High St)	Construction	\$220,201,814	10	.00	■	1.00	■	0	■	G
T7080307	Interlocking Modernization: Ditmas CUL	Construction	\$133,574,754	49	.07	■	1.00	■	0	■	G
T7080308	Interlocking Modernization: Kings Highway CUL	Construction	\$179,435,183	76	.47	▲	1.00	■	0	■	G
T7080322	AC to DC Line Relay Upgrade BCT	Construction	\$25,168,851	45	.00	■	1.00	■	0	■	G
T7080323	Signal Key-By Modifications, Ph4	Construction	\$18,429,499	78	.00	■	1.00	■	0	■	G
T7080324	Code Cable Replacement BW7	Construction	\$41,790,878	0	.00	■	1.00	■	0	■	G
T7080325	Signal Room Fire Suppression, Phase 2	Construction	\$25,609,793	70	.65	▲	1.00	■	0	■	G
T7080326	Life Cycle Replacement of Code Systems	Construction	\$49,220,099	0	.00	■	1.00	■	0	■	G
T7080327	Life Cycle Mod - Speed Enforcement Systems	Construction	\$65,429,183	0	.00	■	1.00	■	0	■	G
T7080332	CBTC: CUL (Church Av to W8 St)	Construction	\$116,770,424	23	.59	▲	.99	■	0	■	G
T7080333	Interlocking Modernization: Ave X CUL	Construction	\$200,040,640	47	.00	■	1.00	■	0	■	G
T7080335	Interlocking Modernization: 30 St & 42nd St / 8AV	Construction	\$258,886,569	10	.00	■	1.00	■	0	■	G
T7080342	CBTC: Carbone Equipment Purchase	Construction	\$84,663,722	4	.00	■	1.00	■	0	■	G
T7080343	2018 M/L Switch Repl: 7 Switches CBTC CUL	Construction	\$32,479,364	30	.00	■	1.00	■	0	■	G
T7080344	2019 M/L Switch Repl: 10 Switches CBTC 8AV	Construction	\$27,563,382	10	.00	■	1.00	■	0	■	G
T7080345	2019 M/L Switch Repl: 12 Switches Kings Hwy CUL	Construction	\$26,368,385	0	.00	■	1.00	■	0	■	G
T7080602	Upgrade Async Network to SONET, Rings A and C	Construction	\$30,961,649	94	.25	■	1.00	■	3	▲	R
T7080603	PBX Upgrade	Construction	\$48,564,396	88	.49	▲	1.17	▲	0	■	R
T7080604	Fiber Optic Cable Replacement Ph2	Construction	\$28,694,060	82	.00	■	1.00	■	0	■	G
T7080614	ISIM-B Module 3: Rail Traffic Systems	Construction	\$91,696,705	38	.04	▼	1.00	▼	0	■	G
T7080617	LiftNet Transition to Ethernet	Construction	\$15,792,305	77	.00	■	.99	■	0	■	G
T7080646	Antenna Cable: Next Generation Pilot & Testing	Construction	\$10,911,976	91	.00	■	1.00	■	1	▲	Y
T7080651	Help Point: Upgrades and CAI Removals	Construction	\$20,205,948	16	.00	■	1.00	■	0	■	Y

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NYCT - New York City Transit Program											
All Other NYCT Projects											
T7090201	Substation Renewal: Burnside Av BXC	Construction	\$22,857,912	88	-.10	■	1.00	■	0	■	G
T7090202	Substation Renewal: Av Z CUL	Construction	\$32,177,194	57	.13	▼	.99	■	0	■	G
T7090203	Substation Rnwl & New Rectifier: Centrl SS 6AV	Construction	\$43,431,274	16	.20	▲	1.00	■	0	■	G
T7090204	Substation Roof & Encl: Wash Heights 8AV [SBDP]	Construction	\$8,637,502	45	.19	▲	1.00	■	0	■	G
T7090205	Replace 25Hz Freq Converters - Various Locs	Construction	\$19,155,969	75	.00	■	1.00	■	4	▲	R
T7090206	Replace HT Switchgear - Various Locs	Construction	\$30,315,905	60	.14	▼	.99	■	0	■	G
T7090210	Install Low-Resistance Contact Rail - CNR Tube	Construction	\$28,661,710	98	.00	■	.99	■	0	■	G
T7090215	Supplemental Negative Cables QBL	Construction	\$53,023,972	38	.00	■	1.00	■	0	■	G
T7090218	Install Low-Resistance Contact Rail QBL	Construction	\$47,828,349	98	.79	▲	1.00	■	0	■	G
T7090221	New Substation: 14 St-Avenue B CNR	Construction	\$81,637,075	98	.72	■	.99	■	0	■	G
T7090222	New Substation: Maspeth Av-Humboldt St CNR	Construction	\$51,458,306	99	.52	▲	.99	■	0	■	G
T7090223	New Substation: Harrison Pl CNR	Construction	\$58,204,402	98	.00	■	.98	■	0	■	G
T7090406	Rehab CBH # 85 & New Ducts: Bedfrd-N 6 St SS CNR	Construction	\$13,403,145	75	.18	■	.99	■	0	■	G
T7090414	Repl Control & Bat Cables: Substation CZs	Construction	\$28,783,652	70	.00	■	1.00	■	0	■	Y
T7090415	Reconstruct CBH # 392 Flushing River Bridge FLS	Construction	\$15,370,715	99	.16	▼	1.01	■	0	■	G
T7100401	DCE Shop Components Ph 1: 180 St, CI, PEL	Construction	\$33,723,023	47	.33	■	1.00	■	0	■	G
T7100402	207th St Maint & OH Shop Roof & Component Repl	Construction	\$59,961,172	28	1.32	▲	1.00	■	0	■	G
T7100403	DCE Shop Components Ph 2: 239 St, Concourse, ENY	Construction	\$45,506,613	50	1.32	▲	1.00	■	0	■	R
T7100405	DCE Shop Components Ph 4: 207 St Admin	Construction	\$24,328,231	48	.17	■	.99	■	0	■	G
T7100407	Upgrade Central Electronics Shop: Woodside	Construction	\$16,100,649	94	.92	■	.99	■	2	▲	Y
T7100409	Heavy Shop Equipment	Construction	\$14,729,150	47	.00	■	1.00	■	0	■	G
T7120301	Artic Modification: ENY Depot	Construction	\$18,152,071	35	1.00	▲	1.00	■	0	■	G
T7120306	Generator: Yukon Depot	Construction	\$11,871,647	0	.00	■	1.00	■	0	■	G
T7120307	Roof, Office, HVAC: Fresh Pond Depot	Construction	\$15,206,507	0	.00	■	1.00	■	0	■	G
T7120315	HVAC: Zerega Consolidated Maintenance Facility	Construction	\$8,500,000	95	.00	■	1.00	■	0	■	G

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NYCT - New York City Transit Program											
All Other NYCT Projects											
T7120321	Artic Modification Windows/Façade: ENY Depot	Construction	\$17,181,652	8	.00	■	1.00	■	0	■	G
T7120408	Elevator Upgrades: JG,GH,MTV,CS,ENY	Construction	\$22,796,195	89	.22	▲	.99	■	0	■	Y
T7130208	Purchase 12 3-Ton Crane Cars	Construction	\$32,161,361	2	.00	■	1.00	■	0	■	G
T7130211	Purchase Locomotives	Construction	\$256,211,618	1	.00	■	1.00	▲	0	■	G
T7130213	Purchase Various Non-Revenue Vehicles	Construction	\$14,817,662	1	.00	■	1.29	▲	-12	▼	G
T7130215	Conversion of 10 R77E Locomotives	Construction	\$34,272,847	95	.00	■	1.00	▲	0	■	G
T7130216	Purchase 65 Flat Cars	Construction	\$7,477,750	60	.00	■	.00	▼	0	■	G
T7160512	Test Pits	Construction	\$10,756,669	29	.00	■	1.00	■	0	■	G
T7160601	Fire Alarm System Replacement - 3 Locs	Construction	\$19,785,003	91	.09	■	.99	■	0	■	G
T7160704	Emp Fac Component Repairs: 7 Locs / Manhattan	Construction	\$10,139,980	96	.00	■	1.04	■	0	■	Y
T7160714	Livingston Plz Elec, Mechanical, Generator Phase A	Construction	\$33,371,819	93	.07	■	1.04	■	3	▲	R
T7160716	RCC and PCC Power Upgrade	Construction	\$59,070,962	86	.28	■	1.00	■	0	■	Y
T7160733	Emp Fac Component Repairs at Various Stations	Construction	\$15,000,000	97	.00	■	1.04	■	0	■	G
T7041201	Water Remediation - Renewal: Borough Hall LEX	Design	\$17,185,536	60	.00	■	.70	■	0	■	G
T70412L1	Renewal: 14 St BW7	Design	\$48,855,000	25	.00	■	1.00	■	2	▲	Y
T70412L2	Platform Components: 14 St 6 AV	Design	\$11,564,000	25	.00	■	1.00	■	2	▲	Y
T7041317	ADA: Systemwide Study	Design	\$17,735,776	95	.00	■	1.00	■	-2	▼	G
T7041322	ADA: 95 St 4AV	Design	\$50,019,153	25	.00	■	1.42	■	1	▲	Y
T7041330	ADA: 14th St 6th Av/7th Av Complex DES	Design	\$41,481,848	25	.00	■	3.90	■	2	▲	Y
T7041347	ADA: 14 St 6AV	Design	\$43,683,587	25	.00	■	1.00	■	2	▲	Y
T7041348	ADA: 14 St BW7	Design	\$55,577,009	25	.00	■	1.00	■	2	▲	Y
T7120419	Queens Depot Property & Environmental Prep	Design	\$19,542,069	90	.00	■	1.00	■	0	■	Y
T8030208	Purchase 126 Hybrid (Nova)	Construction	\$107,949,896	0	.00	■	1.00	■	2	▲	G
T8030209	Purchase 209 Standard Diesel (Nova)	Construction	\$141,211,796	0	.00	■	1.00	■	2	▲	G
T8041216	Platform Components: E Broadway 6AV	Construction	\$14,595,786	8	.00	■	1.00	▲	0	■	G

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NYCT - New York City Transit Program											
All Other NYCT Projects											
T8041313	ADA: Avenue H (NB) BRT	Construction	\$10,962,101	0	.00	■	.43	■	0	■	G
T8050204	2020 Mainline Track Repl: Rutgers	Construction	\$18,600,588	8	.00	■	1.00	▲	0	■	G
T8050205	Mainline Track Replacement 2020 / Queens	Construction	\$7,700,196	17	.00	■	1.00	■	0	■	G
T8050206	Mainline Track Replacement 2020 / 8th Avenue	Construction	\$20,726,225	50	.00	■	1.00	■	0	■	G
T8050207	Mainline Track Replacement 2020 / Broadway-7th Ave	Construction	\$35,259,977	39	.00	■	1.00	■	0	■	G
T8050208	Mainline Track Replacement 2020 / Flushing	Construction	\$59,886,344	39	.00	■	1.00	■	0	■	G
T8050209	Mainline Track Replacement 2020 / Lexington	Construction	\$22,018,001	61	.00	■	1.00	■	0	■	G
T8050210	Mainline Track Replacement 2020 / Brighton	Construction	\$15,212,679	10	.00	■	1.00	■	0	■	G
T8050211	Mainline Track Replacement 2020 / Jamaica	Construction	\$28,061,426	20	.00	■	1.00	■	0	■	G
T8050212	Mainline Track Replacement 2020/ Lenox-White Plain	Construction	\$13,153,929	59	.00	■	1.00	■	0	■	G
T8050213	Mainline Track Replacement 2020 / 6th Avenue	Construction	\$19,911,466	26	.00	■	1.00	■	0	■	G
T8050222	Mainline Track - 2020 Support Costs	Construction	\$8,770,327	35	.00	■	1.00	■	0	■	G
T8050223	Continuous Welded Rail 2020	Construction	\$35,009,063	8	.00	■	1.00	■	0	■	G
T8050224	2020 Track Force Account	Construction	\$35,000,000	0	.00	■	1.00	▲	0	■	G
T8050225	Archer Direct Fixation	Construction	\$35,943,229	8	.00	■	1.00	▲	0	■	G
T8050303	Mainline Track Switches 2020 / Brighton	Construction	\$17,401,523	83	.00	■	1.00	■	0	■	G
T8050304	Mainline Track Switches 2020 / Sea Beach	Construction	\$7,456,555	80	.00	■	.88	▼	0	■	G
T8050306	Mainline Track Switches 2020 / Queens	Construction	\$7,531,710	5	.00	■	1.00	■	0	■	G
T8050308	Mainline Track Switches 2020 / 4th Avenue	Construction	\$29,403,221	8	.00	■	1.00	■	0	■	G
T8050309	Mainline Track Switches 2020 / Lexington	Construction	\$13,943,512	90	.00	■	1.00	■	0	■	G
T8050310	Mainline Track Switches 2020 / White Plains Rd	Construction	\$21,100,168	45	.00	■	1.00	■	0	■	G
T8070308	Structural Repairs Steinway Loop QBL	Construction	\$793,072	50	.00	■	1.00	▲	0	■	G
T8070311	Plenum Plate Demo & Struct. Rehab EPK	Construction	\$497,251	0	.00	■	1.00	■	0	■	G
T8080312	Mechanical Plug-In Timer Relays Replacement	Construction	\$14,087,929	88	.00	■	1.00	■	0	■	G
T8040705	Escalator Design	Design	\$10,521,925	1	.00	■	1.00	▼	0	■	G

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NYCT - New York City Transit Program											
All Other NYCT Projects											
T8080603	Fiber Optic Cable Replacement: Various Locations	Design	\$47,194,594	30	.00	■	1.00	■	0	■	⊙
T8120303	Jamaica Depot Reconstruction	Design	\$375,541,493	0	.00	■	.98	■	0	■	⊙
S7070102	SIR Station Component Program	Construction	\$18,917,569	42	.00	■	.99	■	0	■	⊙
S7070103	SIR Mainline Track Replacement	Construction	\$48,852,964	81	.27	■	1.00	■	0	■	⊙
S7070105	New Power Substation: Tottenville	Construction	\$27,092,166	98	.40	■	.99	■	1	▲	⊙
S7070106	New Power Substation: New Dorp	Construction	\$24,293,252	89	.57	▲	1.00	■	0	■	⊙
S7070107	New Power Substation: Clifton	Construction	\$30,741,073	89	.17	▲	1.00	■	0	■	⊙
S7070111	Relocate HQ to Clifton Shop	Construction	\$9,141,188	67	.02	▼	1.00	■	2	▲	⊙
S7070113	SIR Clifton Yard Track and Switch Replacement	Construction	\$17,329,373	81	.00	■	1.00	■	0	■	⊙
S8070101	Station Components: Various Locations	Design	\$39,776,800	0	.00	■	1.00	■	0	■	⊙
S8070102	Track and Switch Replacement	Design	\$137,000,000	0	.00	■	1.00	■	0	■	⊙
LIRR - Long Island Rail Road Program											
L50304TQ	MLC-Hicksville North Siding	Construction	\$44,186,927	83	.00	■	1.00	■	0	■	⊙
L60101MA	M-9 Rolling Stock Procurement - 92 cars	Construction	\$364,836,340	74	.00	■	1.00	■	1	▲	⊙
L60304TU	Jamaica Capacity Improvements - Phase One	Construction	\$302,228,330	79	3.48	▲	1.00	■	0	■	⊙
L60502LA	Positive Train Control (PTC)	Construction	\$248,958,828	89	1.03	■	1.00	■	0	■	⊙
L60601YN	New Mid Suffolk Electric Yard	Construction	\$79,617,917	97	.46	■	.98	■	0	■	⊙
L60701AR	Replacement of Richmond Hill Substation	Construction	\$16,867,791	33	2.70	■	1.01	■	0	■	⊙
L70101ME	M-9 PROCUREMENT	Construction	\$611,800,000	25	3.30	▲	1.00	■	0	■	⊙
L70204U9	Jamaica Station - Planning & Engineering	Construction	\$9,809,352	28	.00	■	.98	■	0	■	⊙
L70204UV	NEW FARE PAYMENT SYSTEM	Construction	\$8,920,000	0	.00	■	1.00	■	0	■	⊙
L70204UW	GCT/ESA UNIFIED TRASH FACILITY	Construction	\$11,100,000	15	.00	■	1.00	■	0	■	⊙
L70204VV	Lynbrook Station Improvements [SBDP]	Construction	\$9,587,486	80	1.03	▼	.99	▲	1	▲	⊙
L70204VZ	Elmont Station	Construction	\$105,700,000	8	5.55	▲	1.00	■	0	■	⊙
L70206EF	PSNY-33rd Corridor (Phase 1B Construction)	Construction	\$44,020,612	34	.00	■	1.00	■	0	■	⊙

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LIRR - Long Island Rail Road Program											
L70206VN	PSNY-33rd Corridor (Ph1A Constr. & Shared Support)	Construction	\$168,801,162	78	1.03	■	.99	■	0	■	G
L70206VP	Penn Sta Elevator/Escalator Renewal	Construction	\$12,441,500	80	1.07	▲	1.00	■	3	▲	R
L70206VS	MOYNIHAN TRAIN HALL	Construction	\$118,859,974	93	.00	■	1.03	■	0	■	G
L70301WG	Construction Equipment - Phase I	Construction	\$4,587,302	40	.00	■	.53	■	0	■	G
L70301WH	Retaining Walls / Right of Way Projects	Construction	\$9,900,405	94	.00	■	.99	■	0	■	G
L70401BS	Bridge Waterproofing	Construction	\$8,048,756	31	.00	■	1.00	■	12	▲	R
L70401BU	MENTOR ALLOWANCE - LINE STRUCTURES	Construction	\$10,059,188	59	.00	■	.68	▼	5	▲	Y
L70501SD	Fiber Optic Network	Construction	\$34,460,000	85	.00	■	1.00	■	0	■	Y
L70502LJ	Signal Normal Replacement Program	Construction	\$29,183,113	97	.00	■	.97	■	0	■	G
L70502LK	Positive Train Control (PTC)	Construction	\$183,500,000	89	.39	▲	1.00	■	0	■	G
L70502LN	Babylon to Patchogue	Construction	\$45,689,099	19	.00	■	.99	■	0	■	Y
L70601YG	DIESEL LOCOMOTIVE SHOP IMPROVEMENTS	Construction	\$101,965,000	89	.68	▲	.99	■	0	■	Y
L70601YR	Mid Suffolk Yard Improvements	Construction	\$49,838,591	97	1.31	▲	1.00	■	0	■	G
L70701XB	Substation Components	Construction	\$24,306,295	23	1.38	▼	.66	■	0	■	Y
L70701XF	3rd Rail -Composite Rail	Construction	\$11,600,000	83	.00	■	1.00	■	4	▲	R
L70204UO	East Yaphank Station	Design	\$20,000,000	18	15.14	▲	1.00	■	0	■	Y
L70206VQ	PENN STATION CUSTOMER FACILITIES	Design	\$18,172,939	13	.77	▼	1.00	■	2	▲	Y
L70304WU	Jamaica Capacity Improvements Ph 2 DES	Design	\$42,490,000	51	.80	▼	1.00	■	0	■	G
L70502LH	Babylon Interlocking Renewal	Design	\$32,640,000	7	2.63	▲	1.00	■	0	■	R
L8020406	Fare Collection Program	Construction	\$35,000,000	0	.00	■	1.00	■	0	■	G
L8020417	Tactile Strips - Various Locations	Construction	\$12,800,000	0	.00	■	4.57	■	0	■	G
L8030105	2020 - Annual Track Program	Construction	\$100,000,000	66	.00	■	.66	▼	0	■	G
L8030110	Concrete Tie Program	Construction	\$55,000,000	31	.00	■	1.00	■	0	■	G
MNR - Metro-North Railroad Program											
M6020208	Customer Communication / Connectivity Improvements	Construction	\$16,808,750	92	.00	■	.99	■	0	■	G
M6040102	West of Hudson Signal Improvements	Construction	\$63,797,143	95	.00	■	.94	■	2	▲	G

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MNR - Metro-North Railroad Program											
M6050101	Substation Bridge 23 - Construction	Construction	\$41,452,052	95	.00	■	.99	■	1	▲	Y
M6050103	Harlem & Hudson Lines Power Improvements	Construction	\$47,398,478	83	1.95	▼	1.11	▲	1	▲	Y
M7010102	M-8 Fleet Purchase	Construction	\$113,867,497	80	.00	■	.97	■	0	■	G
M7020207	Customer Communication-Stations	Construction	\$75,417,951	77	-.12	▼	.93	■	0	■	G
M7020210	Enhanced Station Initiative, 5 Stations	Construction	\$11,406,258	92	.00	■	.89	■	0	■	G
M7020211	Customer Communication-Systems	Construction	\$12,160,364	74	.78	▲	.91	■	14	▲	R
M7020213	Enhanced Station Initiative	Construction	\$110,580,989	92	1.16	▼	.90	■	0	■	Y
M7030104	Turnouts - Mainline/High Speed	Construction	\$47,089,483	78	.00	■	1.05	■	0	■	G
M7030109	Purchase MoW Equipment	Construction	\$19,050,000	61	.00	■	1.00	▼	0	■	G
M7030112	2019 Cyclical Track Program	Construction	\$26,705,201	64	.00	■	1.00	■	4	▲	G
M7030201	Overhead Bridge Program - E of H	Construction	\$66,646,750	65	.22	■	1.00	■	0	■	G
M7030203	Undergrade Bridge Rehabilitation	Construction	\$81,682,591	33	.71	▼	.98	■	0	■	G
M7030209	Harlem River Lift Bridge	Construction	\$9,785,122	0	.00	■	.94	■	0	■	G
M7040102	Harmon to Poughkeepsie SignalSystem	Construction	\$102,000,677	35	1.69	▼	1.01	■	0	■	Y
M7040103	Positive Train Control	Construction	\$130,723,462	86	1.53	■	1.07	■	0	■	G
M7040111	West of Hudson Signal Improvements	Construction	\$21,079,000	45	.00	■	1.00	■	0	■	G
M7040112	Harlem Wayside Comm & Signal Improvements	Construction	\$53,015,560	80	1.72	▲	1.01	■	0	■	R
M7050101	Replace MA's in Signal Substations	Construction	\$22,668,445	30	.00	■	.93	■	0	■	G
M7050104	Harlem & Hudson Power Rehabilitation	Construction	\$13,226,216	0	.00	■	.88	■	0	■	G
M7050105	Harlem and Hudson Power Improvements	Construction	\$22,594,115	44	1.52	▼	.91	■	0	■	Y
M7050113	H&H Power (86th St / 110th St)	Construction	\$11,844,566	83	1.63	■	1.04	■	0	■	Y
M7060101	Harmon Shop Replacement - Phase V	Construction	\$431,609,780	23	1.16	▼	1.00	■	0	■	G
M7080109	GCT/ESA Investments	Construction	\$35,513,967	7	.00	■	.89	▼	0	■	G
M7080113	Customer Communication-CM	Construction	\$17,571,613	81	6.26	▲	1.10	■	0	■	Y
M7020301	Strategic Facilities	Design	\$13,940,414	60	1.76	▼	.98	■	0	■	Y
M7030303	Undergrade Bridge Rehabilitation	Design	\$10,274,261	40	.00	■	.85	■	0	■	G









**3rd Quarter 2020 Traffic Light Report
Projects in Design and Construction**

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

ACEP	Description	Phase	Total Project EAC	% Phase Complete	Contingency Index	Cont. Trend	Cost Index	Cost Trend	Schedule Variance (Months)	Sched. Trend	Traffic Light
MNR - Metro-North Railroad Program											
M7060103	Brewster YD Improvements - Design	Design	\$7,500,000	27	.00	■	1.00	■	0	■	G
M7060104	West of Hudson Capacity Improvements	Design	\$23,923,618	23	.00	■	.98	■	0	■	Y
B&T - Bridges and Tunnels Program											
D701BW07	Fender Protection around Tower Piers (Const)	Construction	\$20,194,306	22	.00	■	.95	■	0	■	G
D701CB18	CB Scour Protect/Repair/Replace CB/MP Pier Fender	Construction	\$63,108,371	25	.00	■	.95	■	0	■	G
D701HH07	Structural Rehabilitation	Construction	\$38,184,718	23	.00	■	.92	■	0	■	G
D701HH89	Skewback Retrofit	Construction	\$98,934,254	98	.70	■	.98	■	1	▲	Y
D701RK19	Seismic/Wind Retrofit & Structural Rehab Ph1	Construction	\$53,072,173	31	.00	■	.93	■	0	■	G
D701RK20	Cable Inspection and Rehabilitation	Construction	\$12,486,641	95	.00	■	.96	■	0	■	G
D701RK70	Miscellaneous Structural Rehabilitation	Construction	\$32,519,644	30	.00	■	.92	■	0	■	G
D701TN53	Approach Viaduct Seismic Retrofit/Structural Rehab	Construction	\$211,076,685	14	.00	▼	.94	■	0	■	G
D701VN10	Anchorage & Piers Rehabilitation and Sealing	Construction	\$46,620,515	61	.00	■	.95	■	0	■	G
D701VN32	Steel Repair & Concrete Rehabilitation	Construction	\$32,659,403	11	.00	■	.95	■	0	■	G
D701VN89	Tower Pier Rehab/Construct Mooring Platform	Construction	\$35,812,075	94	-.98	▲	.94	■	-3	▼	G
D702RK23	Construction of New Harlem River Drive Ramp	Construction	\$102,081,046	91	.00	■	.96	■	0	■	G
D702TN49	Replacement of Grid Decks on Suspended Span	Construction	\$305,946,567	38	1.33	▼	.97	■	0	■	G
D702VN11	Brooklyn Approach Reconstruction	Construction	\$27,218,578	50	.00	■	.93	■	0	■	G
D702VN84	Reconstruction of VN Approach Ramps - Phase1	Construction	\$206,932,870	22	1.07	▲	.93	■	0	■	G
D703HH88	Toll Plazas & Southbound Approach Reconstruction	Construction	\$93,686,350	83	1.01	▼	.95	■	0	■	Y
D704HC07	Rehabilitation of HCT Ventilation Systems	Construction	\$76,728,503	46	.00	■	.87	■	0	■	G
D704HC30	Installation of Smoke Detection/Alarm Systems	Construction	\$11,151,229	90	.00	■	.95	■	0	■	G
D704QM81	Rehab of Tunnel Controls & Communication Systems	Construction	\$37,627,985	70	.00	■	.96	■	0	■	G
D704QM91	Installation of Smoke Detection/Alarm Systems	Construction	\$12,204,458	90	.00	■	.96	■	0	■	G
D707TN49	Painting of Suspended Span	Construction	\$20,242,135	38	.00	■	.95	■	0	■	G
D707VN49	Paint Suspended Span Upper & Lower Level Steel	Construction	\$69,034,123	24	4.26	▲	.95	■	0	■	G
D801RK81	Facility Interoperability Improvements	Construction	\$6,513,451	10	.00	■	.74	▼	0	■	G

**3rd Quarter 2020 Traffic Light Report
Projects in Design and Construction**

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 ■ = No Change since last quarterly report

ACEP	Description	Phase	Total Project EAC	% Phase Complete	Contingency Index	Cont. Trend	Cost Index	Cost Trend	Schedule Variance (Months)	Sched. Trend	Traffic Light
B&T - Bridges and Tunnels Program											
D802RK75	Deck Rehabilitation & Overlay	Construction	\$23,693,507	80	.00	■	1.02	■	-54	▼	
D804BW96	Lighting, Power Redundancy & Resiliency Imprv	Design	\$54,323,262	8	.00	■	.98	■	0	■	
D804VN12	Misc. Bridge Lighting & Electrical Improvemen	Design	\$26,233,158	15	.00	■	1.00	■	0	■	
D807RKPT	RK Facility-Wide Painting Program	Design	\$79,125,000	50	.00	■	1.00	■	2	▲	
MTA Bus Program											
U6030226	Bus Radio System	Construction	\$28,709,083	58	.10	■	1.03	■	0	■	
U6030232	HVAC Upgrade at College Point Bus Depot	Construction	\$9,521,950	3	.19	▲	1.00	■	0	■	
U7030202	Purchase 257 Express Buses	Construction	\$166,665,518	0	.00	■	1.00	■	1	▲	
U7030211	Bus Radio System - MTA Bus Share	Construction	\$37,355,831	29	.00	■	1.00	■	0	■	

Summary of Core Traffic Light Report Design Exceptions
(Third Quarter 2020 - As of September 30, 2020)

ACEP	Project Name	Index Trigger	EAC	Design Completion Date	Reason for Variance Since Last Quarterly Report	What is Being Done	IEC Comment: All Agency Contractor Evaluation
LIRR - Long Island Rail Road							
L70502LH	Babylon Interlocking Renewal	Contingency	\$32.6M	Jan 2021	During the Third Quarter 2020, the Babylon Interlocking Renewal project had a high Contingency Index of 2.63 due to the issuance of a change order for a Power Load Study. The study was requested by the Engineering Department to determine if the existing Motor Generators at Valley Stream and Wantagh could individually support the existing power requirements from both Valley Stream to Babylon and the new power requirements in the vicinity of Babylon Interlocking. This scope was not included in the original Technical Scope of work for the General Engineering Consultant (GEC) designer.	The designer's contract will increase upon a modification to their contract. In addition, as part of Lessons Learned, the LIRR has recommended that Power Load Studies be included in specifications for similar projects.	The overall Contractor/Consultant Performance rating for the current All-Agency Contractor Evaluation (ACE) report for this project is consistent with the IEC's observation of project performance, during this reporting period.

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

MTA Agency: New York City Transit	Status as of September 30, 2020
Project Name: ADA - Eastern Pkwy-Bklyn Museum - Eastern Parkway Line	Current Budget: \$42.2M
	Project EAC: \$42.2M
	Substantial Completion Date at Award: Oct 2020
Project No: T7041306	Current Substantial Completion Date: Dec 2020
Project Phase: Construction	Phase Complete: 80%

Project Description

This project will install three ADA elevators at the Eastern Parkway - Brooklyn Museum station: one providing access from the street to mezzanine and two from the mezzanine to the side platforms. The project will also expand the south mezzanine to build a new elevator machine room, reconstruct portions of platform edges and ADA boarding areas and replace and widen existing street stairs.

Problem Since Last Quarterly Report

Index Trigger(s): Contingency

Contingency: During the Third Quarter 2020, the project had \$1.7M in pending and approved Additional Work Orders (AWOs) compared to a \$1.6M contingency budget. This was due to changes in the cost estimates for major AWO #21 which involved egress requirements at the west mezzanine. It was not known until after the construction started.

What is Being Done

Contingency: Funding from within the project was made available for the contingency task. Recently \$400K was added to the contingency for AWO #21 based on the in-house estimate. Discussions/negotiations are ongoing to come to an agreement for the cost of AWO #21. The delay in SC due to the COVID 19 impact. Currently, AWO #21 is under negotiation which will also impact the schedule for SC – TBD. Project has funds in to reallocate for any additional need for this AWO #21.

IEC Comment

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

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

MTA Agency: New York City Transit	Status as of September 30, 2020
Project Name: MetroCard Electronic Components Replacement	Current Budget: \$16.3M
	Project EAC: \$16.3M
	Substantial Completion Date at Award: Jun 2016
Project No: T6040401	Current Substantial Completion Date: Apr 2021
Project Phase: Construction	Phase Complete: 89%

Project Description

This project calls for the normal replacement and modernization of the main electronic boards of the Automated Fare Collection (AFC) system resident in both rail and surface end devices, including the turnstile, booth terminal, MetroCard reader, and the bus Integrated Farebox Units (IFU). This work is being done in coordination with the New Fare Payment System project, One Metro New York (OMNY), to preserve the functionality in the existing Vending Machine equipment as the MTA transitions into OMNY.

Problem Since Last Quarterly Report

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

Schedule: During the Third Quarter 2020, the forecasted Substantial Completion date slipped by seven months, from September 2020 to April 2021. This was primarily due to in-house personnel unavailability related to COVID-19 and the reprioritization of personnel to higher priority projects, which temporarily suspended work on this project.

What is Being Done

Schedule: The lead project manager has returned to this project and the field work has started again by in-house personnel; the project is slated for completion in April 2021.

IEC Comment

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

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

MTA Agency: New York City Transit	Status as of September 30, 2020
Project Name: ADA - Platform Gap Retrofit - Various Locations	Current Budget: \$10.7M
	Project EAC: \$14.7M
	Substantial Completion Date at Award: Dec 2019
Project No: T6041304	Current Substantial Completion Date: Dec 2020
Project Phase: Construction	Phase Complete: 93%

Project Description

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

Problem Since Last Quarterly Report

Index Trigger(s): Cost

Cost: During the Third Quarter 2020, the estimate at completion exceeded the current budget by \$3.8M. This was due to an increase in the scope of work, which required additional General Orders (GOs), at several locations due to unexpected field conditions and code related issues.

Six platform edges required additional work that exceeded the reconstruction of the normal 40-foot ADA-Boarding Area. These platforms originally had a non-compliant warning strip that extended the entire length of the platform. The Office of ADA Compliance noted that having two different types of warning strips on the same platform created a potential safety hazard. As a result, ADA Compliance requested that the original warning strip be completely removed from the entire length of the platform edge and replaced with the new standardized 2’x4’ ADA warning strip. This significantly increased the amount of work required at these six platforms (Sutphin Blvd-Archer Ave upper and lower levels, D1, D2, J1, and J2 and Jamaica Van Wyck D1 & D2) and required the purchase of additional GOs.

In addition, 15 other platforms requiring reconstruction, had two ADA boarding areas per platform which was caused by having multiple train car types stopping at that platform. As a result, the cost of construction of these platforms increased as well as the number of GOs required to complete this work.

What is Being Done

Cost: Currently there is a Capital Budget Modification in circulation to address the shortfall.

IEC Comment

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

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

MTA Agency: New York City Transit	Status as of September 30, 2020
Project Name: 207th Street Overhaul Shop - Boiler Upgrades & Site Remediation	Current Budget: \$10.8M
	Project EAC: \$10.8M
	Substantial Completion Date at Award: Dec 2020
Project No: T6100454	Current Substantial Completion Date: Mar 2021
Project Phase: Construction	Phase Complete: 79%

Project Description

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

Problem Since Last Quarterly Report

Index Trigger(s): Schedule

Schedule: During the Third Quarter 2020, the forecasted Substantial Completion date slipped three months, from December 2020 to March 2021. This was due to a re-phase of the boiler upgrade work from the planned concurrent upgrade of the two boilers at the 207th Street Yard Boiler House to a consecutive upgrade of the boilers. The basis for this re-phasing is to avoid the potential of having both boilers in construction and therefore non-operational.

What is Being Done

Schedule: The Substantial Completion date was revised to reflect the time to re-phase. The time extension has been approved and an Additional Work Order (AWO) will be issued by early December 2020 to reflect the time extension. The cost impact of the time extension is under review.

IEC Comment

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

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

MTA Agency: New York City Transit	Status as of September 30, 2020
Project Name: NYCT-Wide Storage Area Network/Disaster Recovery	Current Budget: \$22.4M
	Project EAC: \$22.3M
	Substantial Completion Date at Award: Jul 2015
Project No: T6160402	Current Substantial Completion Date: Dec 2020
Project Phase: Construction	Phase Complete: 85%

Project Description	
<p>This project will purchase Storage Area Network (SAN) components in order to address the consolidation/virtualization of all the agencies' data centers and servers into three selected enterprise facilities connecting them to the NYCT-wide area SAN storage systems. The systems will be located at Livingston Plaza, Brooklyn, 2 Broadway, Manhattan, and a third disaster facility. This third facility is still to be determined.</p>	
Problem Since Last Quarterly Report	
Index Trigger(s): Schedule	
<p>Schedule: During the Third Quarter 2020, the forecasted Substantial Completion date slipped five months, from July 2020 to December 2020. After some initial testing by the Unified Timekeeping System (UTS) Database Administration (DBA) team, NYCT proceeded in installing some of the required UTS Applications servers at the 2 Broadway DR site so the UTS team could continue with performance/benchmark monitoring. Unfortunately, the application performance testing took longer than anticipated and consumed a few months. After the UTS performance/benchmark testing was successfully completed, the first DR test was attempted in September 2020. During this first DR test, lessons learned were encountered, during the test, and resolved. A second DR test attempt was scheduled soon afterwards and subsequent to the reporting period, on October 4, 2020, a successful DR test of the UTS HPCB3u environment was accomplished.</p>	
What is Being Done	
<p>Schedule: The Disaster Recovery environment is basically in place today, but until each user environment is tested and any lessons learned addressed and resolved, as was the case with the first test, one cannot say all environments are functionally protected in the event of a Livingston Plaza Data Center failure. It should be noted that any Disaster Recovery testing requires the “buy in” of all party’s schedules. Moving the Substantial Completion date into 2021 is solely for coordinating testing of each environment with the appropriate application owners.</p> <p>There are four partitions that make up the Superdome DR environment (HPCB3, HPCB3u, HPCB5 and HPCB-MR). With the successful Unified Timekeeping System (UTS/HPCB3u) DR test completed, the next step will be to coordinate and schedule the remaining three partitions/application environments residing in the Superdome environment (HPCB5, HPCB3 and HPCB-MR). It should be noted, the HPCB-MR system Primary applications environment is currently being configured and its associated DR partition configuration will follow once the Primary application environment has been completed and successfully tested. As stated previously Unified Timekeeping System was the first of four DR environments to be successfully tested.</p> <p>At the current time, all resources are consumed with the Securities Department’s/Chairmen’s Server Vulnerabilities Remediation initiative. The MTAI-T Unix/Linux team anticipates the 1Qtr 2021 for the next Disaster Recovery test. With that said, we would anticipate the HPCB5 applications environment would be the next environment tested, saving the largest environment (HPCB3) for testing in the 2Qtr 2021 or sooner depending on the second partitions 1Qtr. test results. As for the remaining fourth partition, once the primary environments partition is active and tested the associated DR environment would be configured with a targeted DR test scheduled sometime during late 2Qtr / 3Qtr 2021.</p>	
IEC Comment	
<p>Budget and Schedule Performance: The IEC substantially agrees with the material presented in this report, including the stated problems and actions taken by the Agency.</p>	
<p>All Agency Contractor Evaluation: An Agency ACE evaluation is not required for this project.</p>	

MTA Agency: New York City Transit	Status as of September 30, 2020
Project Name: Automatic Vehicle Location Monitoring for Paratransit Vehicles	Current Budget: \$26.9M
	Project EAC: \$26.9M
	Substantial Completion Date at Award: Jul 2020
Project No: T7030215	Current Substantial Completion Date: May 2021
Project Phase: Construction	Phase Complete: 35%

Project Description

This project will provide the system replacement and installation of a real-time dispatch and scheduling engine that allows the Paratransit division to know the location of vehicles at most times. Paratransit will be able to provide customers with reliable estimated times of arrival based on vehicle location. Dispatchers will be able to determine which vehicles are operating on time or late, then adjust the trips accordingly. The system will allow Paratransit to accurately record mileage, passenger pick-ups and drop-offs, as well as allow for quicker reaction to emergencies and other problems.

Problem Since Last Quarterly Report

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

Schedule: During the Third Quarter 2020, the forecasted Substantial Completion date slipped five months from December 2020 to May 2021. This was due to two factors: First, the Covid-19 pandemic halted the AVLM equipment installation in paratransit vehicles in March 2020, installations resumed in June and Paratransit and the AVLM vendor completed vehicle installs at the end of September 2020. In addition, Covid-19 limited developers working from the office and the vendor had to adjust to remote development, which led to software development delays and inadequate staffing availability. Secondly, the vendor also had software development delays on the central software functions for Paratransit users, which contributed to the delay of the AVLM system milestones.

What is Being Done

Schedule: MTA-NYCT has applied liquidated damages to the vendor in the amount of \$620K for delays. Also, NYCT is withholding milestone and monthly invoice payments totaling \$2.9M and will withhold future payments until milestones are met. In addition, Paratransit/Procurement and Vendor relations called in the vendor for a Vendor Relations briefing and rated the vendor Unsatisfactory. The vendor has been working on improving the software and the expected completion is forecast for the first quarter of 2021.

IEC Comment

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

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

3MTA Agency: New York City Transit	Status as of September 30, 2020
Project Name: Replace 12 Traction Elevators - Broadway Line	Current Budget: \$98.9M
	Project EAC: \$109.8M
	Substantial Completion Date at Award: May 2022
Project No: T7040702	Current Substantial Completion Date: May 2022
Project Phase: Construction	Phase Complete: 62%

Project Description

The project involves the replacement of 12 traction elevators, located at 3 Manhattan Stations; 168th Street, 181st Street and the 191st Street Stations on the Broadway Line.

Problem Since Last Quarterly Report

Index Trigger(s): Contingency & Cost

Contingency: During the Third Quarter 2020, contingency funds were depleted by \$2.5M. This is mainly due to the payment of \$1.5M in incentives for early completion/place in-service of the elevators and \$0.9M for an emergency repair of the power cable to energize the Elevator Machinery Room (EMR).

Cost: During the Third Quarter 2020, the Estimate at Completion (EAC) exceeded the current budget by \$10.8M. This was due to the additional need of \$2.5M in contingency as mentioned; \$7.0M in TAL for the additional station agents support; \$2.0M in EFA for designers to review the RFIs and support the AWOs; and \$0.1M for the CCM. The total need of \$11.6M will be partially offset by the surplus of \$0.8M in project reserve funds.

What is Being Done:

Contingency: Additional contingency needs were addressed as indicated above, and AWOs are being monitored/reviewed for accuracy.

Cost: The budget modification for \$10.8M was approved in October 2020 and funded.

IEC Comment

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

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

MTA Agency: New York City Transit	Status as of September 30, 2020
Project Name: Replace Supervisory Vent Controls – 11 Various Locations	Current Budget: \$30.0M
	Project EAC: \$30.2M
	Substantial Completion Date at Award: May 2022
Project No: T7060503	Current Substantial Completion Date: May 2022
Project Phase: Construction	Phase Complete: 43%

Project Description
<p>This project will replace the local Supervisory Control System at 11 Fan Plant locations in the Bronx, Manhattan and Brooklyn. Work includes replacing the existing Program Logic Control (PLC) and relay systems with Programmable Automation Controller (PAC) system with associated interfaces and electronics. The improvements will allow for remote control and monitoring at the Rail Control Center (RCC), the 40 Sands Street facility and the 2 Broadway facility.</p>
Problem Since Last Quarterly Report
Index Trigger(s): Contingency
<p>Contingency: During the Third Quarter 2020, approved Additional Work Orders (AWOs) totaled \$0.95M compared to a \$1.5M contingency budget at 39% third party completion. This was due to the installation of fire rated cable on the messenger cables in lieu of installing regular Fiber Optic (FO) cables in the track ducts. The contract bid was based on a 15-month shut down of the L train and had enough time to abate MHS, rod ducts and install cables. However, after the contract award, there was no shut down and the contractor was given 7 Weekend General Orders (GOs) to complete all the work on the tracks. To efficiently use the 7 GOs, duct abatement and utilizing duct rods for running cable (approx. 10,000 ln ft) was avoided and messenger cable was used for the fire rated cables. For the Jerome and Lenox loops, ducts were not available and NYCT used messenger cable. In addition, \$900K was used for installing expensive fire rated cable on the messenger cable but savings of \$1M was realized by not having to abate the various MHs and not using additional flagging and requiring less GOs.</p>
What is Being Done:
<p>Contingency: A \$1M budget modification was requested and was approved.</p>
IEC Comment
<p>Budget and Schedule Performance: The IEC substantially agrees with the material presented in this report, including the stated problems and actions taken by the Agency.</p>
<p>All Agency Contractor Evaluation: The overall Contractor/Consultant performance rating for the current All-Agency Contractor Evaluation (ACE) report for this project is consistent with the IEC’s observation of project performance, during this reporting period.</p>

MTA Agency: New York City Transit	Status as of September 30, 2020
Project Name: Upgrade A Synchronous Fiber Optic Network to Rings A and C	Current Budget: \$31.0M
	Project EAC: \$31.0M
	Substantial Completion Date at Award: Mar 2020
Project No: T7080602	Current Substantial Completion Date: Dec 2020
Project Phase: Construction	Phase Complete: 94%

Project Description

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

Problem Since Last Quarterly Report

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

Schedule: During the Third Quarter 2020, the forecasted Substantial Completion date slipped three months, from September 2020 to December 2020. This was due to COVID-19, since the technical expert could not travel from out of state and also the lack of Electronic Maintenance Division (EMD) support.

What is Being Done

Schedule: Weekly meetings are being held with the contractor and EMD/Dept Of Subways (DOS) to stay on track and resolve issues quickly.

IEC Comment

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

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

MTA Agency: New York City Transit	Status as of September 30, 2020
Project Name: Private Branch Exchange System Upgrade	Current Budget: \$41.5M
	Project EAC: \$48.6M
	Substantial Completion Date at Award: Jan 2020
Project No: T7080603	Current Substantial Completion Date: Mar 2021
Project Phase: Construction	Phase Complete: 88%

Project Description

This project will upgrade the obsolete NYCT Private Branch Exchange (PBX) telephone system equipment with modern equipment at various locations system-wide.

Problem Since Last Quarterly Report

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

Cost: During the Third Quarter of 2020, the Estimate at Completion (EAC) exceeded the current budget by \$7.1M. This was due to unforeseen work that requires additional access & protection, power bulletins, system migration, testing and inspections. Due to COVID-19 restrictions, a technical expert could not travel from out of state and there were DC Power issues at all PBX locations.

What is Being Done

Cost: On September 21, 2020, a draft budget modification was submitted. An extension of time request is currently under review.

IEC Comment

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

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

MTA Agency: New York City Transit	Status as of September 30, 2020
Project Name: Replace 25Hz Freq Converters - Various Locations	Current Budget: \$19.2M
	Project EAC: \$19.2M
	Substantial Completion Date at Award: Jun 2020
Project No: T7090205	Current Substantial Completion Date: Mar 2021
Project Phase: Construction	Phase Complete: 75%

Project Description

This project will furnish and install new frequency conversion equipment at 11 substations to replace existing equipment that has exceeded its useful life. The work will also include demolition and removal of decommissioned equipment, including switchgear, circuit breakers, power transformers, cables, conduits and accessories.

Problem Since Last Quarterly Report

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

Schedule: During the Third Quarter 2020, the forecasted Substantial Completion date slipped four months, from November 2020 to March 2021. This was due in part to additional settings adjustments to the frequency converters (FC) installed at 57th St./Lex Ave which were required based on the results of the Short Circuit Test. The additional adjustments were required to prevent any unexpected interruptions of power supply to the subway signals during and after live connection of the FCs.

The site work on the contract was shut down, for two months earlier this year, due to Covid 19 travel related restrictions which impacted the availability of the software team and Maintenance of Way (MOW) personnel supporting the contract. This impacted the development and installation of software updates to implement required adjustments to the performance of frequency converters. MOW did not proceed with replacement of the remaining converters until the software updates were installed and tested at the 57th St/Lexington location.

What is Being Done

Schedule: An extension of time has been negotiated with the contractor. MOW Power agreed with the manufacturer’s recommendation to substantially reducing the duration of heat run tests and discontinuing the short circuit tests on the remaining new converters. This would allow the contractor to shorten the installation and testing duration of the converters by at least one week (from six to five weeks) at each remaining location. MOW Power and the CM Office agreed to stagger the work schedules at the remaining location, so the contractor would be able to overlap work at two locations for approximately two weeks.

IEC Comment

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

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

MTA Agency: New York City Transit	Status as of September 30, 2020
Project Name: DCE Shop Components Phase 2 - 239th St, Concourse, and East NY Maintenance Shops	Current Budget: \$45.1M
	Project EAC: \$45.5M
	Substantial Completion Date at Award: Jul 2021
Project No: T7100403	Current Substantial Completion Date: Sep 2021
Project Phase: Construction	Phase Complete: 50%

Project Description

This project will replace components and provide improvements at the 239th Street, Concourse and East New York (ENY) Maintenance Shops in the Boroughs of the Bronx and Brooklyn. At 239th Street, the administration, cafeteria and entrance building roofs have been replaced (new EPDM), the crane has been extended to improve HVAC system maintenance of trains, the shop floor has four aisles and three track pits resurfaced. At Concourse, unit heaters are being replaced, the administration and cafeteria building roofs are being replaced (new EPDM), floor aisles are being resurfaced, EDR is being upgraded, car wash roof is being replaced, drain lines are being replaced and relined, windows replaced and the west driveway replaced (new asphalt). At ENY, the skylights are being replaced, exit/emergency stair replaced, and shop and annex building roofs replaced (new EPDM).

Problem Since Last Quarterly Report

Index Trigger(s): Contingency

Contingency: During the Third Quarter 2020, approved Additional Work Orders (AWOs) totaled \$0.99M, compared to a contingency budget of \$1.5M at 50% contract completion. This was due in part to:

- AWO #14 - removal of drainpipe u-traps at Track #4 manholes, removal of wood blocking at parapet and provision of NYCT manhole cover at Concourse
- AWO #17 – emergency back-up lighting at 239th Street
- AWO #18 – hand excavation and redesign of canopy footing at ENY

What is Being Done:

Contingency: A budget modification is planned to replenish the project contingency.

Subsequent to the reporting period, an extension of time request has been issued. The contractor mobilized early at the ENY site to recover schedule as was recommended in the EOT analysis which approved a 69-day contract extension. The approved contract extension established January 11, 2022 as the new Substantial Completion for the contract.

IEC Comment

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

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

MTA Agency: New York City Transit	Status as of September 30, 2020
Project Name: Livingston Plaza Electrical, Mechanical, Generator Phase A	Current Budget: \$31.9M
	Project EAC: \$33.3M
	Substantial Completion Date at Award: Mar 2020
Project No: T7160714	Current Substantial Completion Date: Nov 2020
Project Phase: Construction	Phase Complete: 93%

Project Description

This project will improve and upgrade the electrical and mechanical systems and provide an additional redundant emergency generator system within the 130 Livingston Plaza administrative facility.

Problem Since Last Quarterly Report

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

Schedule: During the Third Quarter 2020, the forecasted Substantial Completion date slipped three months, from August 2020 to November 2020. This was due to several reasons:

- Work on the project was shut for approximately a month because of difficulties in complying with COVID-19 regulations.
- Access to the 4th floor data center was restricted for two months starting March 17, 2020.
- A portion of the work on the existing cooling piping loop required the shutdown of AC to the building, which had been planned for March/April 2020. Completion of this work was delayed to October 2020 when the system could be shut down.

What is Being Done:

Schedule: A non-impactable extension of time is being negotiated with the contractor.

Subsequent to the reporting period, the project achieved Substantial Completion on November 30, 2020.

IEC Comment

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

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

MTA Agency: Long Island Rail Road	Status as of September 30, 2020
Project Name: Penn Station Elevator and Escalator Replacement and Improvements	Current Budget: \$12.4M
	Project EAC: \$12.4M
	Substantial Completion Date at Award: Dec 2019
Project No: L70206VP	Current Substantial Completion Date: Nov 2020
Project Phase: Construction	Phase Complete: 95%

Project Description

This project includes the replacement and improvement of five elevators and 14 escalators at the LIRR “A” level of Penn Station. The scope includes the renovation and modernization of the elevator cabs and internal operating mechanisms. The cab interiors are to be retrofitted to provide an aesthetically pleasing décor, utilizing vandal-proof and scratch proof materials. Renovation and modernization of the 14 escalators includes new microprocessor controls, steps, step chains, bull gears, full escalator track replacement and handrails with plans to re-use supports, frames, trusses and structural components which are in good condition. The refurbished heavy-duty escalators will be equipped with safety enhancements including the ability to measure horizontal impact and forces applied to comb plates at the top & bottom of the escalator, detect obstructions between step and skirt, sense handrail speed variations, and provide remote monitoring capability. The escalators will be equipped with sleep-mode technology, providing energy savings and prolonged equipment lifespan.

Problem Since Last Quarterly Report

Index Trigger(s): Schedule

Schedule: During the Third Quarter 2020, the forecasted Substantial Completion slipped 3 months, from August 2020 to November 2020. This is due to the LIRR initiated Change Order Request to satisfy code compliance issues and has increased the project scope of work. The added work includes; programming of an Alternate Recall System to 5 elevators as recommended by the Fire Marshall, replacement of an old and defective AC unit at the elevator P34 mechanical room, and replacement of existing skirt panels and capping for escalators 34A and 34B to correct a wide gap at the glass balustrade and capping that poses a safety issue to escalator users. The additional Change Order Work is in process.

What is Being Done

Schedule: A contract modification, that includes a time extension due to the Change Order, will be issued to the contractor. Subsequent to the reporting period and due to Covid-19 related reasons, the project will achieve Substantial Completion in December 2020.

IEC Comment

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

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

MTA Agency: Long Island Rail Road	Status as of September 30, 2020
Project Name: Bridge Painting / Waterproofing	Current Budget: \$8.0M
	Project EAC: \$8.0M
	Substantial Completion Date at Award: Dec 2020
Project No: L70401BS	Current Substantial Completion Date: Dec 2021
Project Phase: Construction	Phase Complete: 31%

Project Description

This project includes track-bed waterproofing at various bridges. Based upon LIRR inspections, the scope of work for the waterproofing at bridges includes spall repairs and crack repairs on the concrete deck before applying a waterproofing system after the removal of the rails, ties and track bed material, installation and removal of ballast retaining structure where necessary, waterproofing of the entire deck surface, and improvements to bridge drainage.

Problem Since Last Quarterly Report

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

Schedule: During the Third Quarter 2020, the forecasted Substantial Completion slipped 12 months, from December 2020 to December 2021. This project piggybacks on track outages from other projects. Force Account Labor shortages as a result of COVID-19 prevented the project from taking advantage of some previously identified piggybacking opportunities.

What is Being Done

Schedule: The project continues to look for piggybacking opportunities where the Track Dept, Buildings and Bridges, Facilities, Signal and Power Dept resources are able to supply support. The work is being rescheduled to take advantage of expected outages for the concrete tie replacement program in 2021.

IEC Comment

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

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

MTA Agency: Long Island Rail Road	Status as of September 30, 2020
Project Name: 3rd Rail – Composite Rail	Current Budget: \$11.6M
	Project EAC: \$11.6M
	Substantial Completion Date at Award: Dec 2019
Project No: L70701XF	Current Substantial Completion Date: Apr 2021
Project Phase: Construction	Phase Complete: 89%

Project Description

This project includes the replacement and upgrade of approximately 76,990 LF of new aluminum third rail at various locations to maintain the rail in a State of Good Repair.

Problem Since Last Quarterly Report

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

Schedule: During the Third Quarter 2020, the forecasted Substantial Completion slipped 4 months, from December 2020 to April 2021. The schedule slip was due to COVID-19 related delays, as well as the reallocation of Force Account resources to higher priority projects.

What is Being Done

Schedule: The project team is coordinating their work with high priority projects to make sure the project gets the resources it needs. The team has also rescheduled the work at Massapequa and forecast the completion to be March of 2021.

IEC Comment

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

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

MTA Agency: Metro-North Railroad	Status as of September 30, 2020
Project Name: Customer Communication Systems - Package 7	Current Budget: \$13.4M
	Project EAC: \$12.2M
	Substantial Completion Date at Award: Aug 2020
Project No: M7020211	Current Substantial Completion Date: Dec 2021
Project Phase: Construction	Phase Complete: 74%

Project Description

The Customer Service Initiative (CSI) Package 7 – design, furnish, deliver, install, test, and integrate new security systems, is an integral part of the multi-part, multi-phase CSI Project in Grand Central Terminal and other outlying passenger stations and facilities.

Package 7 includes the following scope:

- 1) New security network system, including integration with existing networks
- 2) New head end/physical security infrastructure management system, including integration with existing systems
- 3) Integrate the existing Video Surveillance System (VSS) cameras, access control systems and intercoms to the existing Security Command Center including those from the all-agency security system into the new system
- 4) New VSS, including integration with existing video management systems
- 5) Intercom system, including integration with existing intercom systems
- 6) Security monitoring and system administration workstations and associated user account setup

Problem Since Last Quarterly Report

Index Trigger(s): Schedule

Schedule: During the Third Quarter 2020, the forecast Substantial Completion date slipped 14 months, from October 2020 to December 2021 due to the following:

To support strategic security initiatives, Metro-North Railroad has elected options within the original contract which extended the Substantial Completion date of this project. The options elected include additional security elements for stations within the CSI, Enhanced Stations Initiative (ESI), West of Hudson and Portable Observation Device projects.

The time extension is needed to provide integration services to ensure all the equipment is installed properly by the contractor; punch list and commissioning at the station level is performed; and work at the head end servers are configured properly to meet the needs of the Security Department.

What is Being Done

Schedule: The additional time extension is within the terms of contract for options elected. The project team will work with C&D to capture all the needs for the options elected and work with the contract manager to ensure that proper time in the options elected are added to the contract.

IEC Comment

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

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

MTA Agency: Metro-North Railroad	Status as of September 30, 2020
Project Name: Harlem Wayside Communication & Signal Improvements	Current Budget: \$52.2M
	Project EAC: \$53.0M
	Substantial Completion Date at Award: Mar 2020
Project No: M7040112	Current Substantial Completion Date: Mar 2021
Project Phase: Construction	Phase Complete: 80%

Project Description

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

Problem Since Last Quarterly Report

Index Trigger(s): Contingency

Contingency: During the Third Quarter 2020, the project had a high Contingency Index due in part to the following change orders:

- Quantity adjustments for crushed stones, PVC conduits, etc.
- Changes via technical advisory including the relocation of communication cases at Scarsdale station and the installation of a double trough north of Scarsdale station.
- Per diem claims while the contractor is working between the original contract end date and until the contract extension is finalized.

Subsequent to the reporting period, the project Contingency Index further increased due to additional pending change orders which include the Segment 2 and 3 contract extensions and the allowance for a Safety Engineer.

Schedule: Subsequent to the reporting period, the Substantial Completion date slipped from March 2021 to November 2021 due to the following:

- In November 2018, a stop work order was implemented north of North White Plains Station (Segments 2 and 3) while under redesign. The stop order was lifted for Segment 2 in May 2020 and Segment 3 in July 2020.

It was originally estimated that it will take one additional year to complete the project with the redesigned Segment 2 only. However, during contract extension negotiations, direction was given to install the express cables on the existing poles in Segment 3 as well. A not to exceed time extension of 20 months was granted, making the new Substantial Completion date November 2021.

What is Being Done

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

Schedule: Segment 1 is completed. Track outages with longer work windows have been put in place. The project team is looking to provide more flagmen to allow the contractor to increase the number of crews to perform their work concurrently in Segments 2 and 3.

IEC Comment

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

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

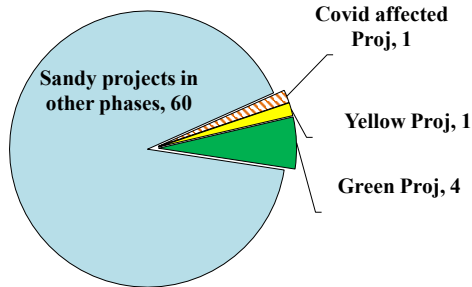


3rd Quarter 2020 Traffic Light Report on MTA SANDY Program

A total of 66 Active Sandy Projects were Reviewed for the 3rd Quarter 2020

The 66 active projects include 6 projects in Design, 11 in Post-Design to Construction Award, 49 in Construction

6 of 66 Projects in Design

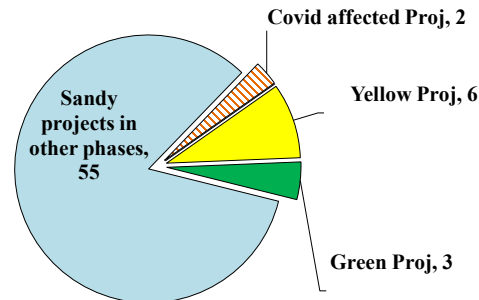


Summary of Projects in Design: 6 projects were reviewed in this phase with 4 (67%) designated green, 1 yellow, and none red.

Covid impacts: 1 project in design was impacted by Covid-19 and designated with an Orange lined TL for a schedule variance. The schedule variance was due in part to funding delays and scope

Last Quarter: 10 projects were reviewed in this phase with 8 (80%) designated Green, 1 (10%) Yellow, and 1 (10%) Red.

11 of 66 Projects in Post-Design to Construction Award

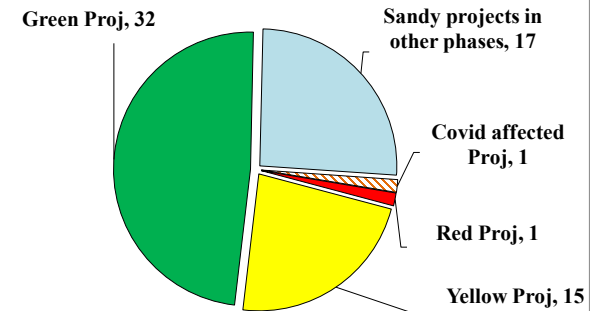


Summary of Projects in Post-Design to Construction Award: 11 projects were reviewed in this phase with 6 (55%) designated yellow, 3 green, and none red.

Covid impacts: 2 projects in Post-Design to Construction Award were impacted by Covid-19 and designated with an Orange lined TL for schedule variances. The schedule variances were attributed in part to funding delays and project bundling issues.

Last Quarter: 11 projects were reviewed in this phase with 8 (73%) designated Red and 3 (27%) Yellow.

49 of 66 Projects in Construction

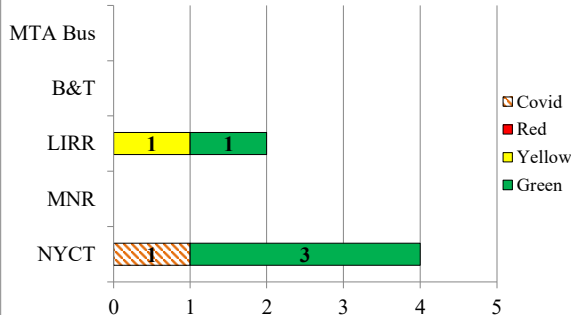


Summary of Projects in Construction: 49 projects were reviewed in this phase with 32 (65%) designated green, 15 yellow, and 1 red. The 1 red project was for a contingency variance. The high contingency index was due to various required change orders.

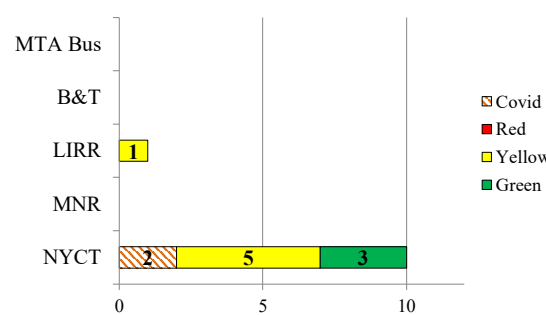
Covid Impacts: 1 project in construction was impacted by Covid-19 and designated with an Orange lined TL for a schedule variance. The schedule variance was due in part to AWOs and a work site shutdown.

Last Quarter: 44 projects were reviewed in this phase with 28 (64%) designated green, 13 (29%) Yellow, and 3 (7%) Red.

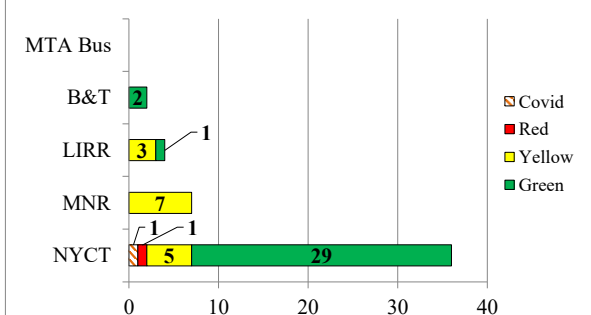
6 Projects in Design



11 Projects in Post-Design to Construction Award



49 Projects in Construction







MTA Sandy Recovery Projects Terms and Definitions




3rd Quarter 2020 Traffic Light Report

The following Terms and Definitions used to identify a project’s Traffic Light color designation show variances from quarter to quarter and are based on three performance indicators: cost, contingency and schedule. A project is designated a “**red light project**” when one or more of the three indicators exceed a specified threshold. Agencies are required to produce follow-up variance reports for all qualified red light projects. Included in these reports are agency 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 “**yellow light project**” after one or more performance indicators had triggered a red in a previous quarter. A yellow project may revert back to green after four consecutive quarters if the performance indicators have not worsened. A project is designated a “**green light project**” when no performance indicator has exceeded the Traffic Light Reports specified thresholds.





Sandy Recovery Traffic Light Report Project Terms and Definitions
Projects in Design: 6

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

Projects in Post Design to Construction Award Phase: 11


	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.
	Yellow: Previously indicated as red with no new substantial change since last Traffic Light Report.


Projects in Construction: 49


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

Projects impacted by Covid-19 (Temporary TLR Criteria): 4

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.

 Orange Lined: Cost or Contingency Index: An increase of 10% (or index movement of 10% more since last Traffic Light Report)

 Orange Lined: Schedule Variance: An increase of 3 months or more to substantial completion or since last Traffic Light Report

 Yellow: Previously indicated as **Orange Lined** with no new substantial change since the last Traffic Light Report / A project in design, procurement or construction that has been designated Yellow may be returned to Green when it has been in compliance with the three performance indicators for (four consecutive quarters) one year.

Projects in Planning:

Projects in Planning are reviewed but not displayed in the TLR until the project reaches the design phase.

Projects Completed:

Projects that were completed in previous quarters are not displayed in the current quarter's TLR, but continue to be maintained in the TLR project database for reporting purposes on the overall Sandy Program.

Report Index Formulas and Criteria:

➤ Cost Variance = EAC / Current Project Budget Amount
(Note: Current Budget is not Budget at Award)

➤ Cost Contingency Index = % Contingency Spent/% 3rd Party Contract Completion
 – Contingency used includes expended & pending AWOs.
 – Prompted when project has reached 25% completion or higher.

➤ Schedule Variance = Number of months of change in schedule since last Traffic Light Report

➤ Projects with current budgets below \$7M are not displayed in the current quarter's Sandy TLR, but will continue to be maintained in the TLR database for reporting purposes on the overall Sandy Program. If the current budget increases above the \$7M minimum threshold, the projects will return to an active status.

3rd Quarter 2020 Traffic Light Report
Sandy 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	Project Type	Total Project EAC	% Phase Complete	Cont. Index	Cont. Trend	Cost Index	Cost Trend	Schedule Variance (Mths)	Sched. Trend	Traffic Light
NYCT - New York City Transit Sandy Program												
Coney Island Yard Flood Mitigation												
ET100211	Recovery: Power Cable at Coney Island Yard	Construction	Recovery	\$164,562,094	50	.24	■	.99	■	0	■	ⓐ
ET100307	Mitigation: Long Term Perimeter Protection at Coney Island Yard	Construction	Mitigation	\$349,769,875	34	.78	▲	.99	■	0	■	ⓐ
Canarsie Tube												
ET040222	Recovery: Shaft Excavation - 1 Avenue (Canarsie Tube)	Construction	Recovery	\$17,335,502	99	.34	■	.97	■	0	■	ⓐ
ET050209	Recovery: Mainline Track (Canarsie Tube)	Construction	Recovery	\$34,504,672	100	.05	■	1.00	■	0	■	ⓐ
ET060213	Recovery: Tunnel Lighting (Canarsie Tube)	Construction	Recovery	\$50,423,338	95	.00	■	1.00	■	0	■	ⓐ
ET060219	Recovery: Pump Room (Canarsie Tube)	Construction	Recovery	\$24,173,895	98	.78	▼	1.00	■	0	■	ⓐ
ET080211	Recovery: Signals (Canarsie Tube)	Construction	Recovery	\$26,109,726	96	.21	■	.71	■	0	■	ⓐ
ET090211	Recovery: 2 Circuit Breaker Houses (Canarsie Tube)	Construction	Recovery	\$36,178,677	98	.53	■	.99	■	0	■	ⓐ
ET090212	Recovery: Power Cable, Communication Cable and Ducts (Canarsie Tube)	Construction	Recovery	\$284,124,776	94	.17	■	.82	■	0	■	ⓐ
ET090309	Mitigation: Power Cable, Communication Cable and Ducts (Canarsie Tube)	Construction	Mitigation	\$49,704,193	100	.00	■	.49	■	0	■	ⓐ
148th Street Yard												
ET100209	Recovery: Power Cable at 148 Street Yard	Construction	Recovery	\$14,570,909	73	.25	■	1.00	■	0	■	ⓐ
ET100309	Mitigation: Long Term Perimeter Protection at 148th Street Yard	Construction	Mitigation	\$78,014,529	69	.35	■	1.00	■	0	■	ⓐ
Rutgers Tube												
ET050210	Recovery: Mainline Track (Rutgers Tube)	Construction	Recovery	\$10,763,493	0	.00	■	1.00	▼	0	■	ⓐ
ET060232	Recovery: 2 Pump Rooms (Rutgers Tube)	Construction	Recovery	\$20,955,350	0	.00	■	1.00	▼	0	■	ⓐ
ET080213	Recovery: Signals (Rutgers Tube)	Construction	Recovery	\$14,068,069	0	.00	■	1.00	▼	0	■	ⓐ
ET090219	Recovery: Power and Communication Cables (Rutgers Tube)	Construction	Recovery	\$47,739,527	0	.00	■	1.00	▲	0	■	ⓐ

**3rd Quarter 2020 Traffic Light Report
Sandy 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	Project Type	Total Project EAC	% Phase Complete	Cont. Index	Cont. Trend	Cost Index	Cost Trend	Schedule Variance (Mths)	Sched. Trend	Traffic Light
NYCT - New York City Transit Sandy Program												
207th Street Yard												
ET100210	Recovery: Power Cable at 207 Street Yard	Construction	Recovery	\$40,779,241	7	.23	▲	1.05	▲	0	▬	G
ET100218	Recovery: 207 Street Yard Signal System	Construction	Recovery	\$297,991,140	38	.08	▼	.99	▬	0	▬	G
ET100219	Recovery: Yard Track (207 Street Yard)	Construction	Recovery	\$62,722,733	57	.29	▲	1.03	▬	0	▬	G
ET100220	Recovery: Yard Switches (207 Street Yard)	Construction	Recovery	\$30,984,884	11	.13	▼	.62	▬	0	▬	G
ET100310	Mitigation: Long Term Perimeter Protection at 207th Street Yard	Construction	Mitigation	\$168,426,766	56	-1.66	▲	.99	▼	0	▬	G
ET100312	Mitigation: 207th Street Yard Portal	Construction	Mitigation	\$42,300,000	97	.14	▲	1.56	▼	0	▬	G
All Other NYCT Projects												
ET040317	Mitigation: Upgrade Emergency Booth Communication System	Construction	Mitigation	\$78,316,385	56	.52	▼	1.00	▬	0	▬	Y
ET040327	Mitigation: Street Level Openings at 7 Stations and 1 Fan Plant	Construction	Mitigation	\$62,369,994	89	.15	▬	1.19	▼	0	▬	G
ET040328	Mitigation: Street Level Openings at 9 Stations	Construction	Mitigation	\$60,277,658	99	-.46	▬	1.05	▬	2	▲	Y
ET060214	Recovery: Tunnel Lighting (Rutgers Tube)	Construction	Recovery	\$7,903,769	0	.00	▬	1.00	▲	0	▬	G
ET060233	Recovery: Fan Plant (Rutgers Tube)	Construction	Recovery	\$10,438,868	0	.00	▬	1.00	▼	0	▬	G
ET060320	Mitigation: 11 Fan Plants	Construction	Mitigation	\$29,012,172	97	.68	▼	1.00	▬	1	▲	G
ET060321	Mitigation: 4 Fan Plants	Construction	Mitigation	\$34,572,831	95	.50	▼	1.00	▬	0	▬	Y
ET060330	Mitigation: 1 Fan Plant on the Flushing Line	Construction	Mitigation	\$13,626,750	71	.16	▬	.99	▬	0	▬	G
ET100314	Mitigation: 207th Street Yard Sewers	Construction	Mitigation	\$141,699,097	4	.00	▬	1.00	▬	0	▬	G
ET120307	Mitigation: Various Bus Depots	Construction	Mitigation	\$26,127,879	66	.17	▬	.99	▬	3	▲	R
ET160311	Mitigation: Zerega Maintenance Facility	Construction	Mitigation	\$8,147,826	72	.19	▬	.99	▬	0	▬	G
ET060317	Mitigation: Conversion of 2 Pump Trains	Design	Mitigation	\$19,119,839	98	.00	▬	.71	▬	3	▲	R
ET070310	Mitigation: Washout Protection on the Rockaway Line	Design	Mitigation	\$40,351,705	0	.00	▬	1.68	▬	0	▬	G
ET070311	Mitigation: Installation of New Crossovers at Beach 105th Street Station on the Rockaway Line	Design	Mitigation	\$63,089,295	27	.00	▬	1.06	▬	0	▬	G

3rd Quarter 2020 Traffic Light Report
Sandy Projects in Design, Post-Design to Construction Award or Construction

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 ■ = No Change since last quarterly report

ACEP #	Description	Phase	Project Type	Total Project EAC	% Phase Complete	Cont. Index	Cont. Trend	Cost Index	Cost Trend	Schedule Variance (Mths)	Sched. Trend	Traffic Light
NYCT - New York City Transit Sandy Program												
All Other NYCT Projects												
ET070313	Mitigation: Compressor Room Protection at Rockaway Park Yard	Design	Mitigation	\$8,065,445	27	.00	■	1.04	■	0	■	G
ET070209	Recovery: Wrap-up Rockaway Line	Post Des to Const Awd	Recovery	\$56,395,934	100	.00	■	1.19	■	5	▲	R
ET070308	Mitigation: Steinway Portal	Post Des to Const Awd	Mitigation	\$15,259,992	100	.00	■	.76	■	0	■	Y
ET090304	Mitigation: Montague-Furman Substation on the Broadway Line	Post Des to Const Awd	Mitigation	\$11,384,540	99	.00	■	1.11	■	2	▲	Y
ET090306	Mitigation: Substation Hardening at 11 Locations	Post Des to Const Awd	Mitigation	\$45,600,000	99	.00	■	1.19	▼	0	■	G
ET090307	Mitigation: Substation Hardening at 12 Locations	Post Des to Const Awd	Mitigation	\$45,274,061	99	.00	■	1.27	▼	0	■	G
ET090308	Mitigation: Deployable Substations	Post Des to Const Awd	Mitigation	\$48,328,865	100	.00	■	1.00	■	0	■	Y
ET090310	Mitigation: Back-up Power Control Center	Post Des to Const Awd	Mitigation	\$15,886,545	98	.00	■	.94	■	0	■	Y
ET090311	Mitigation: Substation Hardening at 5 Locations	Post Des to Const Awd	Mitigation	\$26,400,000	99	.00	■	.88	▼	0	■	G
ET160310	Mitigation: Consolidated Revenue Facility	Post Des to Const Awd	Mitigation	\$11,576,496	100	.00	■	.77	▼	2	▲	Y
ET160312	Mitigation: Tiffany Central Warehouse	Post Des to Const Awd	Mitigation	\$26,225,217	100	.00	■	1.04	■	4	▲	R
ES070211	Recovery: Reconstruction of Clifton Car Repair Shop	Construction	Recovery	\$34,890,731	53	.00	▼	1.00	■	2	▲	Y
ES070302	Mitigation: Reconstruction of Clifton Car Repair Shop	Construction	Mitigation	\$167,831,126	68	.43	▲	1.03	■	2	▲	Y
ES070303	Mitigation: St. George Terminal Yard	Construction	Mitigation	\$51,352,194	40	1.20	▲	1.00	■	0	■	R


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ACEP #	Description	Phase	Project Type	Total Project EAC	% Phase Complete	Cont. Index	Cont. Trend	Cost Index	Cost Trend	Schedule Variance (Mths)	Sched. Trend	Traffic Light
LIRR - Long Island Rail Road Sandy Program												
All Other Projects												
EL0303ZH	Flood and Emergency Management Equipment Mitigation	Construction	Mitigation	\$30,000,000	0	.00	■	1.00	■	0	■	Y
EL0502ZC	Restoration of the Long Beach Branch	Construction	Recovery	\$68,666,958	93	.00	▼	.96	■	0	■	Y
EL0602ZD	West Side Storage Yard Restoration	Construction	Recovery	\$43,512,962	76	.00	■	.99	■	0	■	G
EL0602ZL	Long Island City Yard Restoration	Construction	Recovery	\$28,612,983	99	.09	▼	1.11	■	0	■	Y
EL0402ZA	East River Tunnel Restoration of Signal System Reliability	Design	Recovery	\$121,894,902	30	.00	■	.67	■	0	■	G
EL0603ZP	West Side Yard & East River Tunnel Mitigation	Design	Mitigation	\$105,496,417	57	.00	■	1.04	■	5	▲	Y
EL0603ZS	Long Island City Yard Resiliency	Post Des to Const Awd	Mitigation	\$26,287,019	19	.00	■	1.00	■	0	■	Y
MNR - Metro-North Railroad Sandy Program												
Hudson Line Ph 1 & 2 Power and C & S Restoration												
EM040205	Communications & Signal Infrastructure Restoration Phase 1	Construction	Recovery	\$92,800,525	82	.84	■	.94	■	0	■	Y
EM040301	Power and Signals Mitigation	Construction	Mitigation	\$46,307,241	42	.00	■	.92	■	0	■	Y
EM040302	Hudson Line Power and Signal Resiliency	Construction	Mitigation	\$35,152,702	66	.00	■	1.00	■	0	■	Y
EM050206	Power Infrastructure Restoration Phase 1	Construction	Recovery	\$170,666,710	80	1.17	▼	.96	■	0	■	Y
All Other Projects												
EM030202	Right of Way Restoration	Construction	Recovery	\$8,000,000	95	.00	■	1.00	■	0	■	Y
EM050208	Power Infrastructure Restoration - Substations	Construction	Recovery	\$45,654,840	95	1.05	■	1.00	■	2	▲	Y
EM050209	Power Infrastructure Restoration - Harlem River Lift Bridge	Construction	Recovery	\$7,806,047	96	1.04	■	.93	■	0	■	Y
B&T - Bridges and Tunnels Sandy Program												
All Other Projects												
ED040302	Raising of revenue control equipment at the Queens Midtown Tunnel Service Building above the 500-year flood elevation.	Construction	Mitigation	\$6,950,375	57	.00	■	.95	■	0	■	G

3rd Quarter 2020 Traffic Light Report
Sandy Projects in Design, Post-Design to Construction Award or Construction

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ACEP #	Description	Phase	Project Type	Total Project EAC	% Phase Complete	Cont. Index	Cont. Trend	Cost Index	Cost Trend	Schedule Variance (Mths)	Sched. Trend	Traffic Light
B&T - Bridges and Tunnels Sandy Program												
All Other Projects												
ED040308	Enhancement of electric power resiliency at RFK bridge	Construction		\$35,527,863	10	.00	■	.95	■	0	■	

Summary of Sandy Traffic Light Report Design Exceptions
 (Third Quarter 2020 - As of September 30, 2020)

ACEP	Project Name	Index Trigger	EAC	Design Completion Date	Reason for Variance Since Last Quarterly Report	What is Being Done	IEC Comment: All Agency Contractor Evaluation
NYCT - New York City Transit							
ET060317	Mitigation: Conversion of 2 Pump Trains	Schedule	\$19.1M	Dec 2020	In the Third Quarter 2020, the forecasted design completion slipped three months, from September 2020 to December 2020. This was due to additional time being needed to coordinate funding, which has been impacted due to COVID-19.	NYCT is currently negotiating with the prospective contractor in identifying measures to lower costs and consequently lower the proposed price. Negotiation conference calls were held and few more are yet to be conducted to negotiate pricing and to come to mutual agreement between NYCT and the contractor regarding technical scope and commercial terms.	An Agency ACE evaluation is not required for this project

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

MTA Agency: New York City Transit	Status as of September 30, 2020
Project Name: Mitigation - Various Bus Depots	Current Budget: \$26.2M
	Project EAC: \$26.1M
	Original Substantial Completion Date: Oct 2020
Project No: ET120307	Current Substantial Completion Date: Mar 2021
Project Phase: Construction	Phase Complete: 66%

Project Description	
<p>This project will implement long term flood mitigation/resiliency at three depots: MJ Quill and Casey Stengel in Queens, and Castleton in Staten Island. Depending on the location, resiliency solutions include the installation of floor doors, deployable stop logs or rolling gates with concrete foundations, flood walls and drainage improvements.</p>	
Problem Since Last Quarterly Report	
Index Trigger(s): Schedule – Impacted this quarter by Covid-19	
<p>Schedule: During the Third Quarter 2020, the forecasted Substantial Completion slipped three months, from December 2020 to March 2021 due to following:</p> <ul style="list-style-type: none"> • The work on the contract was temporarily shut down for three weeks in April 2020 due to a shortage of contractor’s personnel related to the COVID-19 pandemic. • NYCT denied the contractor request to close the 41st Street entrances of MJ Quill depot for continuous two weeks each for the excavation and pour of concrete foundations for rolling flood gate and stop logs and requested an alternative solution being. • Additional Work Order (AWO) #11 is being negotiated with the contractor for the changes in stop logs and door flood panels at Castleton Bus Depot due to field conditions. There was a schedule impact associated with this AWO. 	
What is Being Done	
<p>Schedule: The agreed upon alternative access solution at MJ Quill depot is to design and install a temporary bridge to support steel plates over the new foundation to make it possible to provide bus access during overnight hours. AWO #8 was negotiated with the contractor for this work, with no change to the overall project budget.</p> <p>The contract schedule is still impacted by COVID-19 related work crew limitations and limited site access due to the pandemic. The contractor rescheduled the sequence of work by moving their crew between the work sites and different bus depots and working at two sites concurrently in order to mitigate the delay.</p>	
IEC Comment	
<p>Budget and Schedule Performance: The IEC substantially agrees with the material presented in this report, including the stated problems and actions taken by the Agency.</p>	
<p>All Agency Contractor Evaluation: The overall Contractor/Consultant performance rating for the current All-Agency Contractor Evaluation (ACE) report for this project is consistent with the IEC’s observation of project performance, during this reporting period.</p>	

MTA Agency: New York City Transit	Status as of September 30, 2020
Project Name: Mitigation - St. George Terminal Yard	Current Budget: \$51.3M
	Project EAC: \$51.3M
	Substantial Completion Date at Award: Mar 2021
Project No: ES070303	Current Substantial Completion Date: Mar 2021
Project Phase: Construction	Phase Complete: 47%

Project Description

This project will implement mitigation initiatives at the St. George Terminal and Yard to prevent future flooding at the NYCT Staten Island Railway. Resiliency will be achieved by installing a perimeter flood wall, deployable stop logs for access points and the adjacent rail tunnel, watertight manholes, a backflow system, and improvements to the drainage and pumping systems.

Problem Since Last Quarterly Report

Index Trigger(s): Contingency

Contingency: During the Third Quarter 2020, approved Additional Work Orders (AWOs) totaled \$1.6M compared to a contingency budget of \$3.8M at 40% third party completion. This was due to the following AWOs that are being processed:

- AWO #1: Naturally Occurring Asbestos truck & disposal
- AWO #2: Use of security handler and dog for truck access into Department of Transportation (DOT) secure areas (Wall 5 area)
- AWO #3: Obstruction: Existing grade beam at Wall 3 within the pile cap
- AWO #5: Sonic Drilling

What is Being Done

Contingency: A budget analysis will be performed to determine if further contingency funds are needed, although it has been preliminarily determined that the project is still on target to be completed with the available contingency.

IEC Comment

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

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

MTA Agency: New York City Transit	Status as of September 30, 2020
Project Name: Recovery - Wrap-up Rockaway Line	Current Budget: \$47.1M
	Project EAC: \$56.4M
	Original Award Date: Mar 2020
Project No: ET070209	Current Award Date: Mar 2021
Project Phase: Post-Design to Construction Award	Phase Complete: 0%
Project Description	
<p>This project will provide remaining repairs to Superstorm Sandy damage that occurred along the Rockaway Line. Work will include structural repairs on the North Channel Bridge, cable replacement between Howard Beach Station and Hammels Wye, replacement of signal switch heaters at Rockaway Park Yard and replacement of signal cables at various locations along the line.</p>	
Problem Since Last Quarterly Report	
Index Trigger(s): Schedule – Impacted this quarter by Covid-19	
<p>Schedule: During the Third Quarter 2020, the forecasted award date slipped five months, from October 2020 to March 2021. This was due to additional time being needed to coordinate funding, which has been impacted due to COVID-19.</p>	
What is Being Done	
<p>Schedule: Cost saving measures were investigated prior to advertisement. A budget modification is in circulation to allow the project to proceed to award.</p>	
IEC Comment	
<p>Budget and Schedule Performance: The IEC substantially agrees with the material presented in this report, including the stated problems and actions taken by the Agency.</p>	
<p>All Agency Contractor Evaluation: An Agency ACE evaluation is not required for this project.</p>	

MTA Agency: New York City Transit	Status as of September 30, 2020
Project Name: Mitigation - Tiffany Central Warehouse	Current Budget: \$25.0M
	Project EAC: \$26.2M
	Original Award Date: Jul 2018
Project No: ET160312	Current Award Date: Jan 2021
Project Phase: Post-Design to Construction Award	Phase Complete: 0%

Project Description
<p>This project will repair and strengthen the building exterior walls at the Tiffany Central Warehouse, located in the Bronx. The existing walls require repairs and the replacement walls will be built to withstand flood loads from future storm events. Work includes the construction of new foundations, new exterior wall panels, reinforcement of interior columns, new windows, frames, watertight doors, sump pumps and a perimeter drainage system. In addition, a complete roof replacement will be done. This project will be a Design-Build project that is bundled with warehouse roof replacement and exterior wall repairs.</p>
Problem Since Last Quarterly Report
Index Trigger(s): Schedule – Impacted this quarter by Covid-19
<p>Schedule: During the Third Quarter 2020, the forecasted award date slipped four months, from September 2020 to January 2021. This was due to additional time being needed to coordinate funding, which has been impacted due to COVID-19.</p> <p>Subsequent to the reporting period, the forecasted award slipped further to July 2021.</p>
What is Being Done
<p>Schedule: Cost saving measures are being investigated to allow the project to proceed to award. We are awaiting funding to become available to proceed with the next step.</p>
IEC Comment
<p>Budget and Schedule Performance: The IEC substantially agrees with the material presented in this report, including the stated problems and actions taken by the Agency.</p>
<p>All Agency Contractor Evaluation: The overall Contractor/Consultant performance rating for the current All-Agency Contractor Evaluation (ACE) report for this project is consistent with the IEC’s observation of project performance, during this reporting period.</p>



**Projects in CPOC’s Risk-Based Monitoring Program
(3rd Quarter 2020 Traffic Light Report – Period Ending Sept 30, 2020)**

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

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



**Projects in CPOC’s Risk-Based Monitoring Program
(3rd Quarter 2020 Traffic Light Report – Period Ending Sept 30, 2020)**

Capital Program		Project
2010-14	2015-19	
Shops and Yards		
	X	Harmon Shop Replacement Phase V, Stage 2
X		New Mid Suffolk Electric Yard
	X	Morris Park Diesel Locomotive Shop
Line Structures and Track		
	X	Myrtle Avenue Viaduct Replacement
X		Jamaica Capacity Improvements Phase 1
Bridges and Tunnels		
	X	Throgs Neck Bridge Replace Suspended Span Deck
Sandy Program		
Sandy Program		Canarsie Tube Restoration and Resiliency
Sandy Program		Rutgers Tube Rehabilitation
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