Metropolitan Transportation Authority

# Capital Program Oversight Committee Meeting

## December 2019

Committee Members

P. Foye, Chair
N. Zuckerman, Vice Chair
A. Albert
N. Brown
S. Feinberg
D. Jones
R. Linn
D. Mack
S. Metzger
J. Samuelsen
V. Tessitore

# Capital Program Oversight Committee Meeting

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

**Monday, 12/16/2019**
**2:30 - 3:30 PM ET**

## 1. PUBLIC COMMENTS PERIOD

## 2. APPROVAL OF MINUTES NOVEMBER 12, 2019

*- Minutes from November '19 - Page 3*

## 3. COMMITTEE WORK PLAN

*- 2020 CPOC Committee Work Plan - Page 6*

## 4. MTACC CAPITAL PROGRAM UPDATE

*- Progress Report on LIRR Expansion - Page 8*
*- IEC Project Review on LIRR Expansion - Page 16*
*- Update on East Side Access - Page 20*
*- Update on East Side Access Appendix - Page 46*
*- IEC Project Review on East Side Access - Page 62*
*- IEC East Side Access Appendix - Page 66*
*- Update on Second Avenue Subway Phase II - Page 67*
*- Update on Penn Station Access Project - Page 73*

## 5. CAPITAL PROGRAM STATUS

*- Commitments, Completions, and Funding Report - Page 82*

## 6. QUARTERLY TRAFFIC LIGHT REPORTS

*- Third Quarter 2019 Core & Sandy Traffic Light Reports - Page 92*

Date of next meeting: Monday, January 21, 2020 at 2:30 PM

**MINUTES OF MEETING**
**MTA CAPITAL PROGRAM OVERSIGHT COMMITTEE**
**November 12, 2019**
**New York, New York**
**2:30 P.M.**

CPOC members present:
Hon. Susan Metzger
Hon. Andrew Albert

CPOC members not present:
Hon. Norman Brown
Hon. Patrick Foye
Hon. Sarah Feinberg
Hon. David Jones
Hon. Robert Linn
Hon. David Mack
Hon. John Samuelsen
Hon. Vincent Tessitore, Jr.
Hon. Neal Zuckerman

MTA staff present:
Ray Burke
George Cleary
Michael Garner
Jigish Patel
Al Putre
Tom Savio

NYCT staff present:
Marva Brown
Tony Cabrera

Independent Engineering Consultant staff present:
Calvin Gordon
Mark Sielucka
Hassan Tavassoli

* * *

Commissioner Metzger called the November 12, 2019 meeting of the Capital Program Oversight Committee to order at 2:00 P.M.

**Public Comments Period**

There were three public speakers in the public comments portion of the meeting: Jason Pineiro; Matt Kamper; and Kevin Zeng.

**Meeting Minutes**

The minutes to the meeting held on October 21, 2019 were approved.

**Committee Work Plan**

Mr. Savio announced that there were no changes to the Work Plan.

**Update on Minority, Women, Disadvantaged and Service Disabled Veteran-Owned Business Participation Programs and MTA Small Business Development Programs**

Mr. Burke reported that MTA-wide DBE awards against an 18% Federal Participation Goal (October 2018 – September 2019) were 20%. With respect to the 15% NYS Participation Goal (April 2019 - September 2019), the MTA achieved a rate of 18% for MBE awards, and a rate of 15% for WBE awards. With respect to the 6% NYS SDVOB Participation Goal, the MTA achieved a rate of 4% for awards. Mr. Patel then provided an overview of the Small Business Development Program (SBDP) Tier I Program, comprising 272 project awards to 182 firms for a total award amount of $165M. In addition, he cited figures for the Tier II Program, which currently comprises 66 project awards to 31 firms for a total award amount of $127M. Finally, Mr. Patel reported that in the first eight years of the Small Business Federal Program, 57 project awards to 30 firms, for a total award amount of $108M, have been achieved. Mr. Cleary provided highlights of SBDP Business Development efforts currently underway, including the following: there are a total of 217 prequalified firms in the program; since its inception, the SBDP Loan Program has approved 120 loans, for a total loan amount of nearly $17M; the program is readily exceeding its NYS MWBE and Federal Program DBE Goal requirements; and the Emerging Contractors Program, comprising the most diverse group of contractors within the SBDP, includes 64 contractors, and to date has achieved 11 project awards totaling $4.93M. Further details of the presentations, and Committee Members' comments and questions with respect thereto are included in the video recording of the meeting maintained in MTA's records.

**NYCT Update on Track & Switch Capital Program**

Ms. Brown provided an update on program progress since the last such presentation to CPOC in July 2017. Among the highlights: major incidents attributed to track are down by more than half to 7.5 (from a monthly average of 16.5 during the six months prior to the Subway Action Plan, January – June 2017); and major track incidents are down 58% since September 2016. Ms. Brown then provide an inventory of assets in the program, the history of track and switch installations since 1984, and 2015 – 2019 production and budget goals, both of which NYCT is on track to meet by year end. Ms. Brown finished her presentation with a review of various investment categories as well a survey of a wide range of track and switch types in various applications. In its oral remarks, the IEC confirmed that the 2015-2019 Track and Switch Program has met its overall production goals and commitments to date, and that through a project-by-project cost analysis, the IEC has determined that the program is currently within budget. The IEC then noted that its analysis of the individual Track projects in the Capital Traffic Light Report from September 2019 and prior quarters demonstrates a consistent number of cost and schedule variances. However, the IEC finds that NYCT has successfully worked around these issues by redeploying staff and resources to move the program forward and to mitigate cost variances by utilizing the savings from other projects within the program. Further details of the presentations, and Committee Members' comments and questions with respect thereto are included in the video recording of the meeting maintained in MTA's records.

**Progress Report on OMNY - MTA's New Fare Payment System**

Mr. Putre outlined the Phased Approach to project implementation, from the initial launch at select subway stations/buses that occurred in May 2019 through project completion (which remains scheduled for July 2023). He then reported that the project is currently 28% complete and that there has been no change to the $645 million project budget. In its oral remarks, the IEC stated that its analysis confirms that the project remains on budget and on schedule. The IEC noted that the majority of variances from the Phase I rollout have been resolved, resulting in enhanced reliability and performance of the OMNY system. The IEC then cited risks related to the all-Door Boarding change order and the potential effect on the decommissioning of MetroCard equipment related to the integration of affiliate agencies. The IEC then offered the following observations: to take full advantage of the OMNY system, it is incumbent on the MTA to coordinate fare policies across all agencies; the project continues to benefit from a well-coordinated effort, led by the project team, in addressing stakeholder requirements while meeting key schedule milestones; and an effective employee training and customer communications program, implemented by the MTA and OMNY program partners, have contributed to the success of the OMNY program. The IEC concluded its oral remarks with the following recommendations: dual control and well-

established procedures must be followed to minimize human errors while performing critical system operations; and the strategy for a consolidated approach to integrating affiliate agencies into the OMNY system must be developed by the MTA prior to formal agreements. Further details of the presentations, and Committee Members' comments and questions with respect thereto are included in the video recording of the meeting maintained in MTA's records.

**MTA Capital Program Commitments & Completions and Funding**

Mr. Savio reported that in 2019 agencies plan to commit a total of $5.6 billion dollars, including 36 major commitments that are being tracked throughout the year. The MTA made six major commitments through October and twenty major commitments are delayed. Through October, agencies have committed $2.2 billion versus a $4.3 billion year-to-date goal, and by year end, the MTA forecasts making fifteen more major commitments and meeting 85% its overall 2019 commitments goal. For those commitments that will slip into 2020, all are projected to be committed by mid-year, with the majority occurring in January and February. With respect to completions, in 2019, agencies plan to complete a total of $3.4 billion, including 24 major completions that are being tracked throughout the year. Through October, agencies have completed $2.5 billion versus a $2.6 billion year-to-date goal, and by year end, the MTA forecasts meeting its 2019 completions goal.

**CPOC Charter Review**

Mr. Savio stated that the CPOC Committee Charter has been included in the CPOC book for review by Committee Members in advance of the December Corporate Governance Committee, which will review and approve all Committee Charters. Mr. Spero then noted that staff recommends no changes at this time.

**Adjournment**

Upon motion duly made and seconded, Commissioner Metzger adjourned the November 12, 2019 meeting of the MTA Capital Program Oversight Committee at 3:02 PM.

Respectfully submitted,
Michael Jew-Geralds
Office of Construction Oversight

Metropolitan Transportation Authority

# 2020 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**
NYCT Capital Program Update
- Signals and Train Control Division
- Systems and Security Division

NYCT Rolling Stock Procurement Program

**February**
B&T Capital Program Update
- Henry Hudson Bridge Program
- Verrazano-Narrows Program
- Throgs Neck Bridge Program
- Harlem River Drive Connector Ramp at the RFK Bridge
- Overall Design-Build Program

LIRR and MNR Update on Positive Train Control (PTC)
Update on Capital Program Security Projects (in Executive Session)

**March**
NYCT Capital Program Update
Quarterly Traffic Light Reports

**April**
MTACC Capital Program Update

**May**
LIRR Capital Program Update
MNR Capital Program Update
LIRR and MNR Update on Positive Train Control (PTC)
Update on OMNY Program
Update on Minority, Women and Disadvantaged Business Participation

**June**
NYCT Capital Program Update
Quarterly Traffic Light Reports

**July**
MTACC Capital Program Update

**September**
NYCT Capital Program Update
Quarterly Traffic Light Reports

**October**
LIRR Capital Program Update
MNR Capital Program Update
LIRR and MNR Joint Update on Rolling Stock
LIRR and MNR Update on Positive Train Control (PTC)

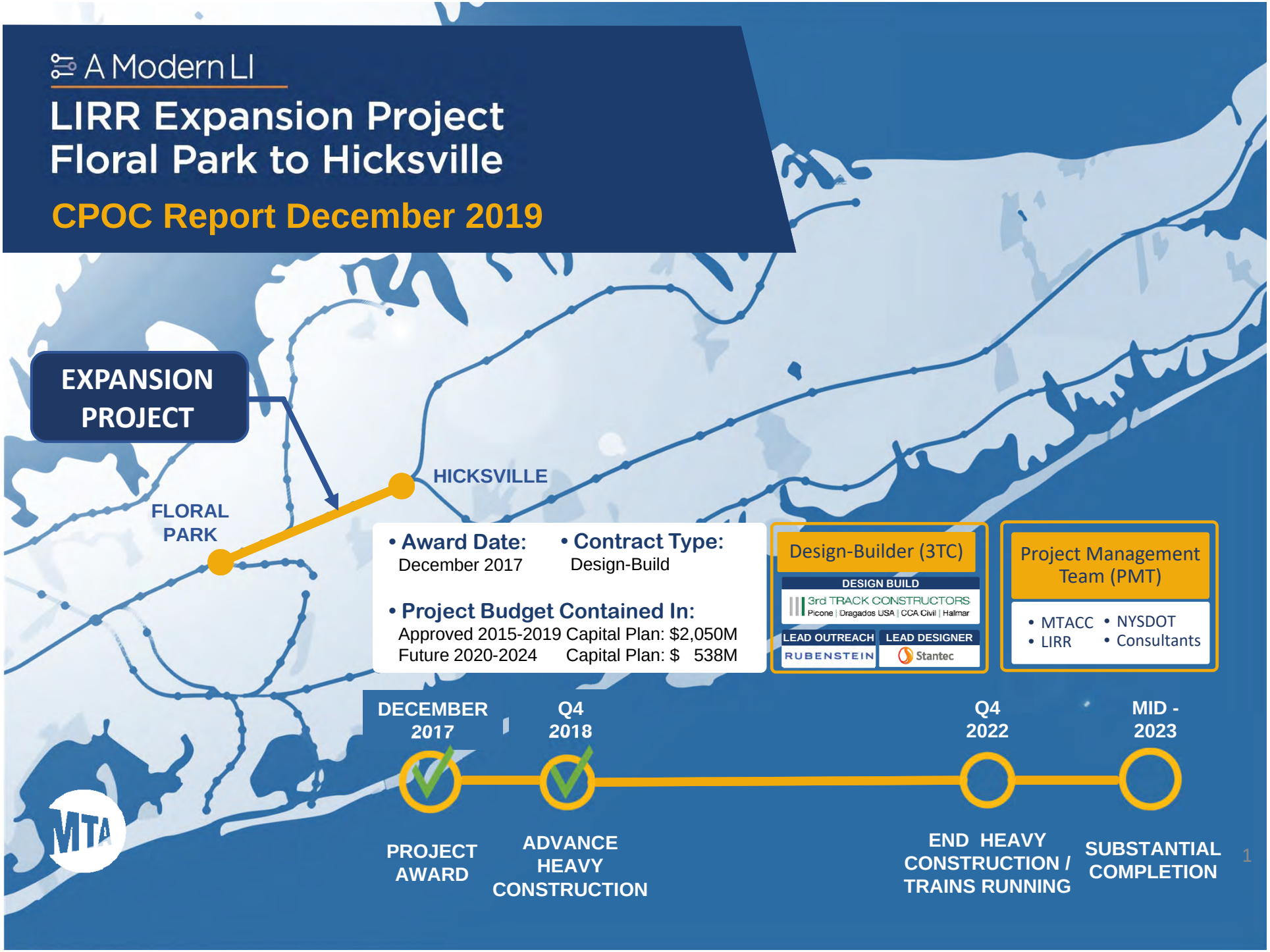
**November**
NYCT Capital Program Update
Update on OMNY Program
Update on Minority, Women and Disadvantaged Business Participation
Update on Small Business Development Program

**December**
MTACC Capital Program Update

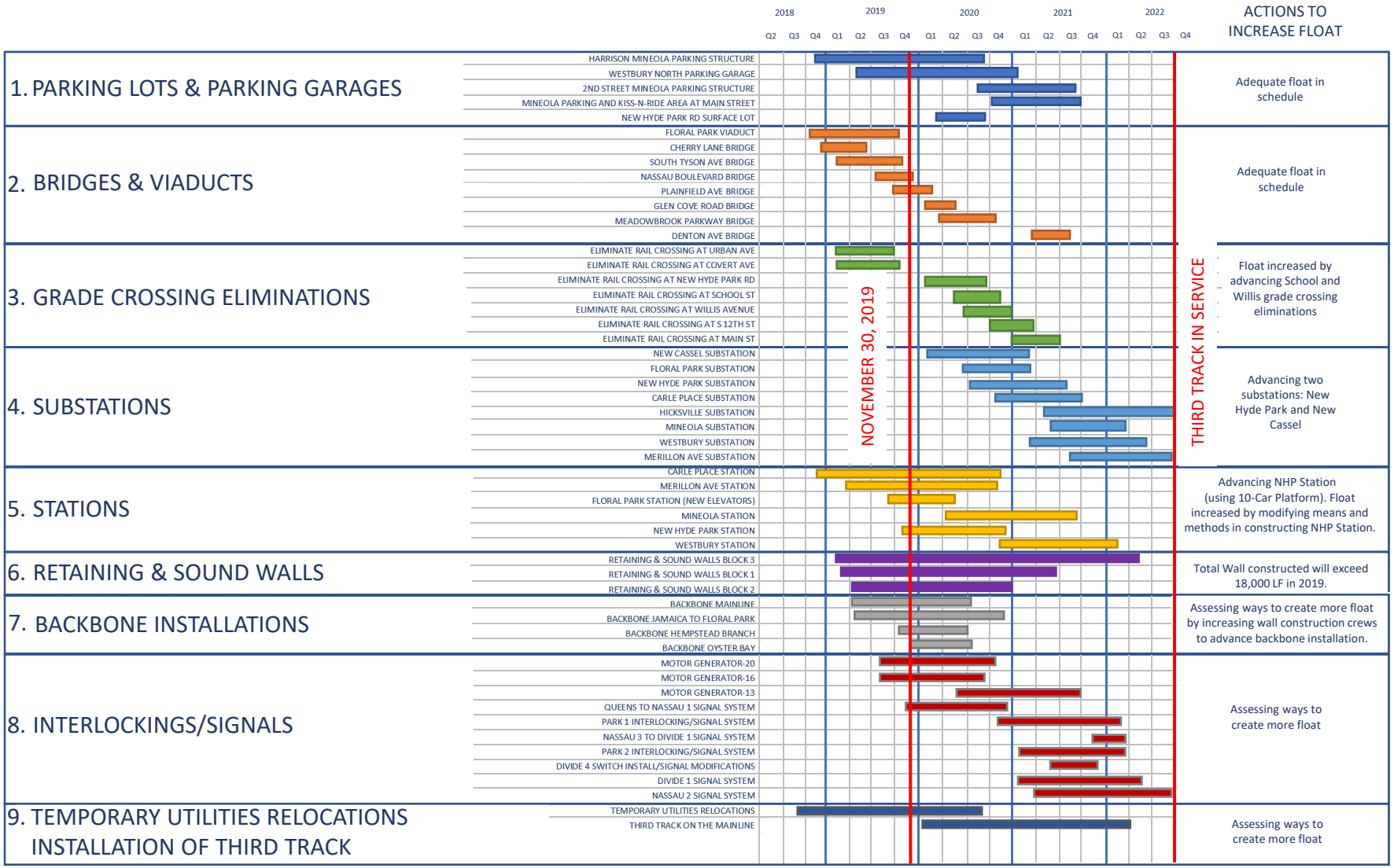
A Modern LI

# LIRR Expansion Project
# Floral Park to Hicksville

## CPOC Report December 2019



# Construction Schedule Summary



# Financial Summary

| Current 2015-2019 Capital Plan | | TOTAL |
|---|---|---|
| Design-Build Budget | $ | 1,497,105,177 |
| LIRR/Force Account | $ | 213,860,388 |
| Project/Other | $ | 197,000,970 |
| Contingency | $ | 142,033,465 |
| **Total Budget with Contingency** | $ | 2,050,000,000 |

| Expenditures | | |
|---|---|---|
| Projected | $ | 776,116,272 |
| Actual | $ | 765,745,960 |

| Change Orders | | |
|---|---|---|
| Executed | $ | 3,838,412 |
| In Negotiations | | ±$5M |
| Remaining Contingency | | $135M - $140M |

| Completion Scope Advanced | | |
|---|---|---|
| Temp allocation for Adv. Grade Crossings | $ | 46,091,776 |

| Future 2020-2024 Capital Plan | | |
|---|---|---|
| Total Budget | $ | 538,532,692 |

**Actuals through October 2019.*

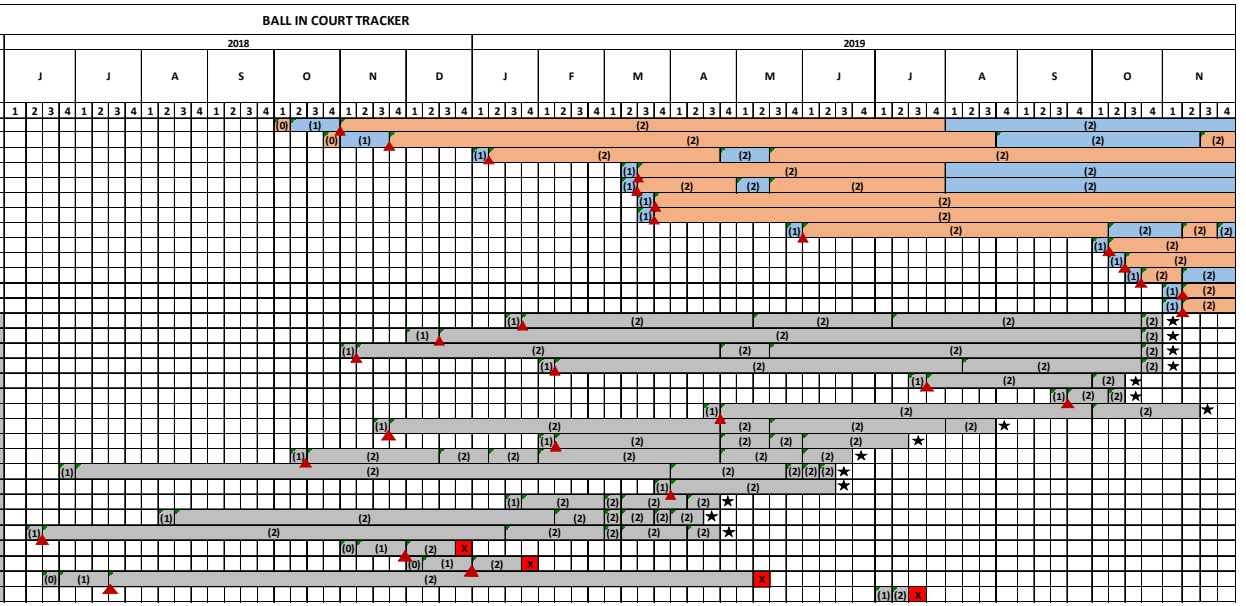
1. Project remains under budget:
   - In negotiations - addl ± $5M that includes credits and debits
2. DB Project is on schedule:
   - 30.6% project progress – verified work (Base + Completion)
     35.2% (Base)
   - All project elements proceeding on schedule
   - Off Right-Of-Way elements advancing ahead of schedule
   - On Right-Of-Way elements are advancing per schedule, prior concerns mitigated
   - Advancing two undergrade crossings and two substations early
3. Future Capital Program
   - Completion Scope - $538M
   - $46M borrowed from Completion Scope for grade crossing advancement financed by use of contingency in Base Scope

# Change Orders / Risk Control

## Ball in Court Tracker (as of November 26, 2019)

**BALL IN COURT TRACKER**

| # | Outstanding Tasks | CO # | BIC | Purpose |
|---|---|---|---|---|
| 1 | Merillon Station Elevators | 8 | PMT | No cost |
| 2 | Existing Grade Crossing Signal Equipment Request | 12 | 3TC | Credit |
| 3 | Queens Operator Workstation | 14 | 3TC | Missed Scope |
| 4 | Cable Tray and Backbone (Force Account Work & DB Credit) | 23 | PMT | Risk Mitigation |
| 5 | Station Gangway and Gangway Storage Deletion | 24 | PMT | Scope reduction |
| 6 | Revised Property Maps in New Hyde Park | 20 | 3TC | Risk Mitigation |
| 7 | Third Rail Heaters | 22 | 3TC | Credit |
| 8 | ASIMS Piping (Stairs and Ramps) | 29 | PMT | Improve Safety |
| 9 | Metal Art at Merillon | 36 | 3TC | New Specs |
| 10 | Global License LIRR | 32 | 3TC | New Specs |
| 11 | Additional NYSDOT Maps | 38 | PMT | Changed Scope |
| 12 | Phase 1 & Phase 2 Studies and Surveys; 80 and 85 Willis Ave | 41 | 3TC | New Specs |
| 13 | NICE Facility Heating Issues (T&M Directed Work) | 42 | 3TC | Improve Safety |
| 14 | Mineola Track Siding | 15 | Negotiated | Risk Mitigation |
| 15 | Help point System Modifications (credit) | 13 | Negotiated | Credit |
| 16 | Hempstead Interlocking Signals (Park 1 and Park 2) | 10 | Negotiated | Improve Safety |
| 17 | Elevator Alarm/Light Scope Deletion | 17 | Closed | Scope reduction |
| 18 | Time Lapse Cameras | 26 | Negotiated | Improve Safety |
| 19 | Nassau County Pump Station Integration | 35 | Negotiated | Improve Efficiency |
| 20 | Blue LED Lights | 21 | Closed | New Specs |
| 21 | Negative Return Running Rail Clamps | 9 | Closed | New Specs |
| 22 | Additional Master Location 147/148 | 16 | Closed | Improve Efficiency |
| 23 | Completion Scope items moved to Base Scope | 7 | Closed | Risk Mitigation |
| 24 | REVISED Proposal for Turnouts and Crossovers | 3 | Closed | New Specs |
| 25 | Advancement of Grade Crossing at Willis, Main, and School | 25 | Closed | Risk Mitigation |
| 26 | Additional Office Space at Westbury Office | 4 | Closed | Improve Efficiency |
| 27 | NICE Facility Repairs | 2 | Closed | Risk Mitigation |
| 28 | Substation Relays - CE-1 update to V7 Contract Drawings & V5 | 5 | Closed | New Specs |
| 29 | ROW Utility Poles Fiberglass v Wood | | Closed | No Merit |
| 30 | Station Aesthetics Design | | Closed | No Merit |
| 31 | Requested VECP for Walkway Canopies | | Closed | No Merit |
| 32 | Stewart Manor Fence | | Closed | No Merit |

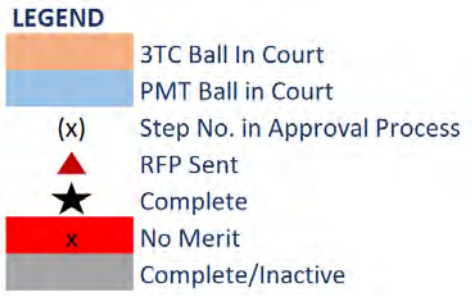



Since our last CPOC:

- 6 new change orders commenced
- 8 more change orders were approved
- 0 change orders were found to have no merit

Out of 13 active change orders:

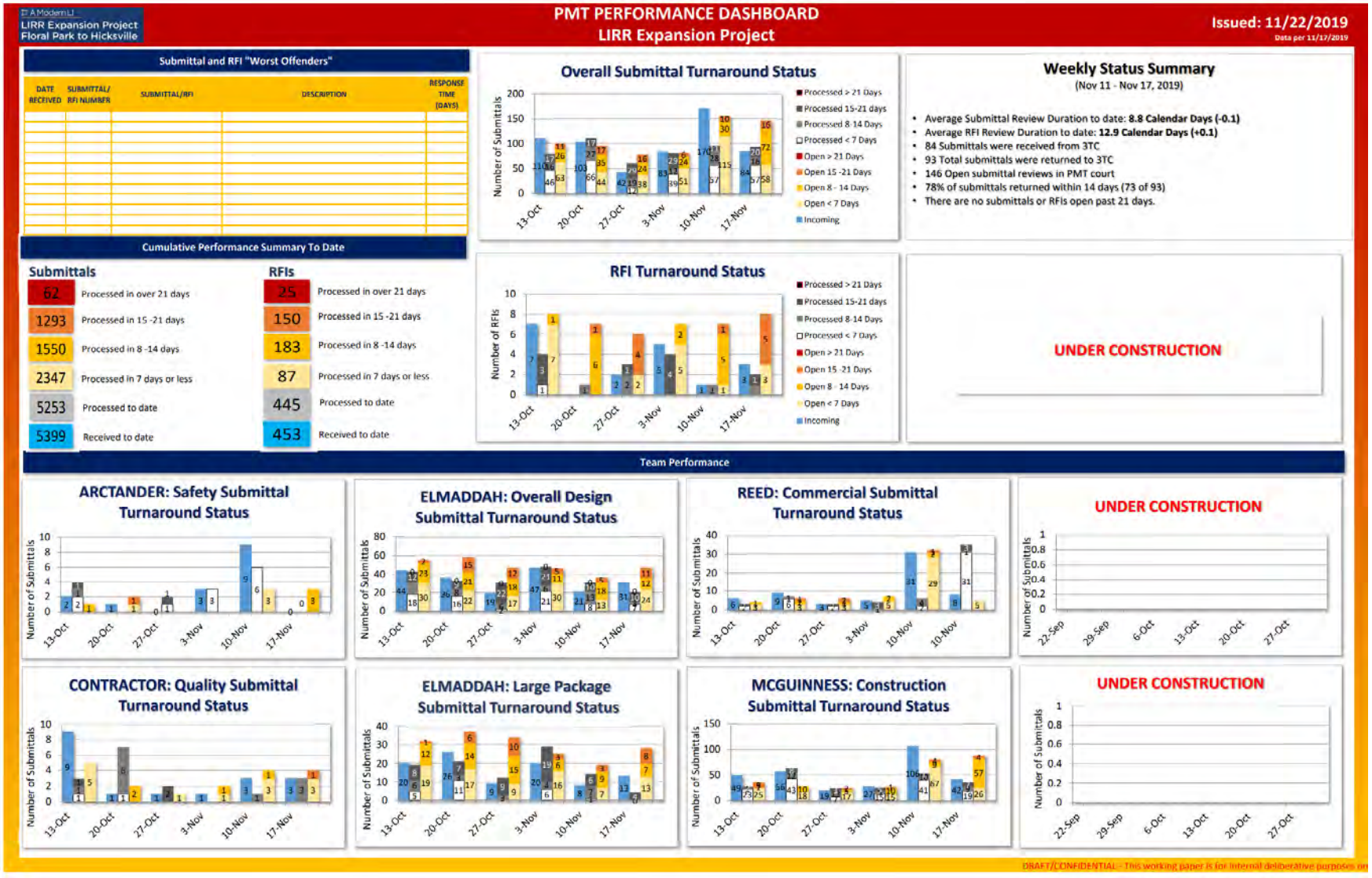
- 2 credits and 1 scope reduction
- 1 no cost scope swap
- 2 risk mitigations
- 1 missed scope, 1 changed scope and 3 new specs
- 2 improved safety



# Risk Mitigation

| Risk | Issue | Concern | Mitigation |
|---|---|---|---|
| **Temporary Utility Relocations** | Extent of temporary utility relocations | Utility relocations may take longer than allocated in the schedule | • Weekly coordination between PMT and design-build team to develop integrated solution<br>• Aggressive design approval process<br>• Dedicated personnel to enable quick decision making |
| **Delivery of Materials** | Delayed delivery of long lead materials | Material not delivered to site in a timely manner may impact project schedule | • Aggressive design / shop drawing approval process<br>• Establish storage areas to accept delivery prior to need |
| **Work Sequencing at Mineola** | Construction at Mineola is the most complicated part of the corridor | Significant unknowns on constructability, restricted working area and temporary traffic plans | • Advancing Willis Avenue Grade Crossing allowing work to start now<br>• Working with Mineola Mayor to ensure construction staging matches local needs |
| **Systems Integration** | Subdivided responsibilities for systems delivery within design-build team | Potential for gaps in scope and ineffective system integration | • New task force created to ensure all experts are at the same table<br>• Working to bring more capable system integrators to the design-build team |

# Key Performance Indicators (KPIs)



# 2020 Milestones

- Completion Milestones
  - Mineola Harrison Garage 3Q2020
  - Carle Place Station 4Q2020
  - Nassau 1 Interlocking Installed
- Bridges & Grade Crossings
  - NHP Road, Willis Ave, School St, S12th
  - Plainfield, Glen Cove, Meadowbrook
- 22,000 lf Walls
- Civil Works largely complete by end of 2020
- Tree Restoration Plans

# A New Approach

Covert Avenue Grade Crossing, Aug 2019

Planning | Development | Delivery

# December 2019 CPOC Independent Engineering Consultant Project Review

## Long Island Rail Road Expansion


*MTA Independent Engineering Consultant*

# Budget Review

- The IEC has reviewed the total project budget. A cost analysis for the design, construction and soft cost to verify the project's estimate at completion was performed. Based on this analysis, the project is within budget.
- Average monthly expenditures of $41M, meet the current schedule requirements.
- The percent complete to date compares favorably to total expenditures, remaining contingency and overall budget.

# Schedule Review

- The IEC's review verifies that the project remains on schedule:
  - The longest path runs through the design, procurement and installation of Nassau 3 interlocking signal systems.
  - Nassau 1 interlocking is near critical. The first switch at Nassau 1 interlocking was successfully placed on Nov 16. A total of four (4) switches are required to be in place by the end of February in order to avoid impacts to successor activities.
  - The project has either met or exceeded all 2019 milestones, and is positioned well to meet the milestones in the upcoming quarter.

# Risk

- The top risks are as follows:
  - Design, procurement and delivery of long-lead items, e.g. signal equipment, sub-stations, track and precast concrete ties.
  - Temporary and permanent utility relocations at Mineola, e.g. underground utilities including signal and power, and overhead electrical utilities need to be relocated before installation of retaining wall and raising of track.
- In the opinion of the IEC, based on field observations, schedule and risk reviews, and participation in risk workshops, the agency is taking appropriate steps to mitigate risks associated with achieving milestones.

Master Page # 20 of 154 - Capital Program Oversight Committee Meeting 12/16/2019

# BRINGING LONG ISLAND RAIL ROAD SERVICE TO THE EAST SIDE OF MANHATTAN

## Capital Oversight Committee Report
## December 2019

# Project Scope

**Largest infrastructure project in the United States**

**8 miles of new tunnels and 40 miles of new track**

**New 350,000 sq. feet Concourse**

**New terminal 150’ below Grand Central**

**Installed 96 new switches and 14 signal huts in Harold Interlocking**

Master Page # 22 of 154 - Capital Program Oversight Committee Meeting 12/16/2019

# BRINGING LONG ISLAND RAIL ROAD SERVICE TO THE EAST SIDE OF MANHATTAN

## Current EAC $11.1B
## RSD : December 2022

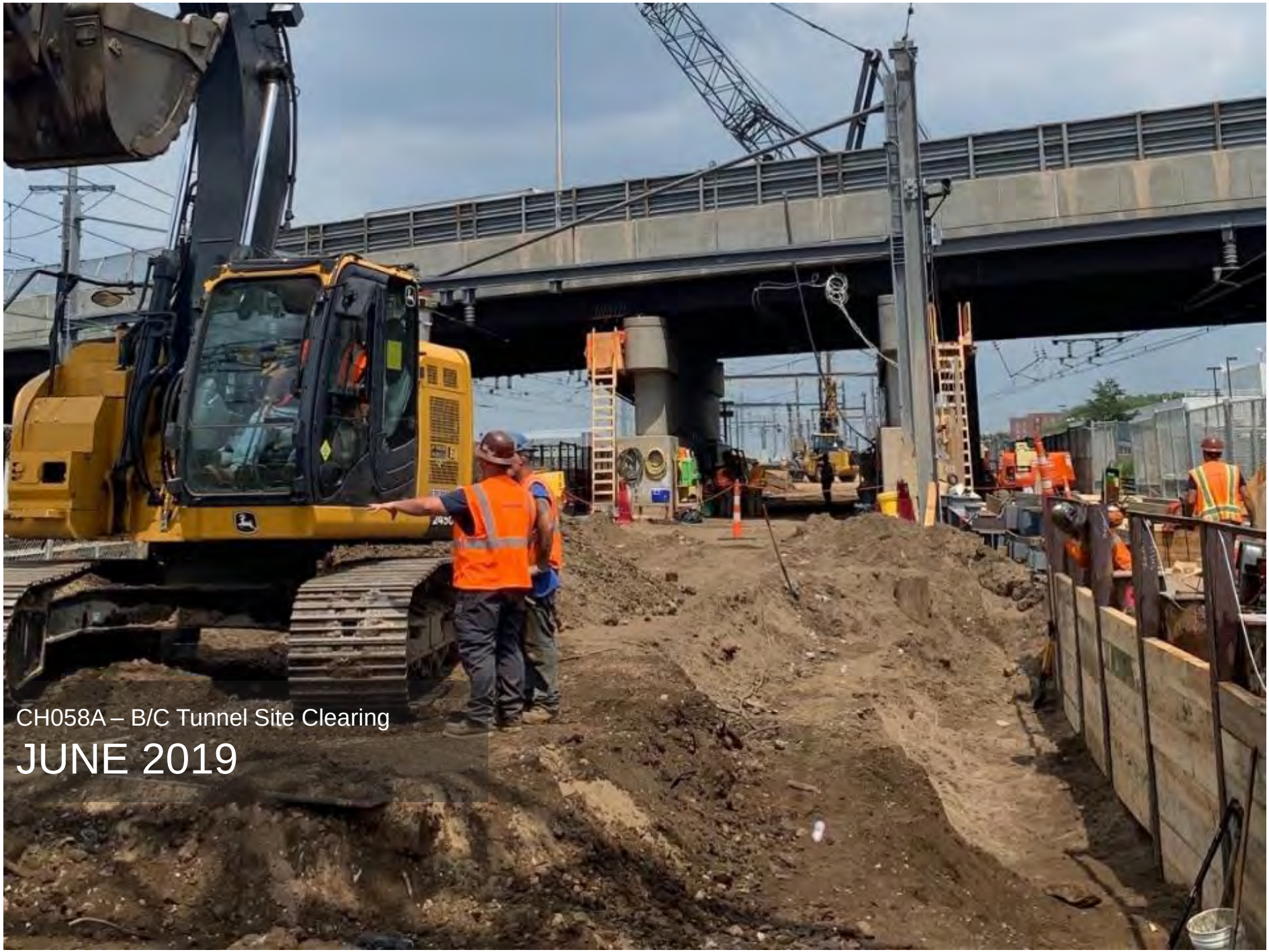
- Saving Long Island passengers to Manhattan's East side up to 40 minutes/day
- Increase capacity of LIRR during peak hour service
- Opportunities for true reverse commuting to Long Island
- Redundancy in our regional transportation system
- Making Long Island an even more desirable place to live and work
- Allows Metro North access to Penn Station

2022

# Progress Photos

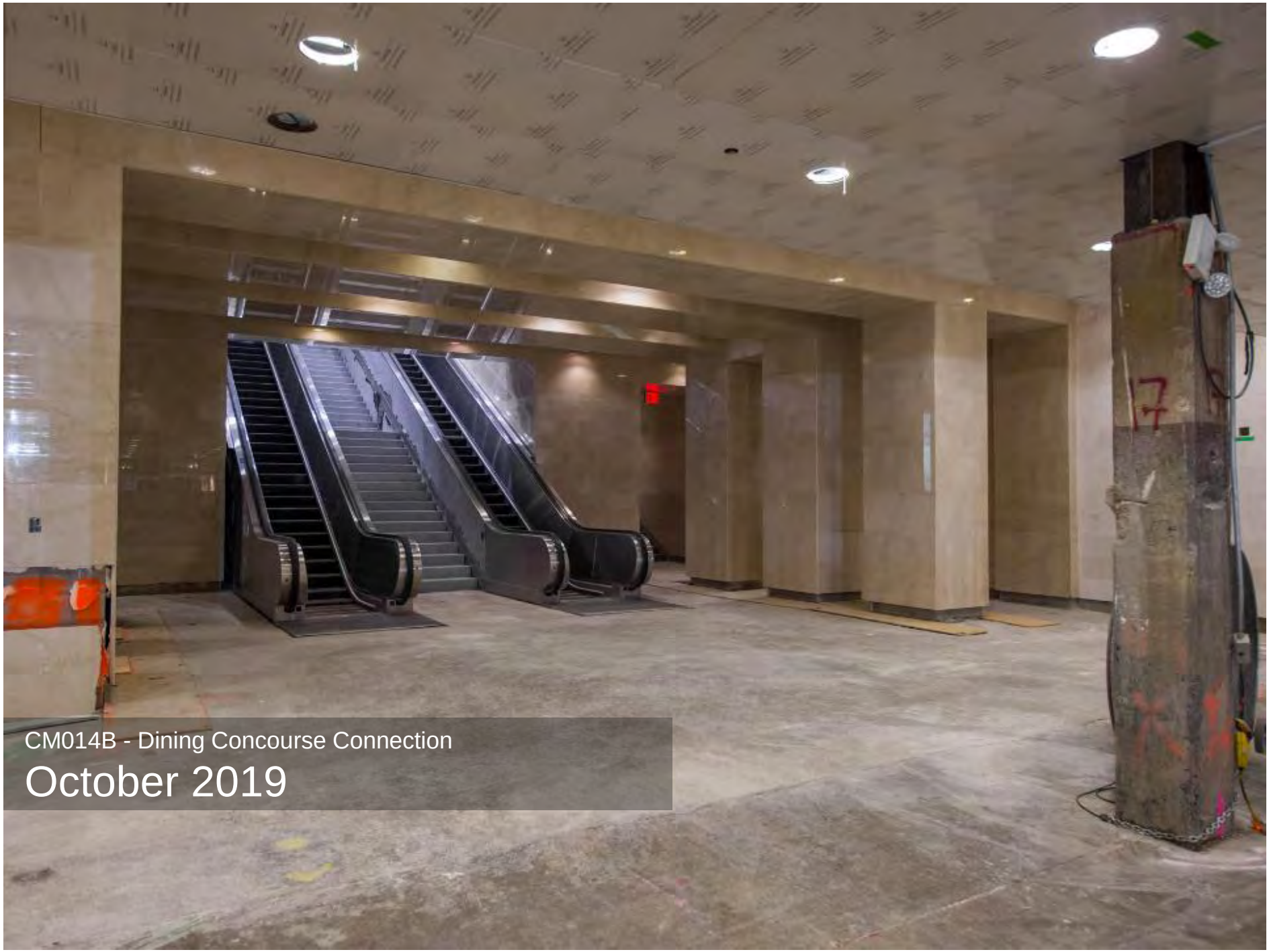

CQ033 – Mid-Day Storage Yard
July 2019

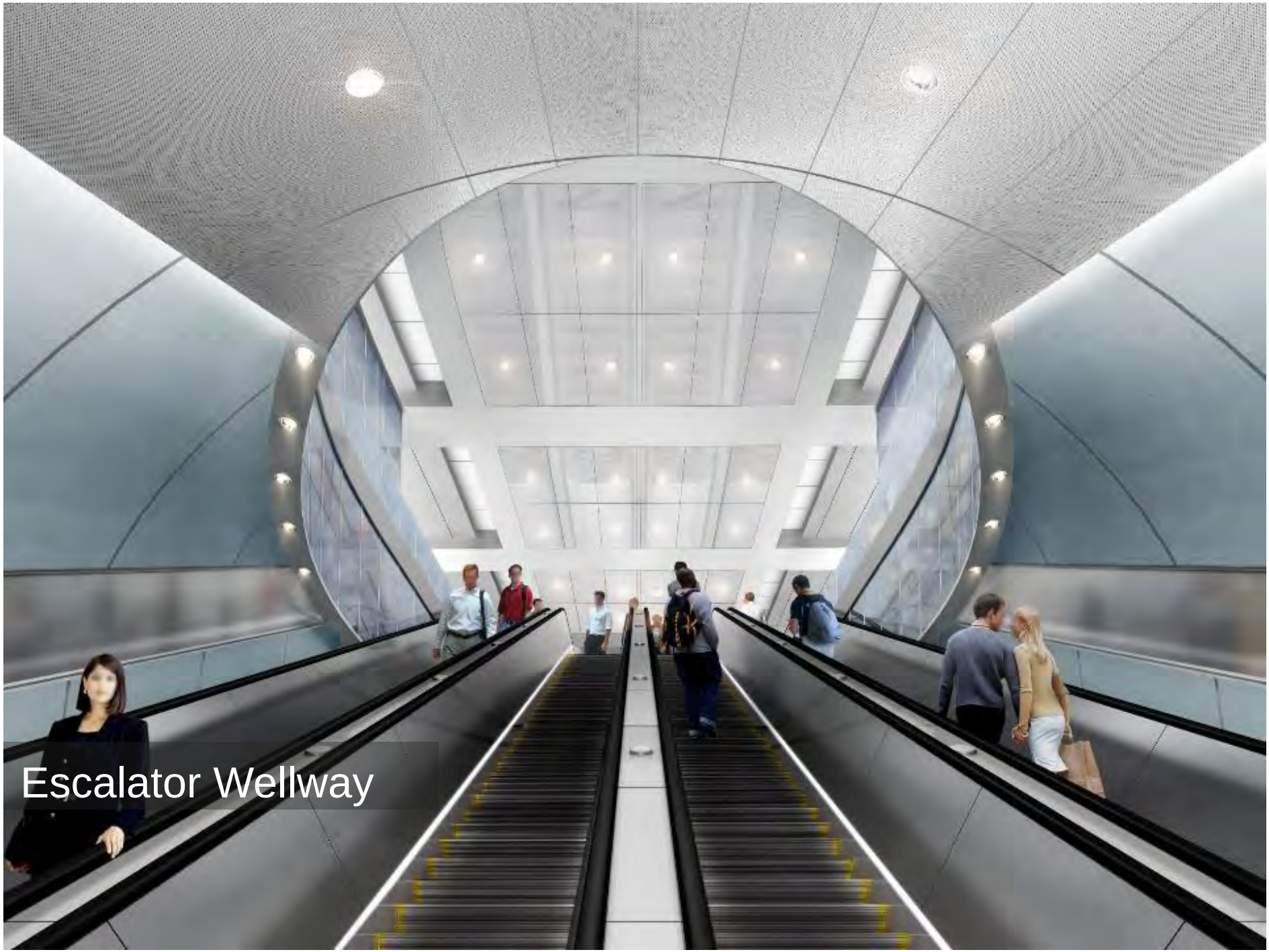

CQ033 – Mid-Day Storage Yard
September 2019


CH058A – B/C Tunnel Site Clearing
JUNE 2019


CH058A – B/C Tunnel Cutter Head Removal
September 2019

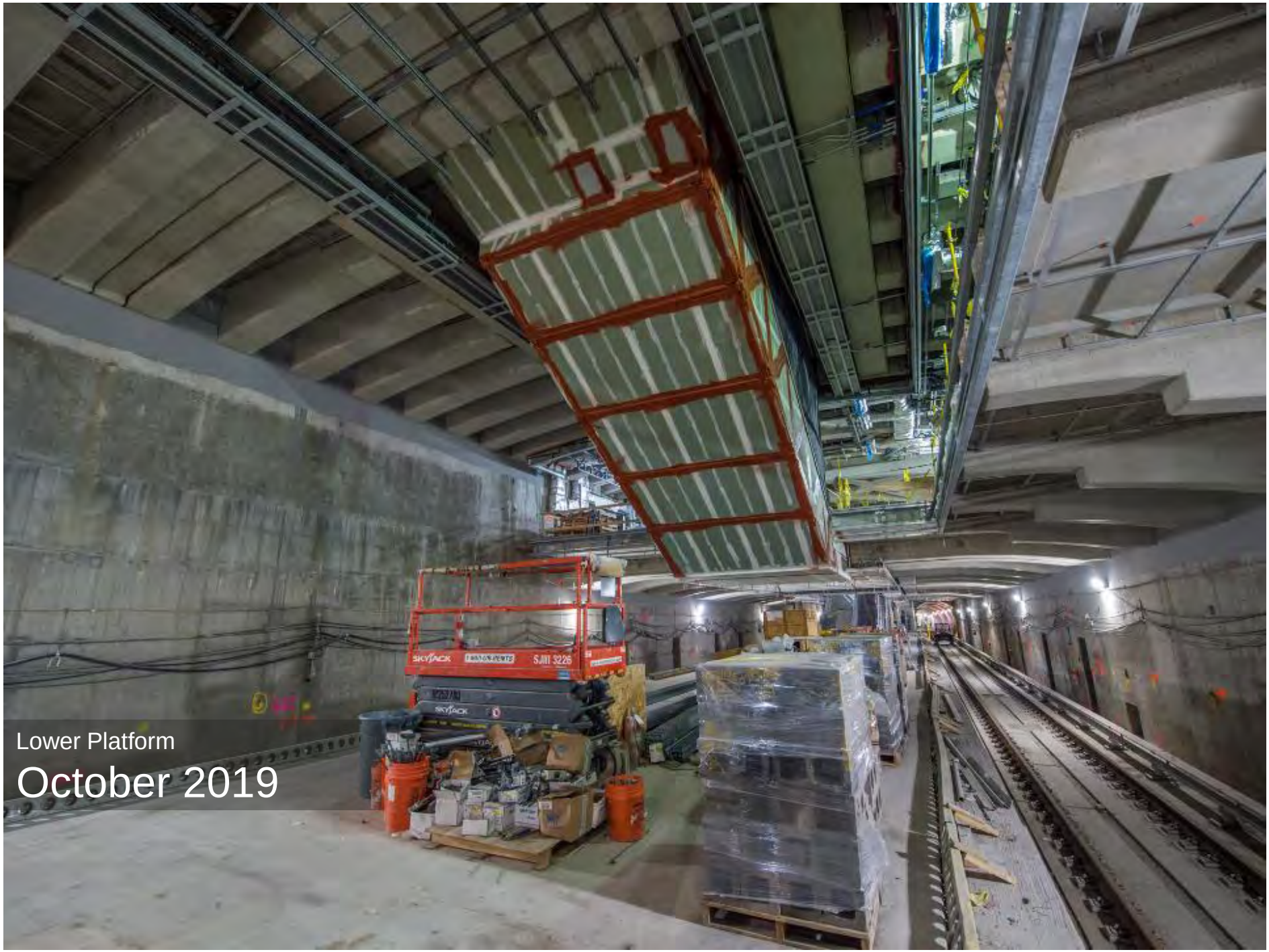

# Dining Concourse Connection


CM014B - Dining Concourse Connection
October 2019


Escalator Wellway


Escalator Wellway
October 2019

Lower Platform

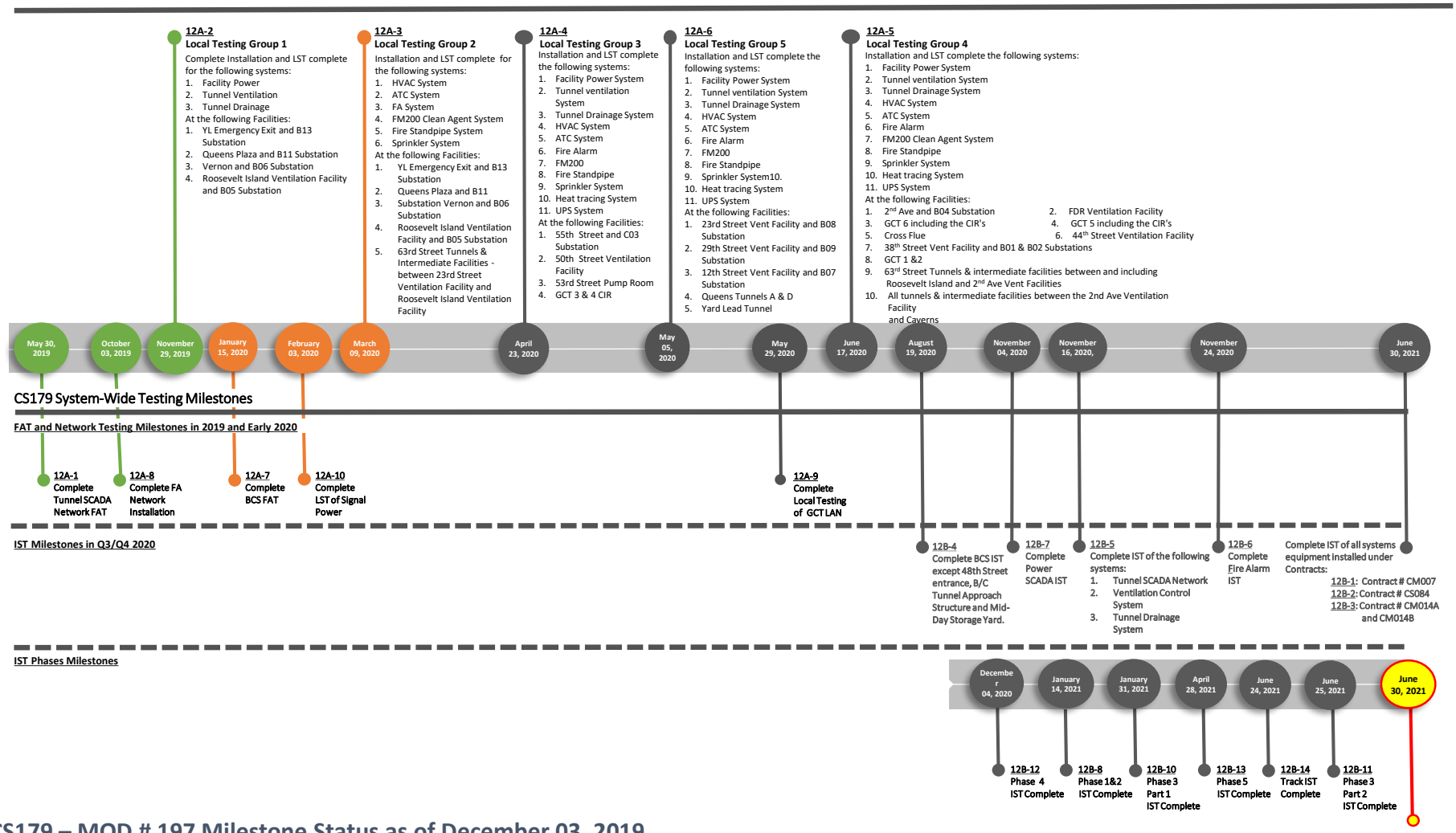



Lower Platform

# October 2019

# Project Risks and Mitigations

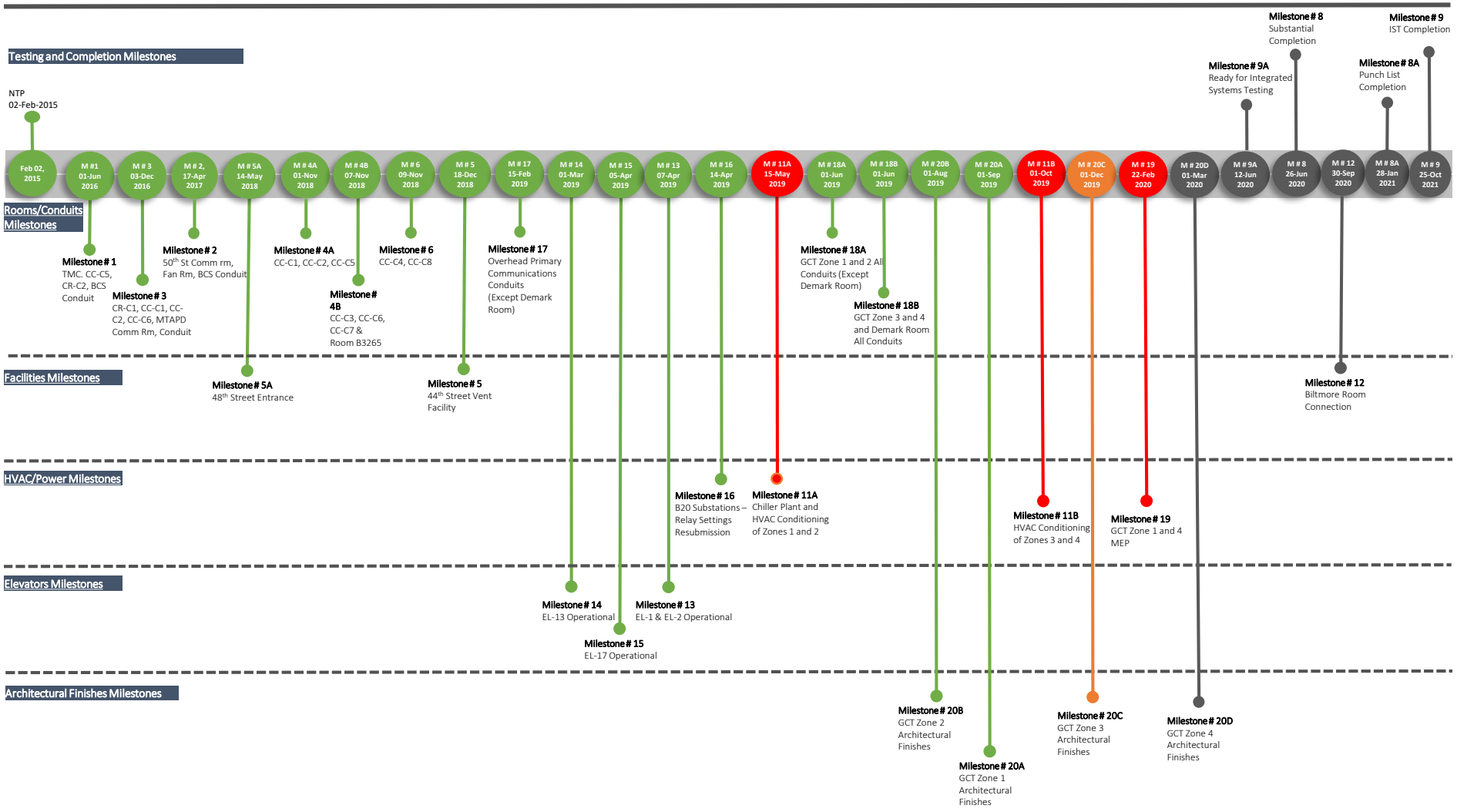
# CS179 Detailed Schedule Milestones




## CS179 – MOD # 197 Milestone Status as of December 03, 2019

Achieved | Tracking towards | Delayed | Future Milestone

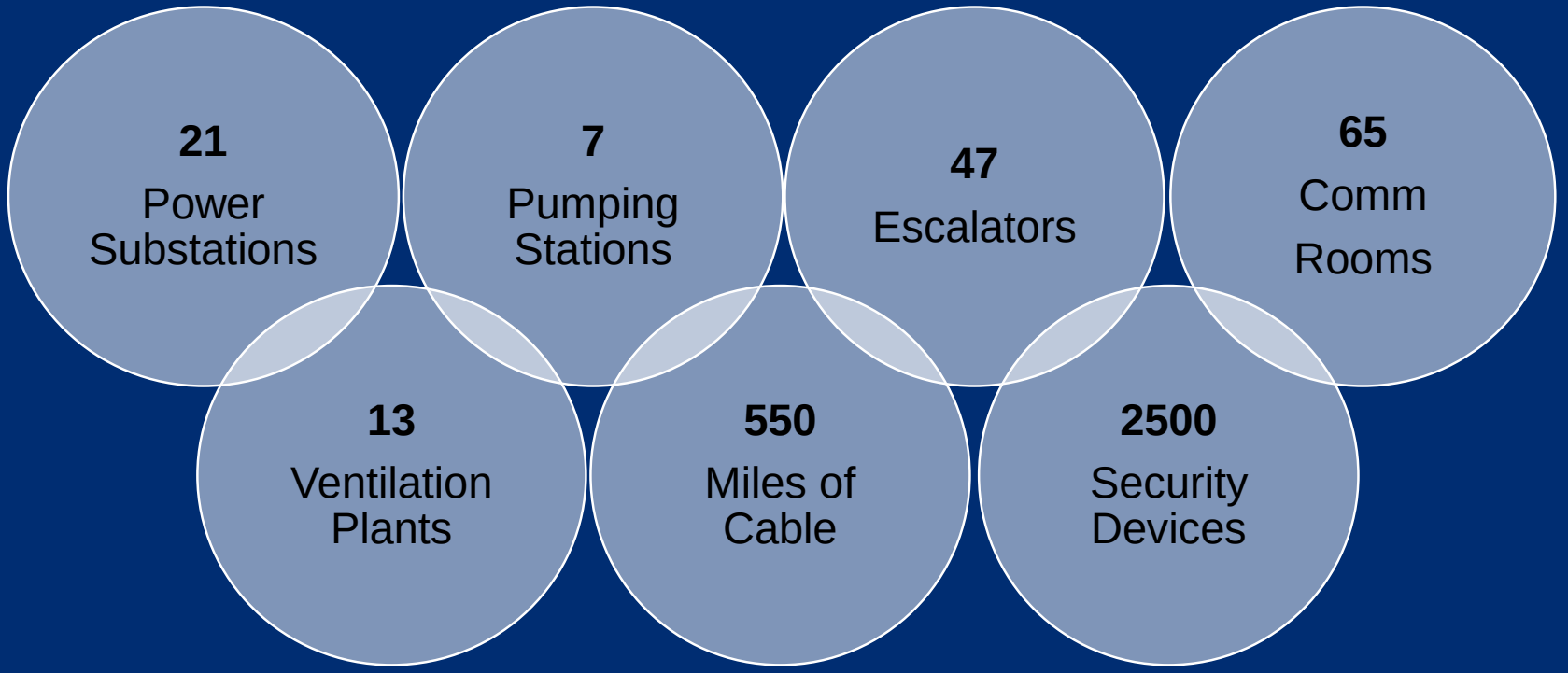
# CM014B Detailed Schedule Milestones




## CM014B – MOD # 210 Milestone Status as of December 03, 2019

| Achieved | Tracking towards | Delayed | Future Milestone |
|---|---|---|---|

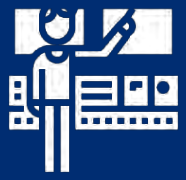
# East Side Access – Systems Highlights



# Integrated Systems

## Integrated System Testing leading up to Revenue Service

Power



Control System

Networks

HVAC

Signals

Fire Life Safety

Tunnel Ventilation

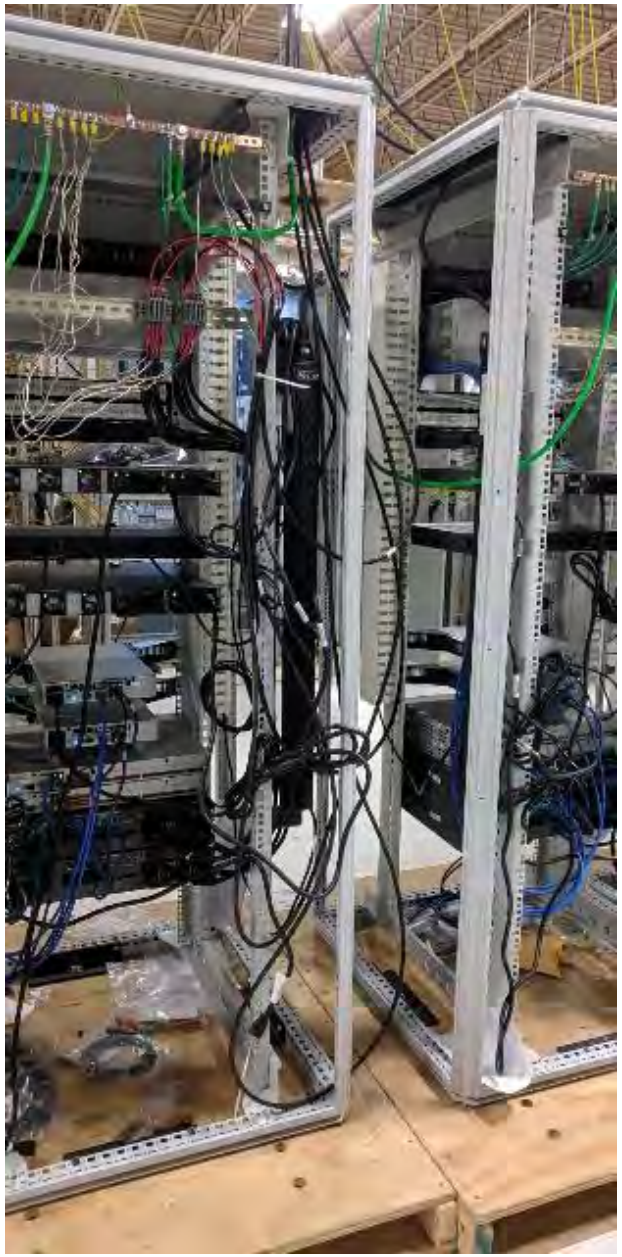
Radio

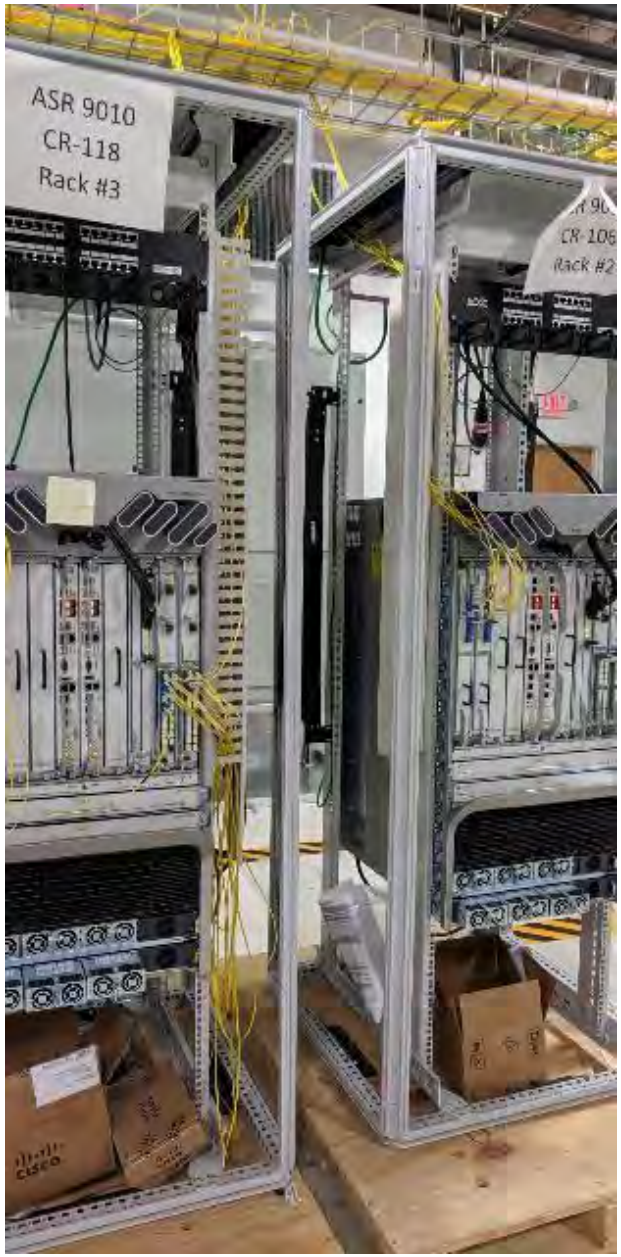
System Integration

Security

# Concourse Systems

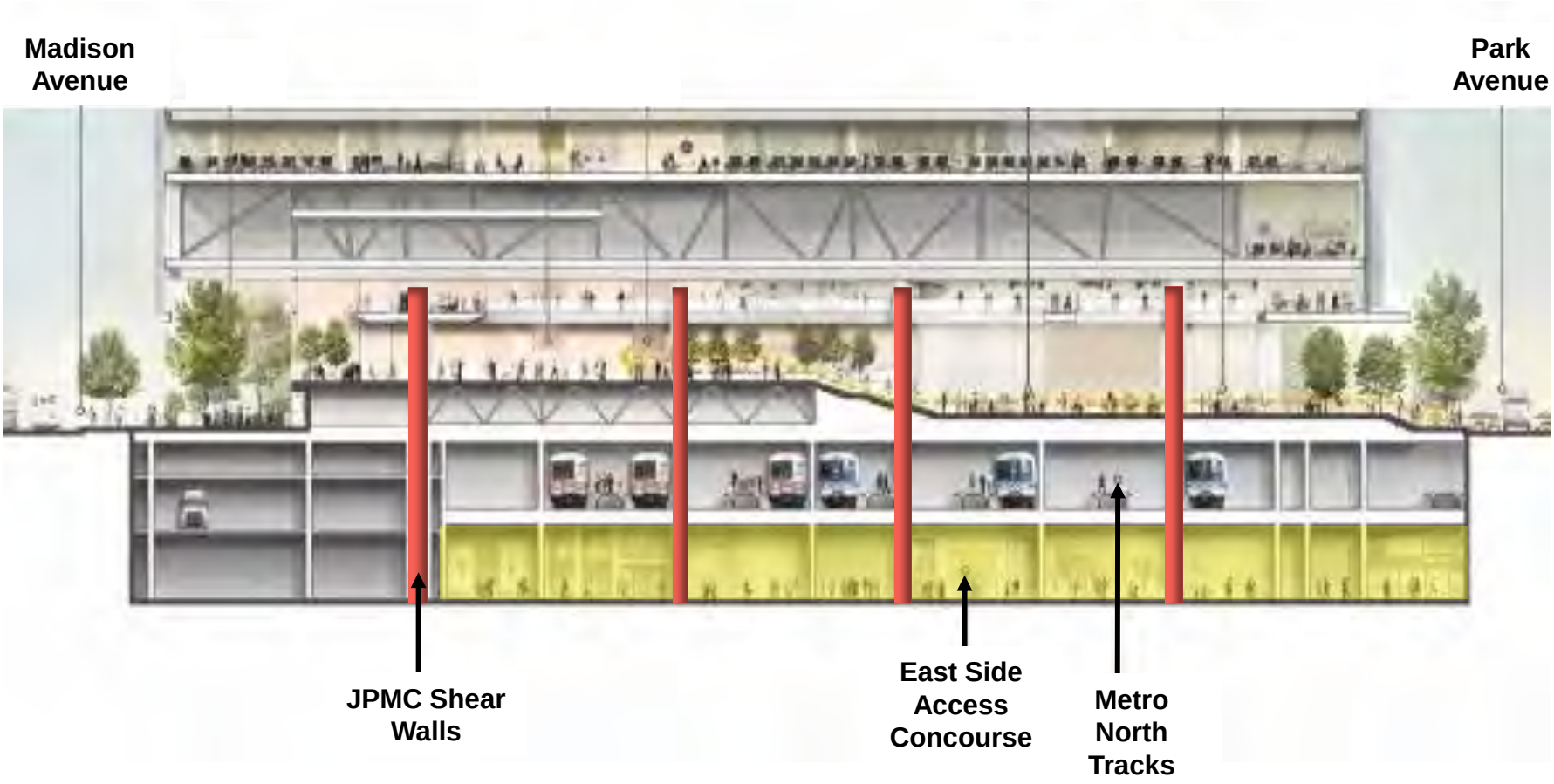
# Backbone Communications – Securitas






# Rail –Acceleration

# JP Morgan Chase - 270 Park Avenue



# Amtrak Availability in Harold Interlocking

# Capital Program Oversight Committee Report

## East Side Access, December 2019

# Capital Program Oversight Committee Report

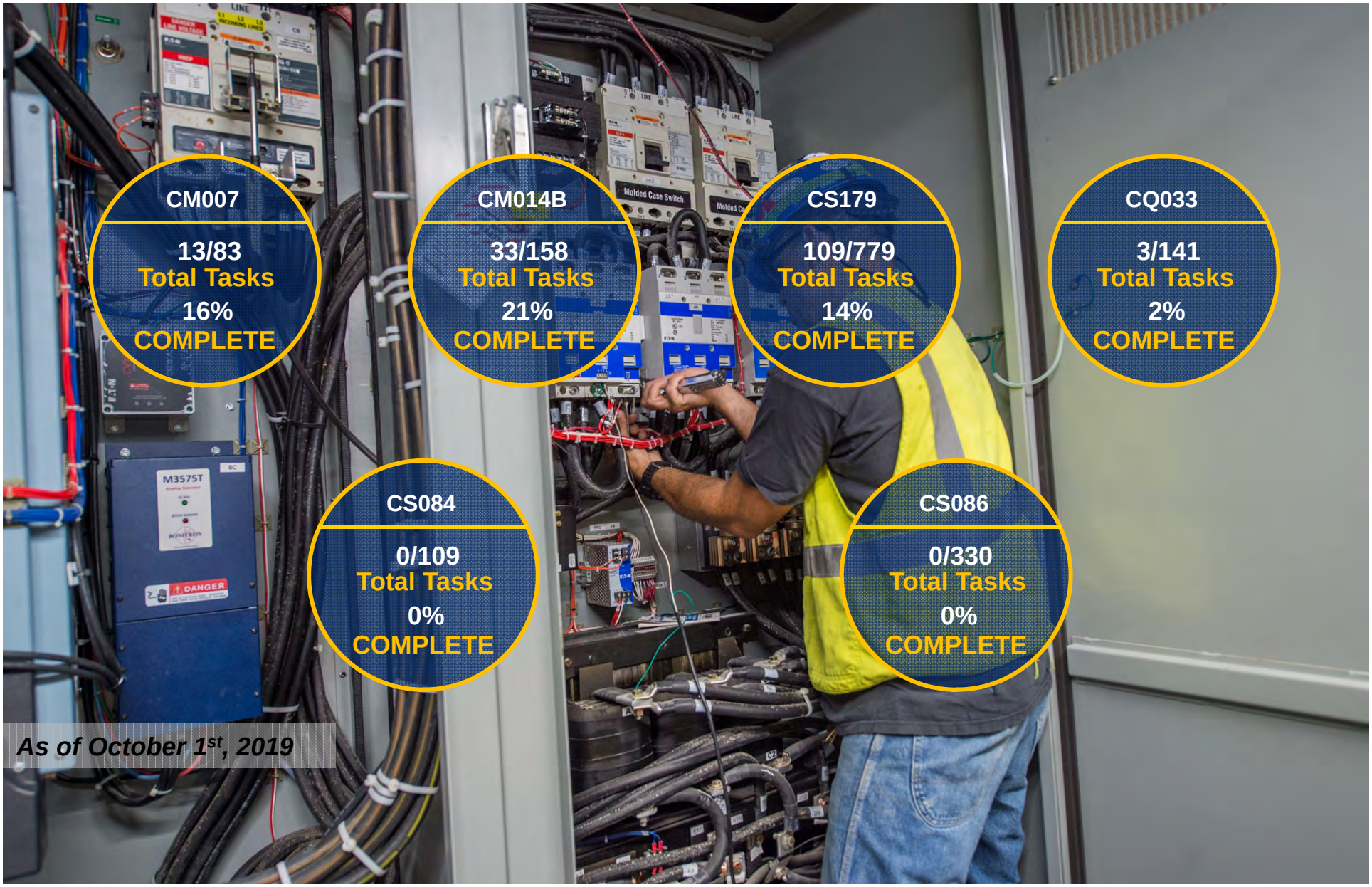
## East Side Access, December 2019

## Appendix

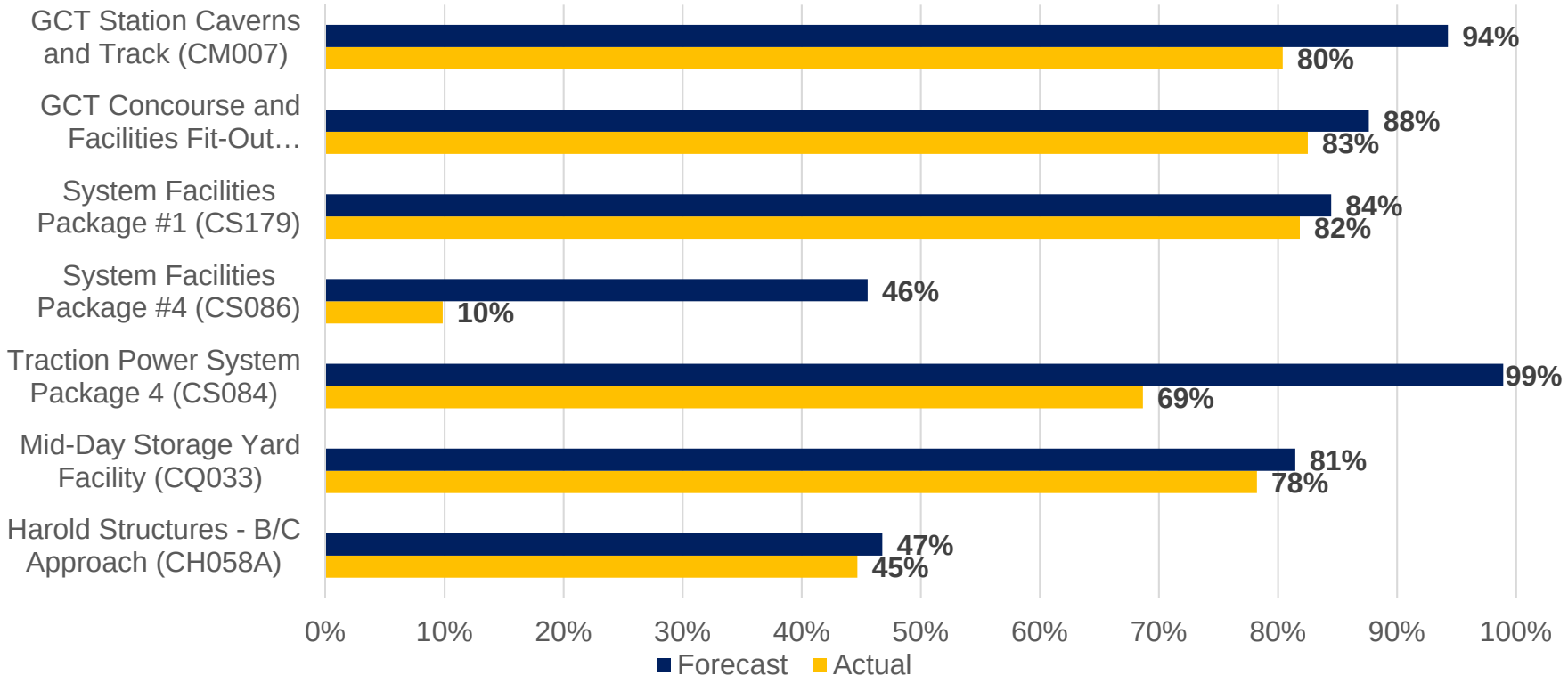
# Construction Progress – Systems Fabrication and Installation


Master Page # 47 of 154 - Capital Program Oversight Committee Meeting 12/16/2019

# Local Systems Testing – Progress

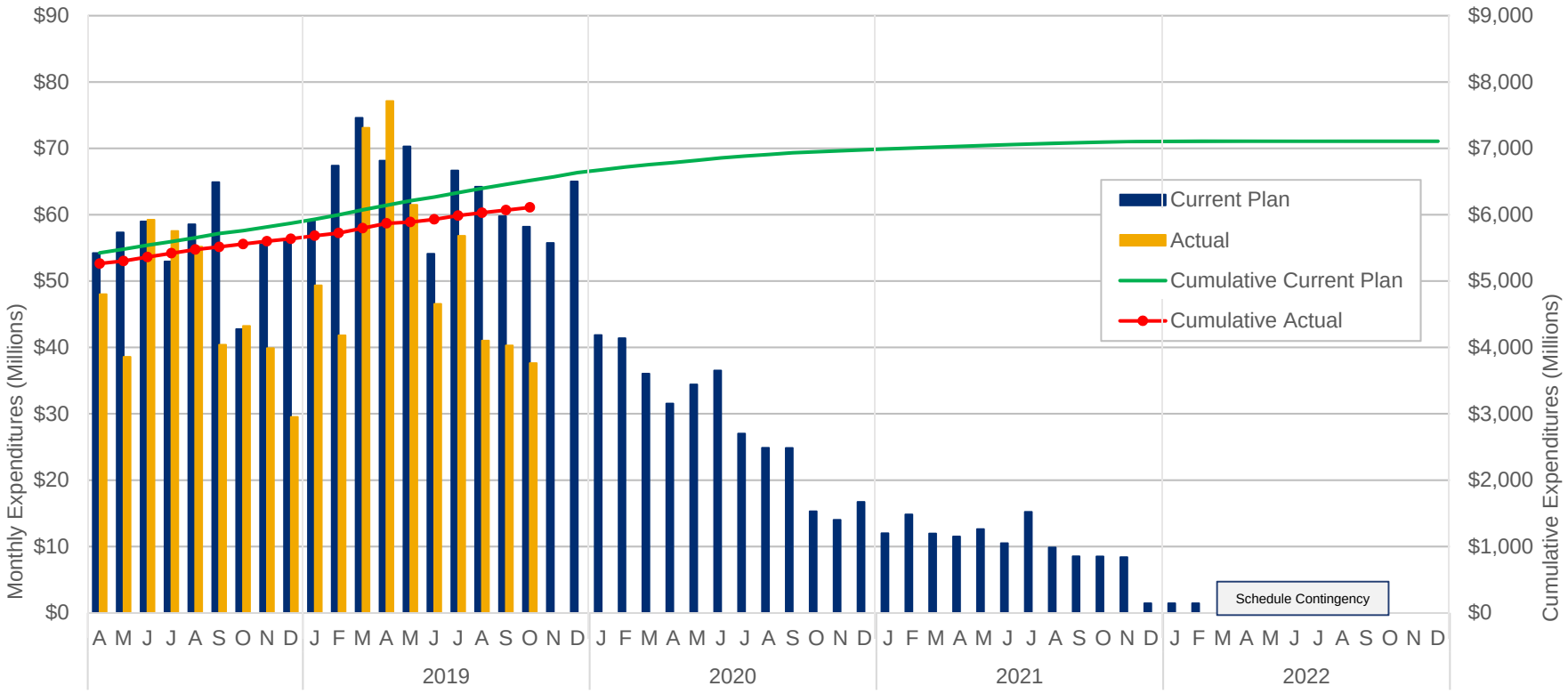


# Active Construction Progress : Forecast vs. Invoiced Amount




***As of October 2019***

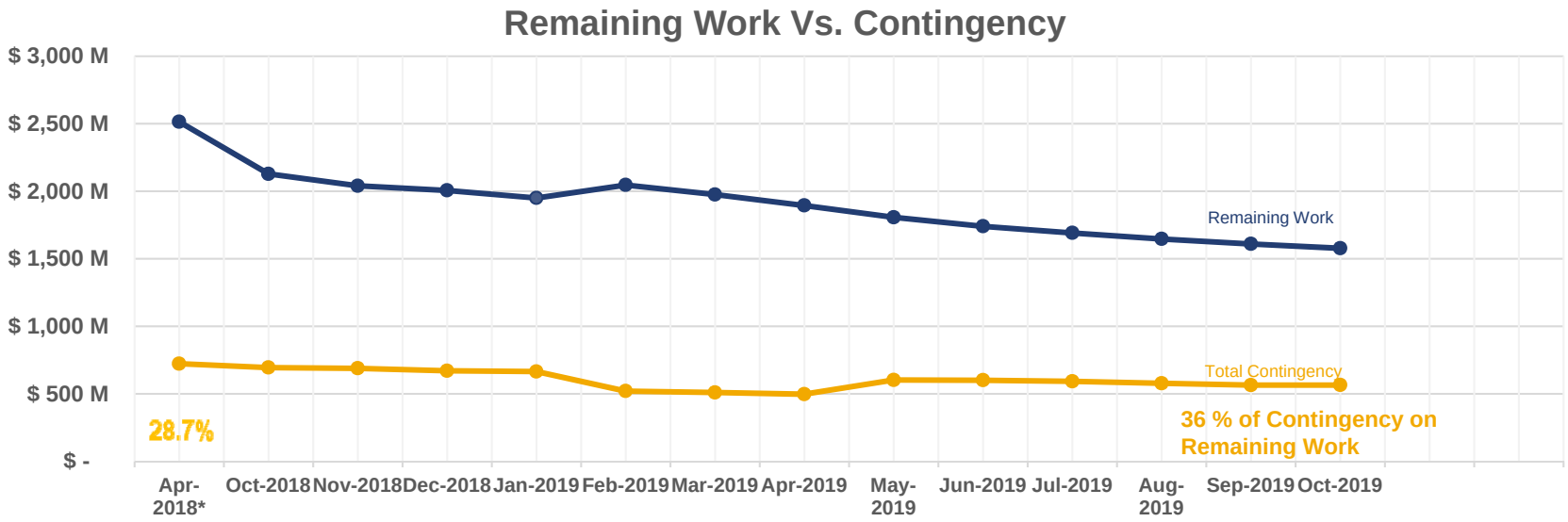
# Financial Performance: 3rd Party Construction – Forecast vs. Actual




**Cumulative values include all 3rd Party Construction Costs (ESA Only) from the beginning of the project until December 2022*

***As of October 2019***

# Financial Performance: Cost Contingency

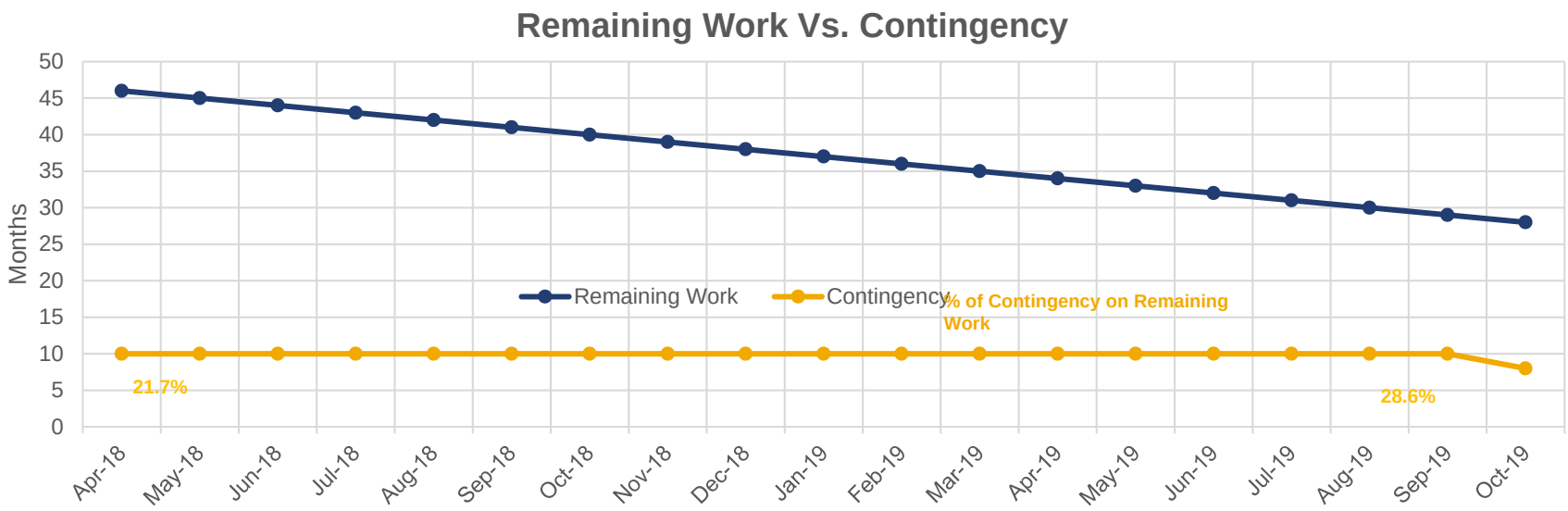



*note April to October '18 Transition

| | April 2018 | October 2019 |
|---|---|---|
| **Unallocated contingency** | $267 million | $259 million |
| **Allocated contingency** | $456 million | $305 million |
| **Total EAC Contingency** | $723 million | $564 million |

***As of October 2019***

# Schedule Performance: Schedule Contingency




| Category | May 2019 Total | October 2019 Total |
|---|---|---|
| Program Contingency – Manhattan/Systems (Critical Path) | 10 months | 8 months |
| Program Contingency – Harold (7 months off Critical Path) | 13 months | 15 months |
| Program Contingency – Mid-Day Storage Yard (8 months off Critical Path) | 18 months | 16 months |

***As of October 2019***

# 120-Day Look Ahead

**Harold & Queens**

- Complete all soil excavation and commence B/C Approach concrete work.
- Complete demolition of TBM Shield at the B/C Approach.
- Continue track/switch installations in Mid-day Storage Yard.

**Systems (CS179, CS084, VS/CS086)**

- Energize B08 substation in Queens and B01/B02 substations in Manhattan.
- Complete Tunnel Ventilation system field testing at four locations in Queens.
- Complete factory testing for Backbone Communication System (BCS), Radio System and Centralized Train Control (CTC).
- Deliver and install Signal equipment in Central Instrumentation Rooms (CIR) and commence fit-out.
- Fully Test and energize two Traction Power substations in Queens.

**Tunnels, Terminal & Concourse**

- Complete escalator and elevator installation in both caverns.
- Complete ceiling framing at west mezzanine and lower level.
- Complete special track work at GCT 6 (East tunnel and diamond crossing).
- Complete EB2 63rd Street track installation.
- Complete Plaza east and west special track work.
- Complete the recertification of the B30 substation for power supply to US3, US4, US5, and US6
- Complete the recertification of the B20 substation for power supply to US7, US8, US9, and US10
- Complete Chiller Plant Work and HVAC conditioning of Zones 1, 2, and 3
- Complete all MEP clash work associated with the 270 Shear Wall construction
- Complete Architectural finishes in Zones 3 in preparation for terrazzo flooring
- Complete the 47th Street Civil Work for tie into the MNR 47th Street Cross Passage
- Start of testing and commissioning of concourse systems and equipment

# Key Milestones and Issues

| Status | Activity | Date Needed | Issues |
|---|---|---|---|
| Yellow | **Contractor Agreement on Incremental Systems Testing Approach, Schedule, and Cost (CM007)** | **December 2019** | **Issue**:<br>• Timely contractor buy-in (agreement on the approach, schedule, and cost) is required for the program in order to commence testing on time.<br>**Impact:**<br>• Delays may result in additional cost and schedule impacts to the contract and the program.<br>• The contractor may expect higher compensation than the amount anticipated by the project team.<br>**Mitigation:**<br>• MTACC legal and the project team are meeting with TPC to finalize compensation negotiations for the time extension to substantial completion (MS #6A) associated with five CPRs in the caverns. In parallel, ESA has reached agreement in principal on track work acceleration, which will be included in the overall CM007 settlement. |

| | | |
|---|---|---|
| Red | Significant impact to Project Cost and/or Schedule (Milestones, Project Completion and/ or Revenue Service Date.) |
| Yellow | Impact to Contract Cost and/or Schedule. |
| Green | No Near Term Impact for Design, Procurement & Construction. |

# Key Milestones and Issues

| Status | Activity | Date Needed | Issues |
|---|---|---|---|
| Yellow | **Factory Acceptance Testing (FAT) for Backbone Communications System (BCS)**<br><br>**(CS179)** | **January 2020** | **Issue**:<br>• Design documents to be completed by the contractor to facilitate BCS FAT;<br>• RFIs in connection with executed modifications for FON Connectivity and IP Addresses to be answered to allow completion of design documents;<br>• CPR-203 (Corporate IT) tied to completion of BCS design documents in current accelerated syndicated contractor schedule.<br><br>**Impact:**<br>• Delaying the start of BCS FAT will delay deployment of BCS equipment and subsequently delay the start of IST.<br><br>**Mitigation:**<br>• Design progress by Securitas is monitored through bi-weekly over-the-shoulder reviews at their facility to ensure that BCS FAT will be executed as planned.<br>• BCS Test procedure approval acceleration planned for November 2019 (2 x collective PMO/GEC/LIRR contractor reviews).<br>• The BCS V5 configuration build - progress is currently 70% to plan, sufficient to support BCS FAT in January 2020. |

| | | |
|---|---|---|
| | Red | Significant impact to Project Cost and/or Schedule (Milestones, Project Completion and/ or Revenue Service Date.) |
| | Yellow | Impact to Contract Cost and/or Schedule. |
| | Green | No Near Term Impact for Design, Procurement & Construction. |

# Key Milestones and Issues

| Status | Activity | Date Needed | Issues |
|---|---|---|---|
| Yellow | **Predecessor Work and Equipment Manufacturing (CS084)** | **February 2020 (Delivery of Final Substation Equipment)**<br><br>**(Previously November 2019)** | **Issue**:<br>• Risk to timely handover of the traction power rooms to CS084 from other contracts, due to water ingress and rework of installations<br>• Risk to the fabrication and delivery schedule of traction power equipment.<br>**Impact:**<br>• Delays to equipment installation in the traction power rooms, required for track, traction power and signal (CTC) Integrated Systems Testing.<br>**Mitigation:**<br>• Leak remediation efforts and the repair of the damaged subsoil drain lines at 55th Street Vent Facility (C03) are moving ahead; the installation of traction power equipment is planned for the 1st Quarter of 2020<br>• Delivery and installation of equipment at all substations, with the exception of C03 is progressing. |

| | | |
|---|---|---|
| Red | Significant impact to Project Cost and/or Schedule (Milestones, Project Completion and/ or Revenue Service Date.) |
| Yellow | Impact to Contract Cost and/or Schedule. |
| Green | No Near Term Impact for Design, Procurement & Construction. |

# Key Milestones and Issues

| Status | Activity | Date Needed | Issues |
|---|---|---|---|
| Yellow | **Correct Traction Power Monuments (CM007)** | **Ongoing** | **Issue**:<br>• Traction power monuments throughout the ESA track alignment are out of tolerance and need to be corrected to facilitate the traction power contractor's (CS084) cable installation in the tunnels.<br>**Impact:**<br>• A delay in the completion of the CS084 tunnel work will postpone the completion of local testing and may ultimately impact track IST and the substantial completion of CS179.<br>**Mitigation:**<br>• Correct conduit stub-ups for future monuments during track installation enabling subsequent construction of monuments in proper location<br>• Provide alternatives to structural modifications of monuments in coordination with LIRR, such as adjusting length in local third rail connection cables.<br>• ESA has completed a sufficient number of monuments in the east cavern, south of GCT 4, to start pulling cables between monuments in the tunnels and between monuments in the tunnels and substations. |

| | | |
|---|---|---|
| Red | Significant impact to Project Cost and/or Schedule (Milestones, Project Completion and/ or Revenue Service Date.) |
| Yellow | Impact to Contract Cost and/or Schedule. |
| Green | No Near Term Impact for Design, Procurement & Construction. |

# Key Milestones and Issues

| Status | Activity | Date Needed | Issues |
|---|---|---|---|
| Yellow | **Availability of Amtrak Resources for Harold** | **Ongoing** | **Issue**:<br>• The levels of Amtrak ET Direct Work resources may not be sufficient to support ESA work in Harold. Based on historical performance, the Amtrak resources allocated to ESA have been less than required to support the schedule in accordance with prior agreements between Amtrak and MTA.<br>**Impact:**<br>• Insufficient Amtrak ET Direct Work resources to support 3rd party construction and LIRR direct work in Harold Interlocking may result in delays to work on the Harold critical path.<br>**Mitigation:**<br>• To reduce pressure on Amtrak ET Direct Work resources, MTACC is procuring a 3rd party contract to perform ET direct scope as part of a design-build contract. NTP for this contract is planned for Q1, 2020.<br>• Catenary wire transfer work impacting CQ033 was completed in October 2019. |

| | | |
|---|---|---|
| Red | Significant impact to Project Cost and/or Schedule (Milestones, Project Completion and/ or Revenue Service Date.) |
| Yellow | Impact to Contract Cost and/or Schedule. |
| Green | No Near Term Impact for Design, Procurement & Construction. |

# Key Milestones and Issues

| Status | Activity | Date Needed | Issues |
|---|---|---|---|
| Green | **LIRR Operational Readiness** | **Resolved** | **Issue**:<br>• Hiring and training of LIRR personnel required for ESA revenue service is a significant effort that may be affected by the current hiring freeze.<br>**Impact:**<br>• Impact ESA revenue service operations (number of trains, schedules, crew assignments, etc.)<br>**Mitigation:**<br>• The Rail Activation Plan durations, which align with the revenue service date, are monitored as part of the ESA integrated project schedule<br>• LIRR was granted a waiver to relieve the hiring freeze which will address current hiring and training constraints.<br>• The OpR Group has been instructed to use the F2 service plan and corresponding T&E staffing levels for planning purposes. The new service plan is expected by the end of the year. |

| | | |
|---|---|---|
| Red | Red | Significant impact to Project Cost and/or Schedule (Milestones, Project Completion and/ or Revenue Service Date.) |
| Yellow | Yellow | Impact to Contract Cost and/or Schedule. |
| Green | Green | No Near Term Impact for Design, Procurement & Construction. |

# Key Milestones and Issues

| Status | Activity | Date Needed | Issues |
|---|---|---|---|
| Yellow | 270 Park Avenue | Ongoing | **Issue**:<br>• JPMC's construction of its new headquarters at 270 Park Ave presents challenges to ESA construction and MNR at Grand Central.<br><br>**Impact:**<br>• Shear walls to be constructed by JPMC affect the architectural, MEP and systems work in the ESA/ LIRR Concourse.<br>• JPMC construction on MNR train operations continues to be under review and will be properly addressed.<br><br>**Mitigation:**<br>• An integrated construction schedule to merge and mitigate impacts to ESA's project schedule has been finalized among JPMC, ESA and MNR.<br>• A Memorandum of Understanding (MOU) between JPMC and MTA was approved, that: 1. Ensures no delay in ESA revenue Service Date, 2. Requires mitigating any service impact to MNR or GCT, 3. Provides JPMC proportional funding to both the GCT Train Shed improvements and a future ESA Entrance at 48th St. – To ensure these agreements are met, these principles were developed, they include the following:<br>  • A fully developed Construction Agreement with JPMC to memorialize the details of design and construction schedule.<br>  • A Construction Agreement and Easement Agreement with the owner of 415 Madison Ave, Rudin Management Company, where ESA's 48th St Entrance will be constructed. |

| | | |
|---|---|---|
| Red | Red | Significant impact to Project Cost and/or Schedule (Milestones, Project Completion and/ or Revenue Service Date.) |
| Yellow | Yellow | Impact to Contract Cost and/or Schedule. |
| Green | Green | No Near Term Impact for Design, Procurement & Construction. |

# Capital Program Oversight Committee Report

## East Side Access, December 2019

# December 2019
# Independent Engineering Consultant
# Project Review

## East Side Access


*MTA Independent Engineering Consultant*

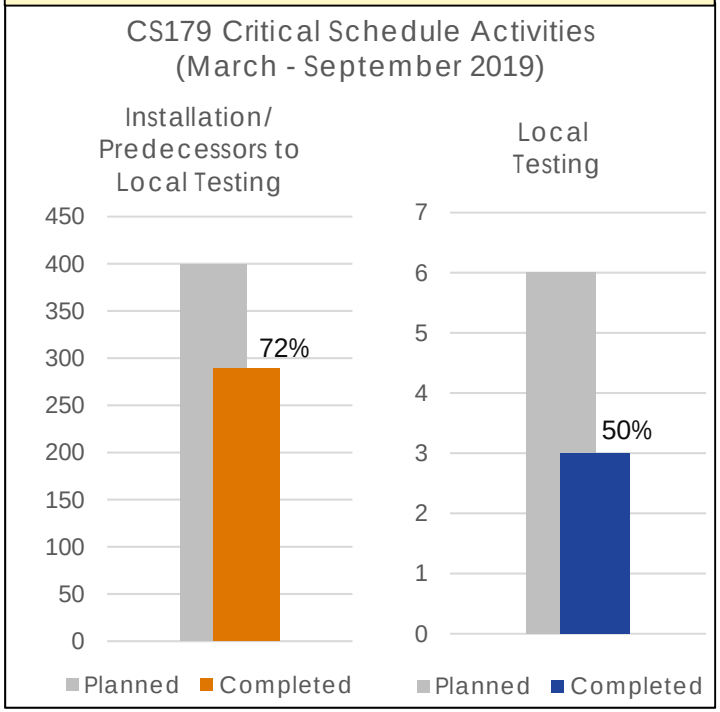
# Cost and Schedule Review

- Cost
  - The Independent Engineering Consultant's analysis indicates the ESA cost estimate established in April 2018, including cost contingencies, remains sufficient to complete the work required for Revenue Service.
- Schedule
  - In July 2019, the IEC forecasted 6 months of program contingency remaining to the December 2022 Revenue Service Date, which was driven by LIRR Takeover of ESA. The takeover criteria and duration continue to be evaluated and finalized.
  - Installation and local testing delays are impacting Integrated Systems Testing (IST). If not mitigated, this could result in the consumption of 2 months of program contingency.
  - Focus should remain on both, the primary and secondary, critical paths to the program.
    - Phase 3 Concourse and Caverns IST (station and building systems, including Fire Life Safety)
    - Phase Track/ Centralized Train Control IST (track, traction power and signal)
      - Replacement of damaged rail and associated re-work need to be captured in the schedule.

# CS179 Systems Review

- Since the May 2019 Settlement Agreement, the contractor has focused its efforts in working towards the upcoming milestones; however, overall installation and local testing progress is behind plan.
- Increased contractor productivity is required to mitigate the systems installation and testing work and ensure that critical and near-critical milestones are met.
  - Additional work shifts and/or resources should be considered.
- The project team is developing systems installation and testing tools, including a database, master submittal log and testing schedule, to facilitate monitoring and reporting.
  - These tools are needed to validate the 16-month IST duration.

Critical activities for the CS179 Systems contract are lagging behind plan.



# Recommendations

- 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:
  - 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.

# Recommendation Log

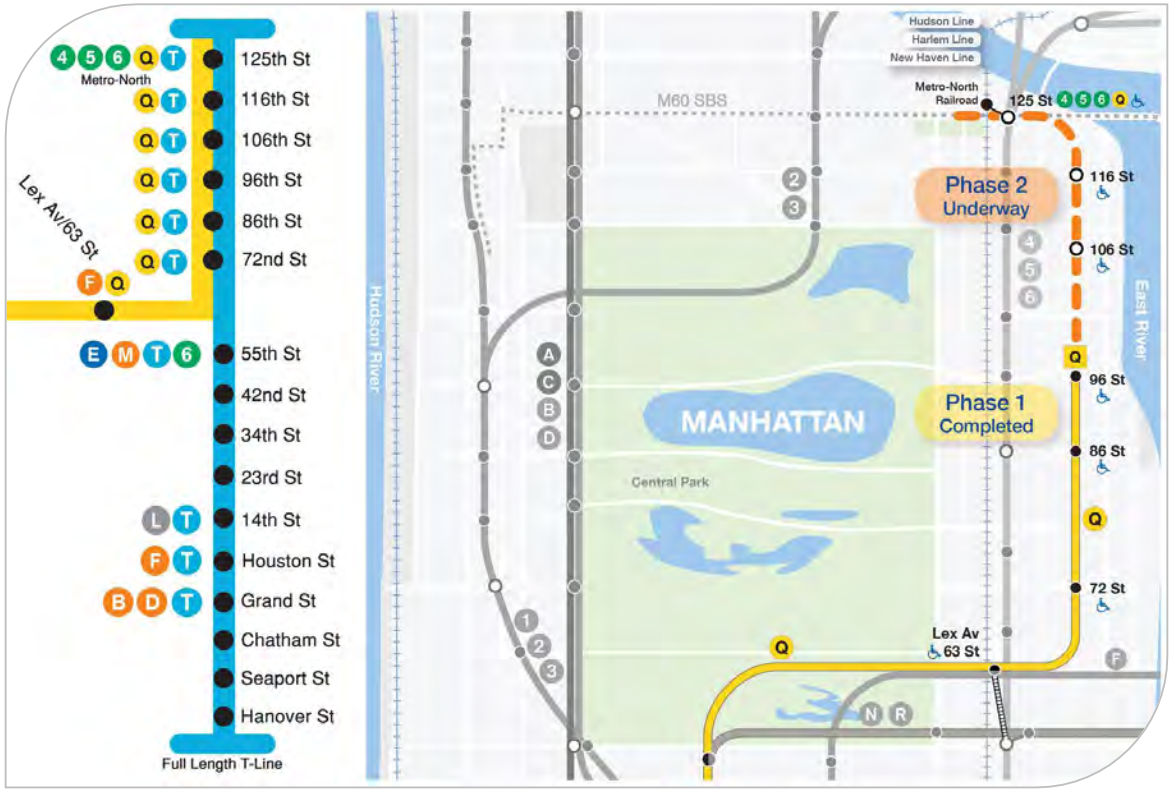
## ESA – IEC Recommendations / Observations Log

| 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 Group (OpR) is holding frequent coordination meetings to develop LIRR takeover procedures and link the OpR schedule with the IPS. Outstanding issues, such as the 90-day burn-in period and PTC testing, are being addressed. | 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 is currently working to populate and link the equipment installation database, the master submittal schedule, and schedules of all systems and systems related contracts to more effectively manage and track progress of systems testing. | Ongoing |

# MTACC Report to CPOC

## Second Avenue Subway Phase 2

- December 16, 2019



# Delivering on Promises

- Serves Transit-Dependent Community
  - Over 70% of residents use public transportation to get to work vs. 55% city-wide
- Improves Access to
  - Jobs
  - Health care options
  - Educational institutions
- Improves Service Beyond SAS
  - Improves reliability by reducing crowding along the Lexington Avenue Line – among the busiest transit lines in America
  - Connection to Metro North Railroad

*Dismantling of Second Ave. Elevated Line in the 1940's*

# Federal Funding

Goal: Funding Agreement by Q4 2020

## Project Development

- Entered Project Development Dec. 2016
- NEPA Re-evaluation SEA (Supplemental Environmental Assessment) completed and FONSI (Finding of No Significant Impact) issued Nov. 2018.

## Engineering

- Received FTA's Risk & Readiness Workshop results : August 28, 2019
- Submitted revised Request to Enter Engineering on September 5, 2019
- Need FTA approval to Enter Engineering Phase of New Starts Program.
  Anticipated: Q1 2020 (Revised)
- 2020-2024 Capital Plan includes remainder of funding for SAS Phase 2.

## Funding Agreement

- Submit request for an FFGA (Full Funding Grant Agreement) (April 2020)

SAS Phase 2 will provide better value per Federal dollar on a cost per rider basis compared to other applicants in New Starts pipeline.

# Cost Containment

- Major Cost Containment Efforts have already reduced project cost by up to $1B
  - Reduction in underground construction at 125th Street Station
  - Reuse of 1970's tunnel to construct new 116th Street Station
- Joint NYCT/Project Team Task Force
  - NYCT operational & engineering staff and project design team collectively developed innovative cost containment ideas covering all major systems.
  - Approximately 50 concepts are being studied.
- Value Engineering
  - Structural, Geotechnical, MEP, Systems & Finishes ongoing.
  - Over 100 opportunities identified.
- Potential Additional Savings: $50M - $200M
- Exploring options for Value Capture

# Design Progress

- Advanced Works Contract
  - Drawings completed.
  - Finalizing coordination with NYC agencies & utility companies.
- Civil/Structural Design/Build (DB)
  - Draft Submission Completed and under review.
- Ongoing coordination with Developers at 125th Street Station
- MEP, Systems, and Architectural Fit-out Design/Build (DB)
  - GEC awarded option (*November 2019*) to develop bid documents

# Public Outreach Update

- Participated in Congressman Adriano Espaillat's East Harlem Transportation Taskforce
- Met with potentially impacted School District 4 superintendent and area principals to provide update on project
- Multiple meetings with Franklin Plaza Board, Facilities Manager, and arborist to plan mitigations for early utility work
- Over 16 presentations made to more than 200 students
- Since opening, interacted with over 10,700 visitors to the SAS Phase 2 CIC & 12,200 contacts at pop-up events
- Presentation by MTA CDO to *Uptown Grand Central*; Community Based Organization including elected officials, business owners, and stakeholders

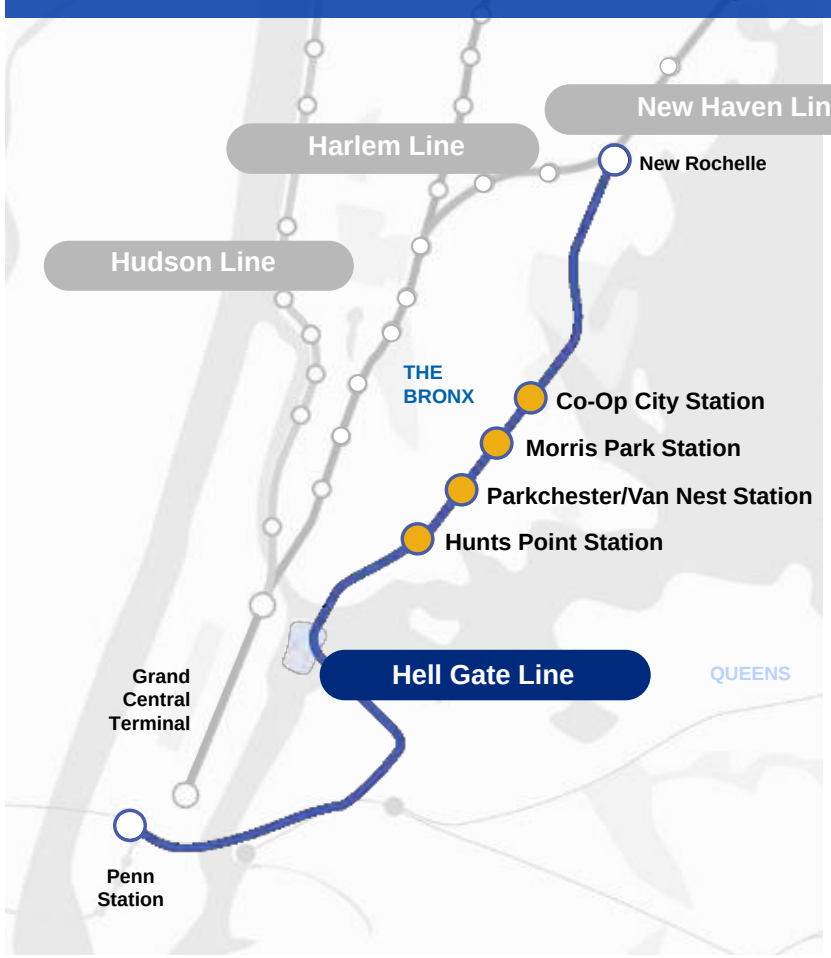


# PENN STATION ACCESS

## CAPITAL PROGRAM OVERSIGHT COMMITTEE

DECEMBER 16, 2019

# PROJECT BENEFITS & ELEMENTS




- **Decreased Travel Times**
- **Optimizing Existing Infrastructure**
- **Reverse Commuting Opportunities**
- **Economic Vitality**
- **Regional Transportation Connectivity**
- **Sustainability**
- **Enhanced Network Reliability**
- **Bridging Communities**

# TIME SAVINGS

| Departure | Arrival | Approx. Current Travel Time | Approx. Time with Penn Station Access | Savings |
|---|---|---|---|---|
| **Co-Op City** | **Penn Station** | 75 Minutes | 30 Minutes | **45 Minutes** |
| **Co-Op City** | **Stamford** | 110 Minutes | 30 Minutes | **80 Minutes** |
| **Morris Park** | **Penn Station** | 60 Minutes | 25 Minutes | **35 Minutes** |
| **Morris Park** | **Stamford** | 95 Minutes | 30 Minutes | **65 Minutes** |
| **Parkchester/Van Nest** | **Penn Station** | 60 Minutes | 20 Minutes | **40 Minutes** |
| **Parkchester/Van Nest** | **Stamford** | 85 Minutes | 35 Minutes | **50 Minutes** |
| **Hunts Point** | **Penn Station** | 45 Minutes | 20 Minutes | **25 Minutes** |
| **Hunts Point** | **Stamford** | 80 Minutes | 40 Minutes | **40 Minutes** |

# ENVIRONMENTAL ASSESSMENT

- ✓ FTA Environmental Assessment June Submittal
- ✓ Initial FTA/FRA comments received
- ✓ EA updated based on the Amtrak track alignment

# DESIGN

- ✓ Design Phase Agreement executed with Amtrak
- ✓ Topographic survey data collected and mapped
- ✓ Concept Design Report (10% design) complete
- ✓ 30% track design submitted to key stakeholders

**PROJECT WEBSITE LAUNCHED!**

**PENNSTATIONACCESS.INFO**

# PROCUREMENT


| DESIGN/BUILD SCHEDULE | |
|---|---|
| RFQ Released | October 25, 2019 |
| RFQ Information Session | November 1, 2019 |
| RFQ Response | December 27, 2019 |
| RFP | Under development |

**122** ATTENDEES

**78** FIRMS AND VENDORS

FROM **7** DIFFERENT STATES

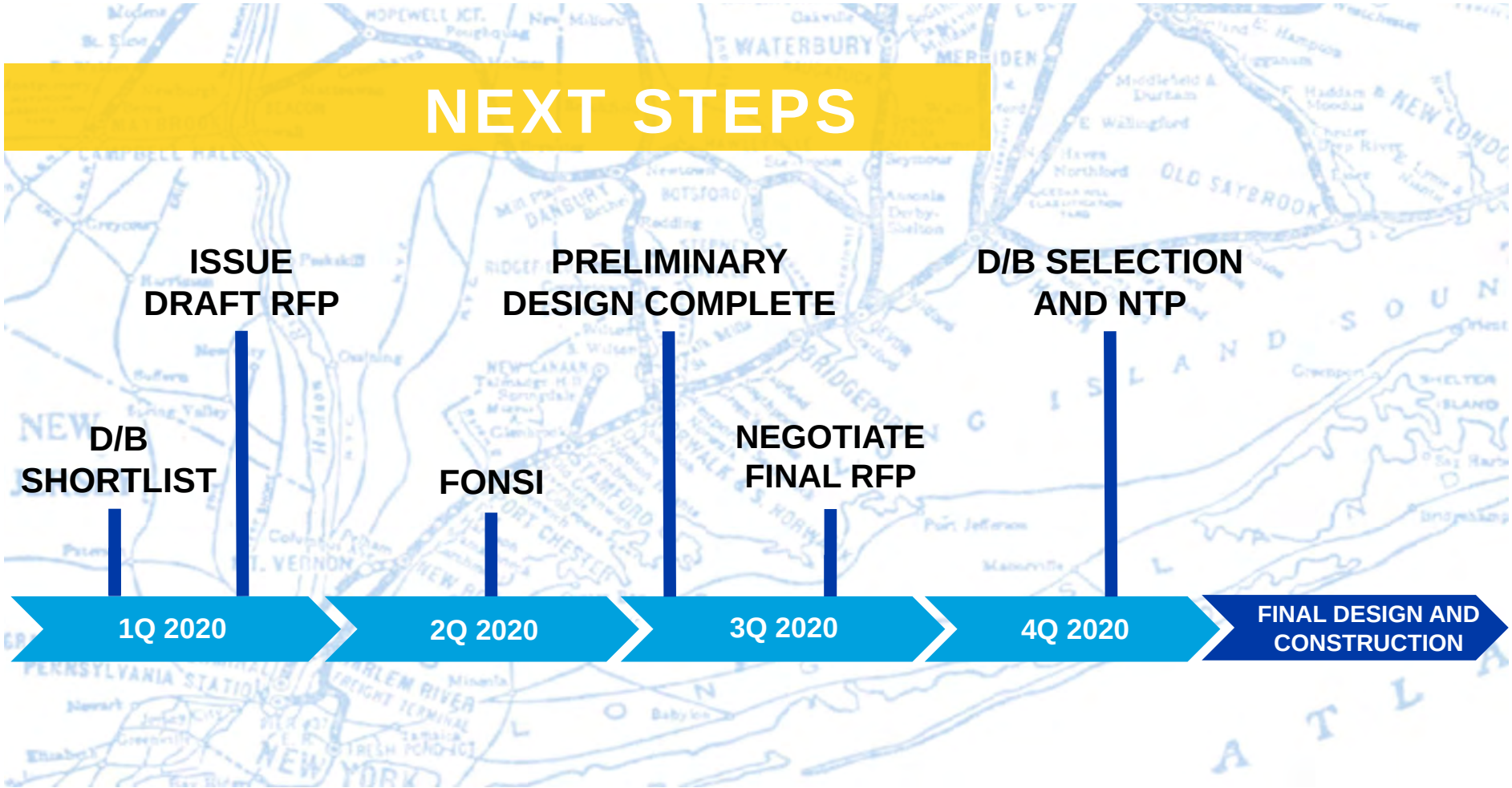
# PRE-CONSTRUCTION

- ✓ Developing Construction Agreement with Amtrak
  - Construction phasing requirements
  - Outages
  - Amtrak Force Account Personnel
- ✓ Advancing Subsurface Investigations
  - Geotechnical testing 50% complete

# PROJECT RISKS/MITIGATIONS

| RISK | POTENTIAL IMPACT | MITIGATION |
|---|---|---|
| Passenger and Freight operators approval of alignment | Finalization of Design, EA and Design-Build RFP | Advancing Amtrak's preferred alignment<br>Amtrak negotiations with freight rail |
| Obtaining FTA sign-off on Environmental Assessment | FONSI needed for construction contract award and real estate agreements | EA just updated and resubmitted to FTA with Amtrak alignment<br>FTA partnering in bi-weekly stakeholder meeting |
| AC Power System Reliability | Impact to AC power design | Alternative technical solution being developed with Amtrak and MNR |
| Limited availability of Amtrak Force Account personnel | Impacts to the project construction schedule | Develop and fund a Training Plan for dedicated Amtrak Forces for Penn Station Access |
| Concurrent competing projects within the Region | Limited competition among contractors could lead to potential cost impacts | Implement MTA's New Way of Doing Business |

# NEXT STEPS


D/B SHORTLIST
ISSUE DRAFT RFP
FONSI
PRELIMINARY DESIGN COMPLETE
NEGOTIATE FINAL RFP
D/B SELECTION AND NTP
1Q 2020
2Q 2020
3Q 2020
4Q 2020
FINAL DESIGN AND CONSTRUCTION

# MTA Capital Program
# Commitments & Completions

## through
## November 30, 2019

Metropolitan Transportation Authority

## Capital Projects – Major Commitments – November 2019

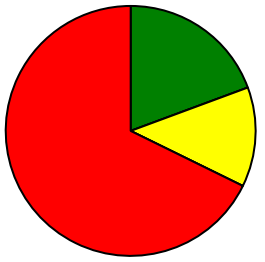
In 2019, agencies have a goal of $5.6 billion in overall commitments. 36 major commitments are included; 18 for NYCT, two for LIRR, four for Metro-North, six for B&T, one for MTACC, two for MTA Bus and three for the MTA Police Department.

Through November, agencies have committed $2.7 billion versus a $4.7 billion YTD goal. The shortfall is primarily due to slips of twenty-one major commitments explained on the following page. The remaining total shortfall is due to delays of non-major commitments, including force account and support costs related to MTACC projects as well as Metro-North projects.

Six other major commitments were made on time or early and four major commitments were delayed but are now committed.

By year-end, the MTA forecasts meeting 88% of its overall $5.6 billion goal. However, achieving this outcome is very much reliant upon agencies making eight major commitments ($1.3 billion) including 8th Ave CBTC and Interlockings, Rehabilitation of the Approach Viaducts at the Throgs Neck Bridge, and Public Safety Radio Cabling all currently forecast for award in December 2019.

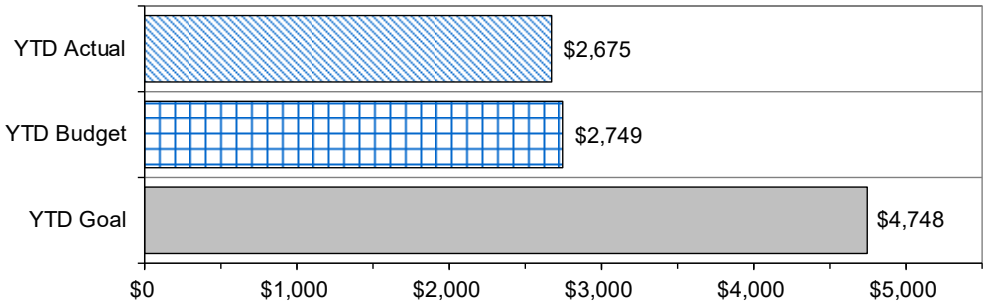
## Year-to-Date Major Commitments



| | | Count | Percent | Change from Prior Month |
|---|---|---|---|---|
| GREEN | =Commitments made/forecast within Goal | 6 | 19% | ↑ 2 |
| YELLOW | = Commitments delayed beyond Goal (already achieved) | 4 | 13% | ↑ 2 |
| RED | = Commitments delayed beyond Goal (not yet achieved) | 21 | 68% | ↑ 1 |
| | | 31 | 100% | ↑ 5 |

## Budget Analysis

| | | |
|---|---|---|
| 2019 Annual Goal | $5,613 | ($ in millions) |
| 2019 Forecast | 88% | of Annual Goal |
| Forecast Left to commit | 46% | ($2,258) |




## Year-to-Date Agency Breakdown

| 2019 Goals | Prior month variance | | |
|---|---|---|---|
| | GREEN | YELLOW | RED |
| New York City Transit (1 2 12) | --- | +2 YELLOW | --- |
| Long Island Rail Road (1 1) | --- | --- | --- |
| Metro-North Railroad (1 1 2) | --- | --- | --- |
| Bridges and Tunnels (2 1 3) | +1 GREEN | +1 YELLOW | +1 RED |
| Capital Construction Company (1) | --- | --- | --- |
| MTA Bus Company (1) | +1 GREEN | --- | --- |
| MTA Police Department (2) | --- | --- | --- |

Metropolitan Transportation Authority

# Capital Projects – Major Commitments – November 2019 – Schedule Variances

## 21 All-Agency Red Commitments (3 New Items)

**NYCT**

*Passenger Stations*

| Project | Commitment | Goal | Forecast |
|---|---|---|---|
| Replace 11 Hydraulic Elevators / Various | Construction Award | Jun-19<br>$46.4 | Feb-20<br>$66.9 |

The contract award date for this project was modified since originally planned to reflect a new innovative procurement method with the potential to reduce construction duration and service outages. Project cost increase reflects refined design and project complexity.

| Project | Commitment | Goal | Forecast |
|---|---|---|---|
| Replace 8 Traction Elevators / Various | Construction Award | May-19<br>$57.9 | May-20<br>$67.4 |

The contract award date for this project was modified since originally planned to reflect a new innovative procurement method with the potential to reduce construction duration and service outages. Project cost increase reflects refined design and project complexity.

| Project | Commitment | Goal | Forecast |
|---|---|---|---|
| **ADA: 149 Street - Grand Concourse Complex *(New Item)*** | Construction Award | Nov-19<br>$79.2 | Jun-20<br>$111.7 |

Contract award date for this project was modified since originally planned to reflect a new procurement method. Project cost increase reflects refined design and project complexity.

| Project | Commitment | Goal | Forecast |
|---|---|---|---|
| ADA: Livonia Avenue / Canarsie | Construction Award | Oct-19<br>$64.8 | Feb-20<br>$76.2 |

The contract award date for this project was modified since originally planned to reflect a new procurement method. Project cost increase reflects refined design and project complexity.

*Line Structures*

| Project | Commitment | Goal | Forecast |
|---|---|---|---|
| Overcoating: 17 Bridges & East 180 Street Flyover / Dyre Av | Construction Award | Oct-19<br>$36.5 | May-20<br>$63.5 |

The contract award date for this project was modified since originally planned to reflect a new innovative procurement method with the potential to reduce construction duration. Cost increase reflects project complexity and market conditions.

| Project | Commitment | Goal | Forecast |
|---|---|---|---|
| Line Structure Repairs & Vents between Stations - Bronx | Construction Award | Oct-19<br>$83.6 | Jul-20<br>$82.8 |

Project being coordinated with the Line Structure Repairs on the Concourse Line and the change in schedule reflects the design and project complexity.

*Signals & Communications*

| Project | Commitment | Goal | Forecast |
|---|---|---|---|
| 8th Ave CBTC and Interlockings | Construction Award | Jun-19<br>$513.7 | Dec-19<br>$523.2 |

The contract award date for this project was modified since originally planned to reflect a new innovative procurement method with the potential to reduce construction duration and service outages.

| Project | Commitment | Goal | Forecast |
|---|---|---|---|
| UHF T-Band Radio System Replacement | Construction Award | Sep-19<br>$61.2 | Jan-20<br>$62.2 |

The contract award date for this project was modified since originally planned to reflect a new innovative procurement method with the potential to reduce construction duration. Bids under evaluation.

| Project | Commitment | Goal | Forecast |
|---|---|---|---|
| Life Cycle Replacement of Code Systems - Phase 1 | Construction Award | Oct-19<br>$31.5 | Mar-20<br>$48.2 |

The contract award date for this project was modified since originally planned to reflect a new innovative procurement method with the potential to reduce construction duration.

| Project | Commitment | Goal | Forecast |
|---|---|---|---|
| **Life Cycle Replacement of Speed Enforcement Systems *(New Item)*** | Construction Award | Nov-19<br>$51.2 | Mar-20<br>$61.5 |

The contract award date for this project was modified since originally planned to reflect a new innovative procurement method with the potential to reduce construction duration and service outages. The cost increase reflects refined design and project complexity.

*Power*

| Project | Commitment | Goal | Forecast |
|---|---|---|---|
| Central Substation Renewal Including New Rectifier / 6AV | Construction Award | Oct-19<br>$44.2 | Dec-19<br>$38.3 |

Project Schedule delayed due to several bid postponements requested by bidders. Bids received 10/15; project budget reflects actual bid cost.

*Shops & Yards*

| Project | Commitment | Goal | Forecast |
|---|---|---|---|
| Sandy Mitigation: Sewer Improvements at 207th Street | Construction Award | Jul-19<br>$19.3 | Dec-19<br>$130.5 |

Advertisement issues were resolved in June. Project cost increase reflects refined design and project complexity. Bids were received and being evaluated.

Metropolitan Transportation Authority

# Capital Projects – Major Commitments – November 2019 – Schedule Variances

| Project | Commitment | Goal | Forecast |
|---|---|---|---|
| ***LIRR*** | | | |
| *Rolling Stock* | | | |
| Work Locomotives | Construction Award | Mar-19 | Jan-20 |
| | | $32.2 | $32.2 |
| An independent firm reviewed the procurement and recommended that work locomotives must not exceed required braking horsepower in order to deliver the cleanest locomotives. The award was rescheduled for vendors to revise their submissions. | | | |
| ***MNR*** | | | |
| *Stations* | | | |
| Harlem Line Station Improvements | Construction Award | Jun-19 | Apr-20 |
| | | $79.5 | $14.7 |
| Construction award delayed due to limited flagging resources. The scope of work has been revised to only capture the critical elements of this project. | | | |
| *Rolling Stock* | | | |
| Locomotive Purchase | Construction Award | Sep-19 | Jan-20 |
| | | $213.0 | $213.0 |
| Project delayed due to a change in funding which required re-issuance of the RFP and time to reconcile the differences between the proposal and the specification. | | | |
| ***MTA Police Department*** | | | |
| *MTAPD* | | | |
| Radio Project Phase 3 - MRRS System | Construction Award | Sep-19 | Mar-20 |
| | | $6.8 | $6.5 |
| This construction award is delayed due to the need to coordinate work with a separate Penn Station renovation project. MTAPD is exploring the possibility of coordinating the radio system work with the renovation project's 2nd phase. | | | |
| Public Safety Radio - Penn Station | Construction Award | Oct-19 | Mar-20 |
| | | $16.8 | $16.8 |
| The delay is due to ongoing discussions with Amtrak to coordinate access to communications rooms and antenna systems in Penn Station. | | | |

| Project | Commitment | Goal | Forecast |
|---|---|---|---|
| **MTACC** | | | |
| *East Side Access* | | | |
| Electric Traction Catenary Work - Harold Systems | Construction Award | Aug-19 | Feb-20 |
| | | $29.8 | $29.8 |
| Construction award delayed due to an extension to permit more time for prospective proposers to assemble qualified teams for bidding and the incorporation of contract modification to include additional scope. | | | |
| ***B&T*** | | | |
| *Henry Hudson Bridge* | | | |
| Structural Rehabilitation & Replacement of HHB Overcoat System | Construction Award | Aug-19 | Dec-19 |
| | | $40.0 | $46.8 |
| Construction award delayed due to change in procurement strategy. Project cost increased due to addition of structural painting of the upper level steel overcoating which to save cost by taking advantage of the full platform that will be installed for steel repairs on the upper level arch. | | | |
| *Throgs Neck Bridge* | | | |
| Approach Viaduct Seismic Retrofit/Structural Rehab | Construction Award | Oct-19 | Dec-19 |
| | | $180.0 | $165.5 |
| As a result of the MTA-wide Cost Containment Initiative, project delivery methods were re-evaluated and modified. This resulted in additional procurement time and reduced project budget, which are reflected in the revised award schedule. Forecast award value reflects an apparent good bid. | | | |
| *Verrazzano-Narrows Bridge* | | | |
| **Approach Viaduct Seismic Retrofit/Structural Rehab (New Item)** | Construction Award | Nov-19 | Dec-19 |
| | | $202.5 | $154.3 |
| As a result of the MTA-wide Cost Containment Initiative, project delivery methods were re-evaluated and modified. This resulted in additional procurement time and reduced project budget, which are reflected in the revised award schedule. Forecast award value reflects an apparent good bid. | | | |

Metropolitan Transportation Authority

## Capital Projects – Major Commitments – November 2019 – Schedule Variances

*Actual Results Shaded*

| Project | Commitment | Goal | Actual |
|---|---|---|---|
| **4 All-Agency Yellow Commitments (2 New Items)** | | | |
| ***NYCT*** | | | |
| *Passenger Stations* | | | |
| **ADA Enhancements: 170 St / JER *(New Item)*** | Construction Award | Sep-19 | Nov-19 (A) |
| | | $49.0 | $59.4 |
| The construction award was delayed due to extended RFP process. The project cost increased due to additional structural repairs. | | | |
| *Buses* | | | |
| **Purchase 50 Express Buses *(New Item)*** | Construction Award | Sep-19 | Nov-19 (A) |
| | | $38.5 | $33.5 |
| Award schedule extended to November to mesh with new prioritized work plan in the new bus/procurement groups. The project cost decrease reflects favorable bids | | | |
| ***MNR*** | | | |
| *Structures* | | | |
| Overhead Bridge Program East of Hudson | Construction Award | Feb-19 | Mar-19 (A) |
| | | $23.4 | $25.6 |
| Award was delayed to March due to revisions made to the notice of award which resulted in a protracted approval process. | | | |
| ***Bridges & Tunnels*** | | | |
| *Bronx-Whitestone Bridge* | | | |
| Tower and Pier Fender Protection & Install of Fire Standpipe Connections | Construction Award | Sep-19 | Oct-19 (A) |
| | | $40.5 | $18.6 |
| Construction award delayed due to change in procurement strategy. Contract awarded in October 2019. | | | |

Metropolitan Transportation Authority

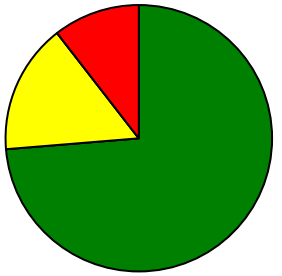
## Capital Projects – Major Completions – November 2019

In 2019, agencies have a goal of $3.4 billion in overall completions. 24 major completions are included, including 14 for NYCT, four for the LIRR, three for Metro-North, one for B&T, one for MTACC, and one for MTA Bus.

Through November, agencies have completed $2.9 billion versus a $2.8 billion YTD goal. Fourteen major completions have been achieved on time or early including a MNR Sandy Restoration project ($168M) and purchase of 367 standard diesel buses and 10 standard hybrid-electric buses ($236M). Three major completions were delayed but are now completed. In addition, two major completions remain delayed and are expected to be completed in December.

By year-end, the MTA forecasts meeting its overall $3.4 billion completion goal.

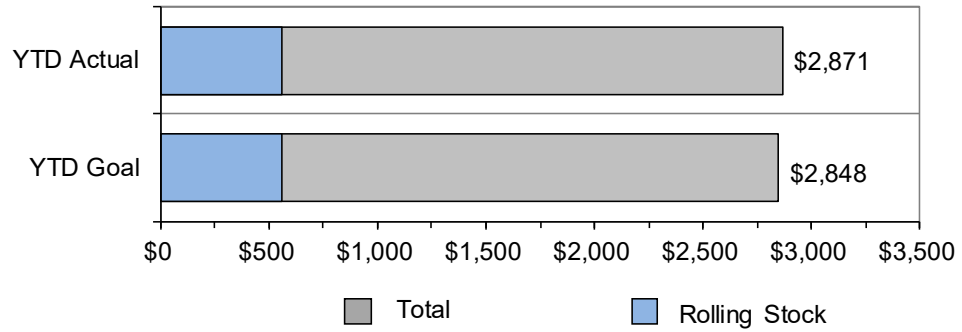
## Year-to-Date Major Completions



| | | Count | Percent | Change from Prior Month |
|---|---|---|---|---|
| GREEN | =Completions made/forecast within Goal | 14 | 74% | ↑ 2 |
| YELLOW | = Completions delayed beyond Goal (already achieved) | 3 | 16% | - |
| RED | = Completions delayed beyond Goal (not yet achieved) | 2 | 11% | - |
| | | 19 | 100% | ↑ 2 |

## Budget Analysis

| | | |
|---|---|---|
| 2019 Annual Goal | $3,428 | ($ in millions) |
| 2019 Forecast | 107% | of Annual Goal |
| Forecast left to Complete | 21% | ($784) |




## Year-to-Date Agency Breakdown

| 2019 Goals | Prior month variance | | |
|---|---|---|---|
| | GREEN | YELLOW | RED |
| New York City Transit (10 / 2) | +1 GREEN | ---- | ---- |
| Long Island Rail Road (1 / 1) | ---- | ---- | ---- |
| Metro-North Railroad (1 / 1) | ---- | ---- | ---- |
| Bridges and Tunnels (1) | +1 GREEN | ---- | ---- |
| Capital Construction Company (1) | ---- | ---- | ---- |
| MTA Bus Company (1) | ---- | ---- | ---- |
| MTA Police Department | ---- | ---- | ---- |

# Capital Projects – Major Completions – November 2019 – Schedule Variances

*Actual Results Shaded*

## 2 All-Agency Red Completions

| Project | Completion | Goal | Forecast |
|---|---|---|---|
| ***MNR*** | | | |
| *Stations* | | | |
| Grand Central Terminal Utilities | Construction | Apr-19<br>$44.7 | Dec-19<br>$51.0 |

Field conditions required the modification of a fire pump controller cabinet. The current forecast for project completion has consequently been delayed to December 2019.

| Project | Completion | Goal | Forecast |
|---|---|---|---|
| ***LIRR*** | | | |
| Stations | | | |
| Nostrand Ave Station Rehab | Construction | Oct-19<br>$20.1 | Dec-19<br>$21.1 |

Delay is due to an extension granted to contractor and ongoing legal issues.

## 3 All-Agency Yellow Completions

| Project | Completion | Goal | Actual |
|---|---|---|---|
| ***NYCT*** | | | |
| *Bus Purchase* | | | |
| Purchase 251 Standard Diesel Buses | Bus Purchase | Jul-19<br>$161.0 | Aug-19 (A)<br>$160.1 |

There was an initial two month delay in the start of production and delivery of buses. Later, delays during fleet production resulted in a one month slip. All buses have been delivered.

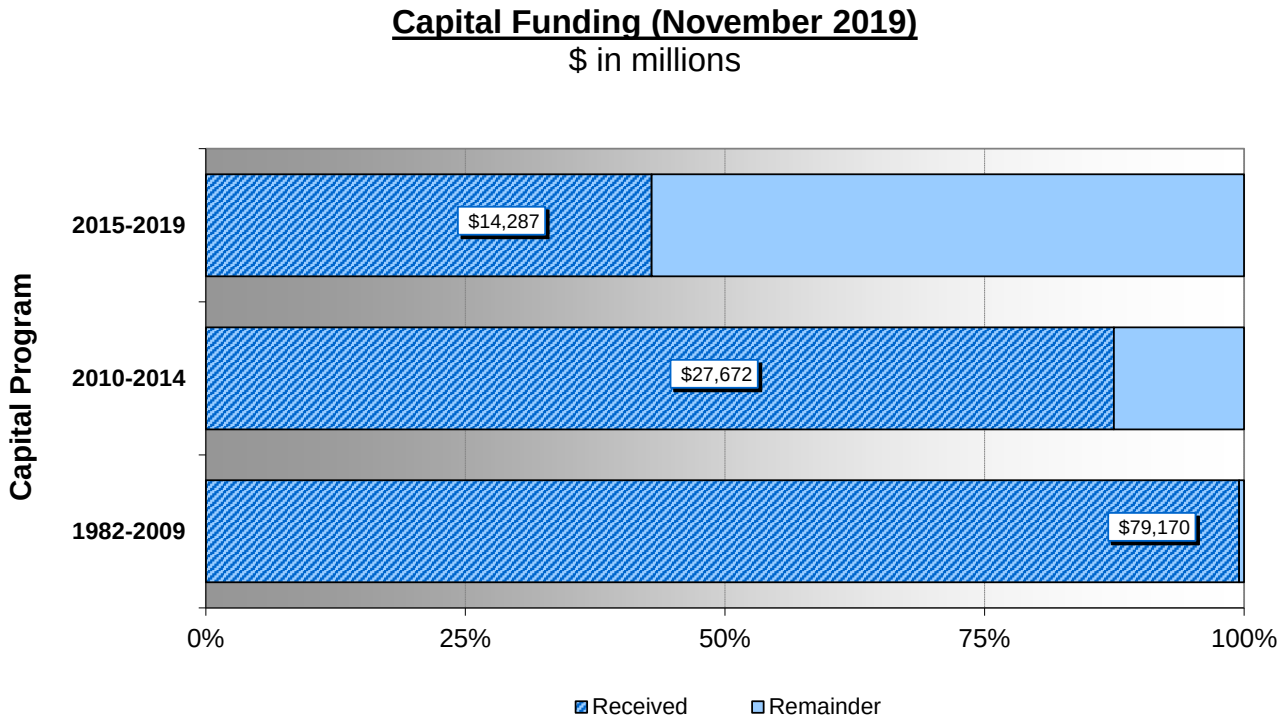
| Project | Completion | Goal | Actual |
|---|---|---|---|
| *Passenger Stations* | | | |
| Station Component: 4 Stations / Jamaica | Construction | Feb-19<br>$87.0 | Aug-19 (A)<br>$104.7 |

A project extension was granted to the contractor to complete additional work. Track access was available until August. The project cost increased to repair 30 tons of steel after a detailed steel repair survey revealed a significant amount of steel deterioration.

| Project | Completion | Goal | Actual |
|---|---|---|---|
| ***MTA Bus Company*** | | | |
| Facilities | | | |
| Security: JFK & Spring Creek | Construction | Aug-19<br>$8.5 | Sep-19 (A)<br>$8.5 |

Delayed due to an additional work order to replace a downed pole at JFK depot.

# Status of MTA Capital Program Funding


Capital Funding (November 2019)
$ in millions
Capital Program
2015-2019
2010-2014
1982-2009
$14,287
$27,672
$79,170
0%
25%
50%
75%
100%
Received
Remainder

# Capital Funding Detail (November 30, 2019)

$ in millions

| | Funding Plan | Receipts | | |
|---|---|---|---|---|
| | Current | October | This month | Received to date |
| **1992-1999 Program** | 18,095 | 18,095 | - | 18,095 |
| **2000-2004 Program** | 21,668 | 21,668 | - | 21,668 |
| **2005-2009 Program** | 24,409 | 24,002 | 14 | 24,016 |

| | Funding Plan | Receipts | | |
|---|---|---|---|---|
| **2010-2014 Program** | Current | October | This month | Received to date |
| Federal Formula, Flexible, Misc | $5,853 | $5,839 | $ - | $5,839 |
| Federal High Speed Rail | 295 | 295 | - | 295 |
| Federal New Start | 1,257 | 1,257 | - | 1,257 |
| Federal Security | 189 | 101 | - | 101 |
| 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) | 11,483 | 9,606 | 202 | 9,808 |
| Other (Including Operating to Capital) | 1,365 | 1,239 | - | 1,239 |
| B&T Bonds | 2,026 | 1,812 | - | 1,812 |
| Hurricane Sandy Recovery | | | | |
| *Insurance Proceeds/Federal Reimbursement* | 6,329 | 5,613 | - | 5,613 |
| *PAYGO* | 235 | 81 | - | 81 |
| *Sandy Recovery MTA Bonds* | 758 | 55 | 64 | 118 |
| *Sandy Recovery B&T Bonds* | 230 | 18 | - | 18 |
| **Total** | **31,640** | **27,406** | **266** | **27,672** |

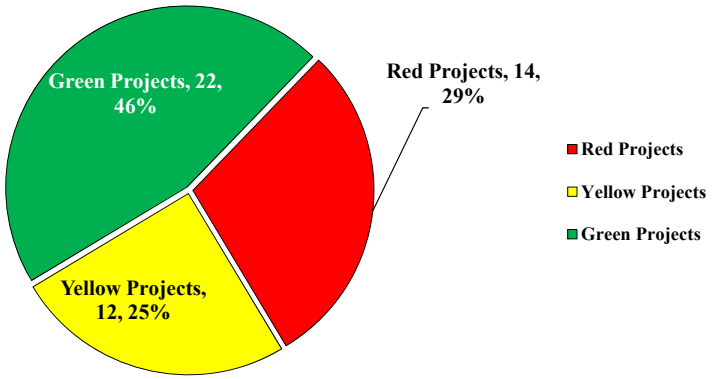
| | Funding Plan | Receipts | | |
|---|---|---|---|---|
| **2015-2019 Program** | Current | October | This month | Received to date |
| Federal Formula, Flexible, Misc | $6,704 | $4,456 | $ - | $4,456 |
| Federal Core Capacity | 100 | - | - | - |
| Federal New Start | 500 | - | - | - |
| Federal Security | 3 | 3 | - | 3 |
| State Assistance | 8,640 | 979 | - | 979 |
| City Capital Funds | 2,667 | 790 | - | 790 |
| MTA Bonds | 7,968 | 4,793 | 666 | 5,459 |
| Asset Sales/Leases | 1,017 | 318 | - | 318 |
| Pay-as-you-go (PAYGO) | 2,145 | 1,730 | - | 1,730 |
| Other | 592 | - | - | - |
| B&T Bonds & PAYGO | 2,936 | 553 | - | 553 |
| **Total** | **33,273** | **13,620** | **666** | **14,287** |

Metropolitan Transportation Authority

# 3rd Quarter 2019 Traffic Light Report on MTA Core Capital Program Projects

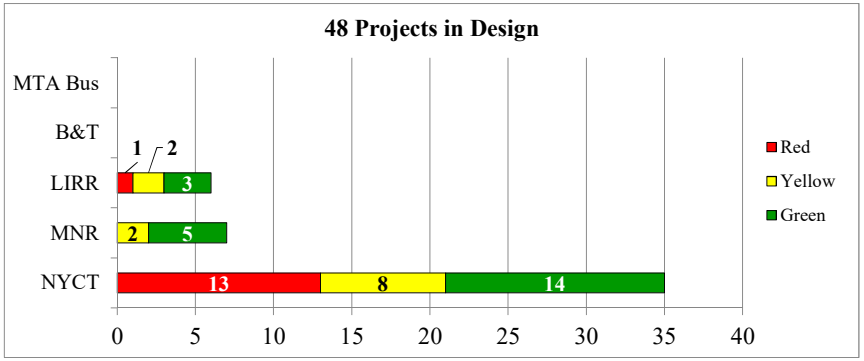
**A total of 285 Projects were Reviewed for the 3rd Quarter 2019**

## 48 Projects in Design

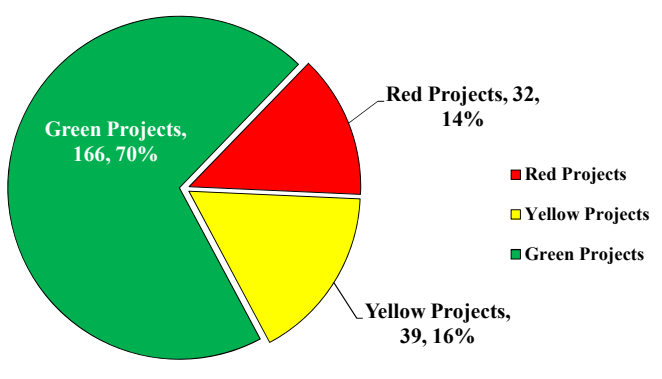



**Projects in Design:** 48 projects were reviewed in the design phase with 22 (46%) projects designated green, 12 (25%) yellow, and 14 (29%) red. This is an increase of 8 red projects since the 2nd quarter 2019. Of the 14 red projects, 6 (43%) were red for a schedule variance, 5 for a cost variance and 3 for both cost and schedule variances. For the 6 projects designated red for schedule, the issues were due in part to reprioritization of more crucial designs, repackaging of design for Design/build award, and coordination with other projects.

**Last Quarter:** 47 projects were reviewed in the design phase with 17 (36%) projects designated green, 24 (51%) yellow, and 6 (13%) red.

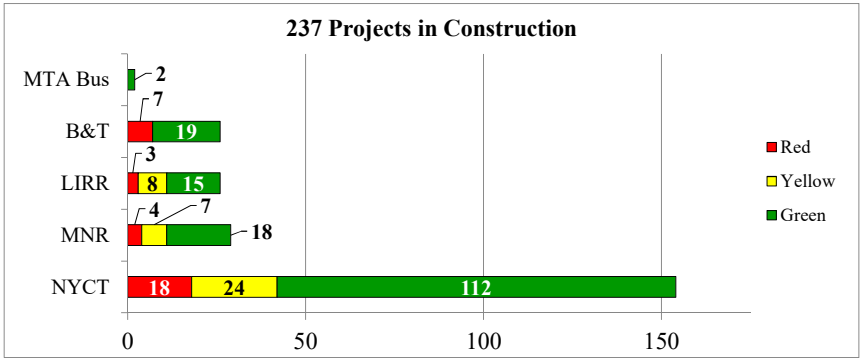



## 237 Projects in Construction




**Projects in Construction:** 237 projects were reviewed in the construction phase with 166 (70%) designated green, 39 (16%) yellow and 32 (14%) red. This is an increase of 5 red projects since the 2nd quarter 2019. Of the 32 red projects, 16 (50%) were red for a schedule variance, 9 for a contingency variance, 5 for a cost variance, 1 for both cost and schedule variances, and 1 for both contingency and schedule variances. For the 16 projects designated red for schedule, the variances ranged from 3 to 19 months. The schedule variances were due in part to added scope, reprioritization of in-house workforces, the requirement for additional General Orders, variety of contractor issues and limited track access.

**Last Quarter:** 276 projects were reviewed in the construction phase with 200 (72%) designated green, 49 (18%) yellow and 27 (10%) red.



# Terms and Definitions
# 3rd Quarter 2019 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: 48** |
|---|
| 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: 237** |
|---|
| 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 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. |

| **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 |

Metropolitan Transportation Authority

## 3rd Quarter 2019 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 | 44 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| T7041301 | ADA: Bedford Av CNR | Construction | $72,610,025 | 57 | .91 | ▼ | .98 | ▬ | 0 | ▬ | G |
| T7041302 | ADA: Astoria Blvd AST | Construction | $41,965,140 | 42 | .06 | ▼ | .99 | ▬ | 0 | ▬ | G |
| T7041303 | ADA: Bedford Pk Blvd BXC | Construction | $37,119,638 | 48 | .35 | ▼ | 1.00 | ▬ | 0 | ▬ | G |
| T7041304 | ADA: 86 St 4AV | Construction | $36,055,077 | 42 | 1.52 | ▼ | 1.11 | ▲ | 0 | ▬ | R |
| T7041305 | ADA: Gun Hill Road DYR | Construction | $60,707,871 | 35 | -.03 | ▲ | .99 | ▬ | 0 | ▬ | G |
| T7041306 | ADA: Eastern Pkwy-Bklyn Museum EPK | Construction | $42,298,636 | 28 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| T7041308 | ADA: Chambers St NAS | Construction | $47,265,141 | 44 | .19 | ▼ | 1.00 | ▬ | 0 | ▬ | G |
| T7041309 | ADA: Greenpoint Av XTN | Construction | $41,345,663 | 49 | .06 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| T7041310 | ADA: 59 St 4AV | Construction | $58,733,105 | 26 | .05 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| T7041311 | ADA: Rockaway Parkway CNR | Construction | $12,787,053 | 35 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| T7041312 | ADA: 1 Av CNR | Construction | $33,969,390 | 64 | .67 | ▲ | .88 | ▬ | 0 | ▬ | G |
| T7041323 | ADA: 57 Street BWY Additional Support Costs | Construction | $53,339,198 | 44 | 7.86 | ▲ | 1.00 | ▲ | 0 | ▬ | G |
| **All Other NYCT Projects** | | | | | | | | | | | |
| T5041419 | Intermodal Rockaway Pkwy CNR | Construction | $11,491,690 | 28 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| T5160749 | Ulmer Park Depot Mezzanine Extension | Construction | $7,754,011 | 90 | 1.10 | ▲ | 1.00 | ▼ | 0 | ▬ | Y |
| T6030227 | On-Board Audio Visual (OBAV) System | Construction | $23,284,832 | 70 | .00 | ▬ | 1.01 | ▲ | 0 | ▬ | G |
| T6040401 | MetroCard-Electronic Components Replacement | Construction | $16,340,035 | 85 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| T6041260 | Components: 4 Stations JAM | Construction | $105,641,493 | 100 | .78 | ▼ | 1.00 | ▬ | -1 | ▼ | Y |
| T60412F2 | Components: Ventilators Rehab. 8 Locs Ph 7 | Construction | $9,175,000 | 98 | .00 | ▬ | 1.00 | ▬ | 4 | ▲ | R |
| T6041304 | Imprve Platfrm Horizntl/Vertical Clearance-Var Loc | Construction | $12,555,331 | 71 | .00 | ▬ | 1.13 | ▲ | 0 | ▬ | R |
| T6060203 | Tunnel Lighting:Roosevelt Av-36 St QBL | Construction | $52,192,907 | 99 | .00 | ▬ | 1.00 | ▬ | -4 | ▼ | G |
| T6070306 | Demolish Abandoned Structures | Construction | $15,116,583 | 74 | .00 | ▬ | 1.00 | ▬ | 15 | ▲ | R |
| T6070316 | Structural Repairs: 39 St - 60 St 4AV Ph1 | Construction | $31,200,170 | 94 | .00 | ▬ | 1.00 | ▬ | -3 | ▼ | G |
| T6100454 | 207th St. OH Shop: Boiler Upgrades & Site Remed. | Construction | $10,823,059 | 38 | .58 | ▲ | 1.00 | ▬ | 0 | ▬ | G |

Metropolitan Transportation Authority

## 3rd Quarter 2019 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** | | | | | | | | | | | |
| **All Other NYCT Projects** | | | | | | | | | | | |
| T6120436 | Replacement of Oil/Water Separators at 4 Locs | Construction | $19,024,868 | 85 | -.31 | ▼ | 1.00 | ▬ | 0 | ▬ | Y |
| T6130202 | Purchase 65 Flatcars | Construction | $47,597,644 | 29 | .00 | ▬ | 1.04 | ▬ | 0 | ▬ | G |
| T6130207 | Purchase 3 Vacuum Trains | Construction | $34,704,131 | 100 | .00 | ▬ | .99 | ▬ | -1 | ▼ | G |
| T6160402 | NYCT-Wide Storage Area Network/Disaster Recovery | Construction | $22,268,148 | 85 | .00 | ▬ | .99 | ▬ | 3 | ▲ | R |
| T6160611 | Replace Fire Alarm Systems at 13 Locations | Construction | $22,364,036 | 0 | .00 | ▬ | 1.01 | ▼ | 0 | ▬ | G |
| T6160717 | Livingston Plaza Repairs | Construction | $51,620,490 | 27 | .00 | ▲ | 1.00 | ▬ | 7 | ▲ | R |
| T7030205 | Purchase 15 Artic Electric Buses & Depot Chargers | Construction | $34,378,339 | 6 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| T7030215 | AVLM for Paratransit Vehicles | Construction | $26,938,276 | 19 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| T7030218 | Purchase 251 Standard Diesel Buses | Construction | $160,110,732 | 100 | .00 | ▬ | .99 | ▬ | 1 | ▲ | G |
| T7030219 | Purchase 367 Diesel and 10 Hybrid Standard Buses | Construction | $235,733,576 | 100 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| T7030221 | Purchase 108 Articulated Buses (New Flyer) | Construction | $99,592,763 | 79 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| T7040402 | AFC Low Turnstile Procurement | Construction | $11,640,000 | 95 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| T7040403 | AFC Replacement, Phase 2: Electronic Boards | Construction | $13,861,520 | 67 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| T7040702 | Replace 12 Traction Elevators BW7 | Construction | $98,873,454 | 29 | .42 | ▼ | .99 | ▬ | 0 | ▬ | G |
| T7040704 | Replace 6 Traction Elevators 8AV | Construction | $43,618,067 | 12 | .00 | ▬ | .99 | ▬ | 0 | ▬ | G |
| T7040706 | Replace 2 Escalators: Grand Central-42 St LEX | Construction | $29,863,318 | 26 | .00 | ▬ | 1.30 | ▲ | 0 | ▬ | R |
| T7040710 | Escalator Relocation: Jay St-MetroTech FUL | Construction | $21,724,370 | 4 | .00 | ▬ | 1.00 | ▬ | -1 | ▼ | G |
| T7041202 | Renewal: 138 St-Grand Concourse JER | Construction | $25,606,623 | 4 | .00 | ▬ | .99 | ▬ | 0 | ▬ | G |
| T7041204 | Renewal: Astoria Blvd AST | Construction | $52,721,060 | 42 | .38 | ▲ | 1.00 | ▬ | 0 | ▬ | G |
| T7041236 | Platform Components: Longwood Ave PEL | Construction | $10,329,087 | 5 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| T7041237 | Platform Components: 2 Locs LNX | Construction | $7,941,325 | 9 | .00 | ▬ | 1.04 | ▬ | 0 | ▬ | G |
| T7041251 | Platform Components: 4 Locs CNR | Construction | $19,460,670 | 42 | .61 | ▲ | .72 | ▼ | 0 | ▬ | G |
| T7041252 | Platform Components: 3 Locs EPK, CLK | Construction | $15,436,947 | 35 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| T7041263 | Platform Components: 3 Locs NOS | Construction | $19,236,236 | 63 | .89 | ▲ | 1.00 | ▬ | 0 | ▬ | G |
| T7041401 | Station Signage Improvements | Construction | $10,225,624 | 3 | .00 | ▬ | .94 | ▬ | 0 | ▬ | G |

Metropolitan Transportation Authority

## 3rd Quarter 2019 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** | | | | | | | | | | | |
| T7041402 | Access Improvements: Grand Central, Phase 2 | Construction | $68,076,674 | 75 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| T7041403 | Reopen Station Entrance: 8 Av SEA | Construction | $19,515,798 | 89 | .98 | ▬ | 1.00 | ▬ | -2 | ▼ | Y |
| T7041404 | Reconstruction: Times Sq Complex, Ph3 - Shuttle | Construction | $28,659,175 | 10 | .00 | ▬ | .98 | ▬ | 0 | ▬ | G |
| T7041408 | 2017 Water Condition Remedy | Construction | $9,966,029 | 36 | .00 | ▬ | 1.00 | ▼ | 0 | ▬ | G |
| T7041409 | Reconstruct Cortlandt St Station BW7 | Construction | $61,809,779 | 95 | .00 | ▬ | .86 | ▬ | 0 | ▬ | Y |
| T7041411 | New Street Stairs: 2 Locs CNR | Construction | $6,973,332 | 64 | .94 | ▼ | .92 | ▬ | 0 | ▬ | G |
| T7041416 | Circulation Improvements: Union Square CNR | Construction | $17,577,047 | 54 | 2.38 | ▲ | 1.00 | ▬ | 0 | ▬ | R |
| T7050210 | 2018 Continuous Welded Rail | Construction | $9,953,473 | 94 | .00 | ▬ | .91 | ▼ | 3 | ▲ | R |
| T7050216 | 2019 Track Force Account | Construction | $35,000,000 | 0 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| T7050240 | 2016 Mainline Track Repl: Canarsie Tube | Construction | $64,179,407 | 46 | .00 | ▬ | .98 | ▬ | 0 | ▬ | G |
| T7050259 | 2017 Mainline Track Repl: Jerome | Construction | $22,849,946 | 67 | .00 | ▬ | 1.00 | ▬ | 1 | ▲ | Y |
| T7050260 | 2017 Mainline Track Repl: Lexington | Construction | $9,345,501 | 87 | .00 | ▬ | 1.00 | ▬ | 3 | ▲ | R |
| T7050261 | 2017 Mainline Track Repl: Pelham | Construction | $15,685,569 | 93 | .00 | ▬ | 1.87 | ▲ | 3 | ▲ | R |
| T7050266 | 2017 Mainline Track Repl: Flushing | Construction | $37,834,237 | 84 | .00 | ▬ | 1.28 | ▬ | 0 | ▬ | Y |
| T7050269 | Continuous Welded Rail (SAP) | Construction | $53,000,000 | 80 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| T7050270 | 2018 Mainline Track Repl: Astoria | Construction | $17,274,700 | 98 | .00 | ▬ | 1.27 | ▬ | 3 | ▲ | R |
| T7050271 | 2018 Mainline Track Repl: Flushing | Construction | $15,012,488 | 41 | .00 | ▬ | .65 | ▼ | 0 | ▬ | Y |
| T7050272 | 2018 Mainline Track Repl: Jamaica | Construction | $27,770,164 | 80 | .00 | ▬ | 1.00 | ▲ | 0 | ▬ | Y |
| T7050275 | 2018 Mainline Track Repl: Pelham | Construction | $8,140,175 | 94 | .00 | ▬ | .91 | ▬ | 0 | ▬ | Y |
| T7050276 | 2018 Mainline Track Repl: Eastern Parkway | Construction | $14,813,807 | 86 | .00 | ▬ | 1.31 | ▲ | 1 | ▲ | R |
| T7050277 | 2018 Mainline Track Repl: Broadway-7th Avenue | Construction | $12,953,000 | 97 | .00 | ▬ | 1.33 | ▬ | 3 | ▲ | R |
| T7050278 | 2018 Mainline Track Repl: Canarsie | Construction | $8,615,368 | 86 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | Y |
| T7050279 | 2018 Mainline Track Repl: Concourse | Construction | $13,092,700 | 65 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | Y |
| T7050280 | 2018 Mainline Track Repl: 6th Ave/Culver | Construction | $22,512,343 | 93 | .00 | ▬ | .98 | ▲ | 0 | ▬ | G |
| T7050283 | 2018 Mainline Track Repl: Archer Ave | Construction | $7,330,264 | 85 | .00 | ▬ | .73 | ▼ | 0 | ▬ | G |

Metropolitan Transportation Authority

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|---|---|---|---|---|---|---|---|---|---|---|---|
| **NYCT - New York City Transit Program** | | | | | | | | | | | |
| **All Other NYCT Projects** | | | | | | | | | | | |
| T7050284 | 2018 Mainline Track Repl: Lenox-White Plains Rd | Construction | $11,896,699 | 63 | .00 | ▬ | 1.00 | ▲ | 2 | ▲ | Y |
| T7050287 | 2018 Mainline Track Repl: Brighton Line, BMT | Construction | $10,528,093 | 54 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| T7050288 | 2018 Mainline Track Repl: 4th Avenue Line, BMT | Construction | $22,152,940 | 95 | .00 | ▬ | 1.55 | ▲ | -1 | ▼ | R |
| T7050290 | 2018 Mainline Track Repl: Myrtle | Construction | $7,465,755 | 82 | .00 | ▬ | 1.00 | ▬ | 2 | ▲ | G |
| T7050293 | 2019 Mainline Track Repl: Astoria | Construction | $20,967,636 | 82 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| T7050304 | 2018 Mainline Switch Repl: Design/Support | Construction | $9,252,717 | 80 | .00 | ▬ | 1.25 | ▲ | 0 | ▬ | R |
| T7050320 | 2016 Mainline Switch Repl: Flushing | Construction | $7,499,563 | 0 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| T7050328 | 2018 Mainline Switch Repl: Astoria | Construction | $10,959,838 | 98 | .00 | ▬ | 1.00 | ▼ | 3 | ▲ | Y |
| T7050332 | 2018 Mainline Switch Repl: White Plains Rd | Construction | $7,398,926 | 75 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | Y |
| T7050333 | 2018 Mainline Switch Repl: 4th Avenue Line, BMT | Construction | $8,912,505 | 97 | .00 | ▬ | 1.39 | ▬ | 3 | ▲ | R |
| T7050334 | 2018 Mainline Switch Repl: Culver (Ditmas) | Construction | $10,708,606 | 97 | .00 | ▬ | 1.26 | ▬ | -1 | ▼ | Y |
| T7050339 | 2019 Mainline Switch Repl: Bway-7th Ave. | Construction | $22,311,140 | 80 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| T7060503 | Replace Supervisory Vent Controls - Var Locs | Construction | $29,023,735 | 9 | .00 | ▬ | .99 | ▬ | 0 | ▬ | G |
| T7060506 | Rehab Forsyth St Vent Plant | Construction | $90,374,945 | 9 | .00 | ▬ | .99 | ▬ | 0 | ▬ | G |
| T7060514 | Tunnel Lighting: Roosevelt Av to Elmhurst Av / QBL | Construction | $10,000,000 | 1 | .00 | ▬ | 1.00 | ▲ | 0 | ▬ | G |
| T7070303 | Struct Rehab: Livonia Yard Overpass & Retain Wall | Construction | $27,083,332 | 3 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| T7070307 | Rehab Emergency Exits (ICC) - Various Locs | Construction | $16,997,741 | 73 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| T7070308 | Rehab Emergency Exits (3rd Party) - Var Locs | Construction | $10,665,352 | 1 | .00 | ▬ | 1.00 | ▼ | -11 | ▼ | G |
| T7070313 | Overcoat: 72 St - 104 St FLS | Construction | $60,965,120 | 48 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | Y |
| T7070316 | Overcoat: Broadway - End of Line MYR | Construction | $58,258,534 | 9 | .00 | ▬ | .99 | ▬ | 0 | ▬ | G |
| T7070317 | Overcoat: 48 St - 72 St FLS | Construction | $57,133,383 | 3 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| T7070321 | Struct Rehab:  4AV - Ph2 | Construction | $86,455,006 | 94 | .86 | ▼ | 1.00 | ▬ | -3 | ▼ | Y |
| T7070344 | Repairing 'A' and 'B' Column Base Conditions WPR | Construction | $17,401,817 | 8 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| T7080307 | Interlocking Modernization: Ditmas CUL | Construction | $133,574,754 | 10 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| T7080308 | Interlocking Modernization: Kings Highway CUL | Construction | $179,435,183 | 61 | .09 | ▬ | 1.00 | ▬ | 0 | ▬ | G |

Metropolitan Transportation Authority

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|---|---|---|---|---|---|---|---|---|---|---|---|
| **NYCT - New York City Transit Program** | | | | | | | | | | | |
| **All Other NYCT Projects** | | | | | | | | | | | |
| T7080322 | AC to DC Line Relay Upgrade BCT | Construction | $25,168,851 | 40 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| T7080323 | Signal Key-By Modifications, Ph4 | Construction | $18,429,499 | 65 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| T7080325 | Signal Room Fire Suppression, Phase 2 | Construction | $25,609,793 | 30 | .04 | ▼ | 1.00 | ▬ | 0 | ▬ | G |
| T7080332 | CBTC: CUL (Church Av to W8 St) | Construction | $117,995,762 | 5 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| T7080333 | Interlocking Modernization: Ave X CUL | Construction | $200,040,640 | 7 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| T7080339 | Upgrade/Modernization of Signal Technology (SAP) | Construction | $75,235,917 | 40 | .00 | ▬ | 1.05 | ▲ | 2 | ▲ | G |
| T7080345 | 2019 M/L Switch Repl: Kings Hwy 12 Switches CUL | Construction | $26,368,385 | 0 | .00 | ▬ | 1.00 | ▲ | 0 | ▬ | G |
| T7080346 | Ultra-Wideband (UWB)-Based Train Control | Construction | $58,939,886 | 70 | .00 | ▬ | 1.05 | ▬ | 0 | ▬ | G |
| T7080602 | Upgrade Async Network to SONET, Rings A and C | Construction | $30,961,649 | 55 | .12 | ▼ | 1.00 | ▬ | 0 | ▬ | G |
| T7080603 | PBX Upgrade | Construction | $41,507,342 | 58 | .18 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| T7080604 | Fiber Optic Cable Replacement Ph2 | Construction | $29,219,060 | 41 | .00 | ▬ | 1.01 | ▬ | 0 | ▬ | G |
| T7080617 | LiftNet Transition to Ethernet | Construction | $15,965,060 | 53 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| T7080646 | Antenna Cable: Next Generation Pilot & Testing | Construction | $10,911,976 | 21 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| T7080651 | Help Point: Wrap Up work and CAI Removals | Construction | $20,205,948 | 0 | .00 | ▬ | 1.00 | ▲ | 0 | ▬ | G |
| T7090201 | Substation Renewal: Burnside Av BXC | Construction | $22,857,912 | 18 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| T7090202 | Substation Renewal: Av Z CUL | Construction | $32,517,194 | 10 | .00 | ▬ | 1.01 | ▬ | 0 | ▬ | G |
| T7090205 | Replace 25Hz Freq Converters - Various Locs | Construction | $19,205,969 | 40 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| T7090206 | Replace HT Switchgear - Various Locs | Construction | $29,930,773 | 5 | 1.01 | ▲ | 1.00 | ▬ | 0 | ▬ | G |
| T7090210 | Install Low-Resistance Contact Rail - CNR Tube | Construction | $28,661,710 | 64 | .00 | ▬ | .99 | ▬ | 0 | ▬ | G |
| T7090215 | Supplemental Negative Cables QBL | Construction | $53,023,972 | 24 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| T7090218 | Install Low-Resistance Contact Rail QBL | Construction | $48,418,850 | 30 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| T7090222 | New Substation: Maspeth Av-Humboldt St CNR | Construction | $51,540,916 | 88 | .24 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| T7090223 | New Substation: Harrison Pl CNR | Construction | $58,204,402 | 78 | .00 | ▬ | .98 | ▬ | 0 | ▬ | G |
| T7090401 | Rehab CBH # 586 - 18 Av CUL | Construction | $14,497,395 | 89 | .00 | ▬ | 1.02 | ▬ | -2 | ▼ | G |
| T7090404 | Rehab CBH # 86 - Wilson Av CNR | Construction | $5,578,665 | 88 | .76 | ▬ | 1.00 | ▬ | 0 | ▬ | G |

Metropolitan Transportation Authority

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|---|---|---|---|---|---|---|---|---|---|---|---|
| **NYCT - New York City Transit Program** | | | | | | | | | | | |
| **All Other NYCT Projects** | | | | | | | | | | | |
| T7090406 | Rehab CBH # 85 & New Ducts: Bedfrd-N 6 St SS CNR | Construction | $13,400,910 | 60 | .20 | ▬ | .99 | ▬ | 0 | ▬ | G |
| T7090407 | Rehab CBH # 5 - 53 St BWY | Construction | $17,031,998 | 49 | .45 | ▲ | 1.00 | ▬ | 0 | ▬ | G |
| T7090414 | Repl Control & Bat Cables: Substation CZs | Construction | $28,828,653 | 45 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| T7090415 | Reconstruct CBH # 392 Flushing River Bridge FLS | Construction | $15,137,840 | 2 | .00 | ▬ | 1.00 | ▼ | 0 | ▬ | G |
| T7100401 | DCE Shop Components Ph 1: 180 St, CI, PEL | Construction | $33,852,409 | 1 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| T7100402 | 207th St Maint & OH Shop Roof & Component Repl | Construction | $59,961,172 | 8 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| T7100403 | DCE Shop Components Ph 2: 239 St, Concourse, ENY | Construction | $45,506,450 | 11 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| T7100405 | DCE Shop Components Ph 4: 207 St Admin | Construction | $24,328,231 | 0 | .00 | ▬ | .99 | ▬ | 0 | ▬ | G |
| T7100407 | Upgrade Central Electronics Shop: Woodside | Construction | $16,100,649 | 69 | .57 | ▼ | .99 | ▬ | 1 | ▲ | G |
| T7100409 | Heavy Shop Equipment | Construction | $14,729,150 | 47 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| T7100422 | Yard Lighting: 207th St Yard | Construction | $27,630,979 | 100 | -.12 | ▬ | 1.10 | ▬ | 0 | ▬ | Y |
| T7120314 | HVAC: Manhattanville Depot | Construction | $16,516,303 | 87 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| T7120315 | HVAC: Zerega Consolidated Maintenance Facility | Construction | $8,700,000 | 10 | .00 | ▬ | 1.02 | ▬ | 0 | ▬ | G |
| T7120408 | Elevator Upgrades: JG,GH,MTV,CS,ENY | Construction | $22,842,795 | 37 | .07 | ▲ | .99 | ▬ | 0 | ▬ | G |
| T7120422 | Storage Tanks: Jackie Gleason and Castleton Depots | Construction | $9,330,816 | 100 | .37 | ▬ | 1.00 | ▬ | -1 | ▼ | Y |
| T7130212 | Purchase 202 Non-Revenue Vehicles | Construction | $33,772,829 | 98 | .00 | ▬ | .99 | ▬ | 0 | ▬ | Y |
| T7160512 | Test Pits | Construction | $10,756,669 | 29 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| T7160601 | Fire Alarm System Replacement - 3 Locs | Construction | $19,960,202 | 55 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| T7160704 | Emp Fac Component Repairs: 10 Locs / Manhattan | Construction | $9,739,980 | 92 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | Y |
| T7160714 | Livingston Plz Elec, Mechanical, Generator Phase A | Construction | $33,550,597 | 53 | .27 | ▲ | 1.05 | ▬ | 6 | ▲ | R |
| T7160716 | RCC and PCC Power Upgrade | Construction | $59,070,962 | 48 | .35 | ▼ | 1.00 | ▼ | 0 | ▬ | G |
| T7160721 | EDR Rprs: DO #20 - Briarwood-Van Wyck | Construction | $7,984,193 | 75 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| T7030203 | Purchase 275 Standard Hybrid Buses | Design | $261,394,304 | 39 | .00 | ▬ | .98 | ▬ | 0 | ▬ | G |
| T7030206 | Purchase 50 Express Buses | Design | $40,987,264 | 95 | .00 | ▬ | 1.05 | ▬ | 0 | ▬ | G |
| T7030216 | Purchase 45 Standard Electric Buses | Design | $73,873,840 | 32 | .00 | ▬ | 1.35 | ▬ | 0 | ▬ | R |

Metropolitan Transportation Authority

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| **NYCT - New York City Transit Program** | | | | | | | | | | | |
| **All Other NYCT Projects** | | | | | | | | | | | |
| T7041201 | Water Remediation - Renewal: Borough Hall LEX | Design | $14,223,032 | 60 | .00 | ▬ | .32 | ▬ | 0 | ▬ | G |
| T7041213 | Renewal: Woodhaven Blvd JAM | Design | $59,110,983 | 40 | .00 | ▬ | 1.36 | ▲ | -1424 | ▼ | R |
| T7041214 | Renewal: 85 St-Forest Parkway JAM | Design | $51,323,374 | 40 | .00 | ▬ | 2.04 | ▲ | 0 | ▬ | R |
| T7041215 | Renewal: 75 St-Elderts Lane JAM | Design | $49,474,633 | 40 | .00 | ▬ | 1.97 | ▲ | 0 | ▬ | R |
| T7041216 | Renewal: Cypress Hills JAM | Design | $52,265,794 | 40 | .00 | ▬ | 2.09 | ▲ | 0 | ▬ | R |
| T7041218 | Renewal: 61 St-Woodside FLS | Design | $2,106,741 | 60 | .00 | ▬ | .04 | ▬ | 3 | ▲ | R |
| T7041224 | Platform Components: 2 Locs JER | Design | $19,566,341 | 70 | .00 | ▬ | .96 | ▲ | 0 | ▬ | Y |
| T7041267 | Platform Components: 10 Locs BW7 | Design | $50,046,964 | 75 | .00 | ▬ | .99 | ▬ | 0 | ▬ | Y |
| T7041274 | Station Lighting: 9 Locs / Various [SBDP] | Design | $7,633,787 | 1 | .00 | ▬ | .99 | ▬ | 0 | ▬ | G |
| T7041286 | Station Lighting: 6 Locs 8AV, WPR [SBDP] | Design | $5,538,280 | 50 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | Y |
| T7041314 | ADA: Court Square XTN (Elevator Phase) | Design | $15,904,539 | 50 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| T7041316 | ADA: Woodhaven Boulevard JAM | Design | $31,839,421 | 20 | .00 | ▬ | 1.00 | ▬ | 4 | ▲ | R |
| T7041317 | ADA: Systemwide Study | Design | $17,575,305 | 75 | .00 | ▬ | 1.03 | ▬ | 0 | ▬ | G |
| T7041322 | ADA: 95 St 4AV | Design | $35,000,000 | 10 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| T7041327 | ADA & Station Improvements: Westchester Sq PEL | Design | $96,795,976 | 60 | .00 | ▬ | 1.07 | ▲ | 0 | ▬ | G |
| T7041330 | ADA: 14th St 6th Av/7th Av Complex DES | Design | $41,717,317 | 52 | .00 | ▬ | 3.92 | ▬ | 0 | ▬ | Y |
| T7060505 | Rehab Vent Plant Damper System - Var Locs | Design | $68,967,059 | 97 | .00 | ▬ | 1.69 | ▬ | 0 | ▬ | Y |
| T7060508 | Rehab Pump Rooms: Various Locations | Design | $44,948,705 | 40 | .00 | ▬ | 1.28 | ▲ | 2 | ▲ | G |
| T7070305 | Struct Repair: Over land Section RKY | Design | $18,969,436 | 0 | .00 | ▬ | .94 | ▬ | 0 | ▬ | G |
| T7080619 | Comm Room Upgrade and Expansion Ph2 [SBDP] | Design | $25,000,000 | 65 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| T7090220 | New Substation: 28 St 8AV | Design | $76,316,728 | 53 | .00 | ▬ | 1.21 | ▲ | 4 | ▲ | R |
| T7090410 | Rehab Various CBH Enclosures | Design | $8,915,249 | 60 | .00 | ▬ | 1.12 | ▬ | 0 | ▬ | R |
| T7090418 | Protection of Cables DYR | Design | $9,000,000 | 0 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| T7100406 | Rehab Livonia Maintenance Shop, Ph 1 | Design | $55,600,152 | 90 | .00 | ▬ | 1.01 | ▬ | 0 | ▬ | Y |
| T7120310 | New Depot: Jamaica | Design | $45,024,260 | 2 | .00 | ▬ | .96 | ▼ | 0 | ▬ | G |

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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** | | | | | | | | | | | |
| T7120419 | Queens Depot Property & Environmental Prep | Design | $40,000,000 | 90 | .00 | ▬ | 1.00 | ▬ | 4 | ▲ | Y |
| T7130207 | Purchase 27 Refuse Flats | Design | $24,854,608 | 99 | .00 | ▬ | 1.00 | ▬ | 15 | ▲ | R |
| T7130208 | Purchase 12 3-Ton Crane Cars | Design | $28,780,641 | 77 | .00 | ▬ | 1.00 | ▬ | 1 | ▲ | Y |
| T7130211 | Purchase Locomotives | Design | $205,080,447 | 96 | .00 | ▬ | 1.57 | ▬ | 3 | ▲ | R |
| T7160703 | Emp Fac Consolidation: 2 Av 6AV | Design | $14,726,772 | 5 | .00 | ▬ | .96 | ▬ | 3 | ▲ | R |
| T7160727 | Roof Replacement: Tiffany Central Warehouse | Design | $16,915,864 | 95 | .00 | ▬ | 1.00 | ▬ | 4 | ▲ | R |
| T7160730 | Elevator & Escalator Training Facility Expansion | Design | $16,980,895 | 30 | .00 | ▬ | 1.13 | ▬ | -12 | ▼ | G |
| S7070102 | SIR Station Component Program | Construction | $18,778,861 | 1 | .00 | ▬ | 1.01 | ▼ | 0 | ▬ | G |
| S7070103 | SIR Mainline Track Replacement | Construction | $48,852,964 | 6 | .00 | ▬ | .99 | ▬ | 0 | ▬ | G |
| S7070105 | New Power Substation: Tottenville | Construction | $27,353,205 | 88 | .35 | ▲ | .99 | ▬ | 0 | ▬ | Y |
| S7070106 | New Power Substation: New Dorp | Construction | $23,993,252 | 48 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| S7070107 | New Power Substation: Clifton | Construction | $31,041,073 | 51 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| S7070110 | Rehabilitation of Amboy Rd Bridge | Construction | $8,282,466 | 95 | -.82 | ▲ | .98 | ▬ | 0 | ▬ | G |
| S7070111 | Relocate HQ to Clifton Shop | Construction | $9,141,188 | 32 | .24 | ▬ | 1.00 | ▬ | 1 | ▲ | Y |
| S7070113 | SIR Clifton Yard Track and Switch Replacement | Construction | $17,706,979 | 6 | .00 | ▬ | 1.01 | ▬ | 0 | ▬ | G |
| **LIRR - Long Island Rail Road Program** | | | | | | | | | | | |
| L50304TQ | MLC-Hicksville North Siding | Construction | $44,190,616 | 56 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | Y |
| L60701AR | Replacement of Richmond Hill Substation | Construction | $16,617,791 | 10 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| L70204UM | MURRAY HILL STATION - NEW ELEVATORS | Construction | $11,665,693 | 45 | .23 | ▼ | 1.01 | ▬ | 5 | ▲ | R |
| L70204UN | Nostrand Ave. Station Rehabilitation | Construction | $28,158,681 | 90 | .88 | ▲ | 1.00 | ▬ | 0 | ▬ | Y |
| L70204UW | GCT/ESA UNIFIED TRASH FACILITY | Construction | $11,100,000 | 15 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| L70204V5 | Enhanced Station Initiative: 8 Stations | Construction | $98,764,999 | 96 | .73 | ▼ | 1.00 | ▬ | 0 | ▬ | G |
| L70204VV | Lynbrook Station Improvements [SBDP] | Construction | $8,200,000 | 10 | .00 | ▬ | .89 | ▬ | 0 | ▬ | G |
| L70206VN | PENN STATION - 33RD STREET CORRIDOR | Construction | $167,700,800 | 14 | .00 | ▬ | .98 | ▬ | -15 | ▼ | G |
| L70206VP | Penn Sta Elevator/Escalator Renewal | Construction | $12,441,500 | 20 | .34 | ▬ | 1.00 | ▬ | 0 | ▬ | Y |

Metropolitan Transportation Authority

## 3rd Quarter 2019 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **LIRR - Long Island Rail Road Program** | | | | | | | | | | | |
| L70206VS | MOYNIHAN TRAIN HALL | Construction | $107,206,794 | 40 | .00 | ▬ | .94 | ▼ | 0 | ▬ | G |
| L70301WE | 2019 ANNUAL TRACK PROGRAM | Construction | $74,792,298 | 80 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| L70301WH | Retaining Walls / Right of Way Projects | Construction | $9,997,495 | 61 | .00 | ▬ | .99 | ▬ | 0 | ▬ | Y |
| L70304WV | Amtrak Territory Investments | Construction | $68,848,123 | 76 | .00 | ▬ | 1.01 | ▬ | 15 | ▲ | R |
| L70401BS | Bridge Waterproofing | Construction | $8,048,756 | 22 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| L70401BU | MENTOR ALLOWANCE - LINE STRUCTURES | Construction | $17,375,423 | 8 | .00 | ▬ | 1.12 | ▲ | 0 | ▬ | Y |
| L70401BV | North Main Street & Accabonac Road | Construction | $21,080,494 | 13 | .00 | ▬ | 1.00 | ▬ | 6 | ▲ | G |
| L70401BX | Springfield Blvd & Union Tpke | Construction | $6,753,877 | 99 | .00 | ▬ | .91 | ▬ | 0 | ▬ | Y |
| L70401D4 | Lynbrook & Rockville Centre Renewals [SBDP] | Construction | $6,000,000 | 0 | .00 | ▬ | .76 | ▼ | 0 | ▬ | G |
| L70501SD | Fiber Optic Network | Construction | $33,460,000 | 25 | .00 | ▬ | .97 | ▬ | 0 | ▬ | G |
| L70502LJ | Signal Normal Replacement Program | Construction | $30,000,000 | 68 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| L70502LN | Babylon to Patchogue | Construction | $48,065,192 | 9 | .00 | ▬ | 1.04 | ▬ | 0 | ▬ | G |
| L70601YG | DIESEL LOCOMOTIVE SHOP IMPROVEMENTS | Construction | $101,965,000 | 37 | .46 | ▼ | .99 | ▬ | 0 | ▬ | G |
| L70701XA | Substation Repl Pkg 1 | Construction | $22,895,773 | 40 | .00 | ▬ | 1.00 | ▬ | 3 | ▲ | R |
| L70701XB | Substation Components | Construction | $24,156,295 | 7 | 5.23 | ▬ | .65 | ▬ | 0 | ▬ | G |
| L70701XE | 3rd Rail - Protection Board | Construction | $6,350,000 | 55 | .00 | ▬ | 1.00 | ▼ | 0 | ▬ | Y |
| L70701XF | 3rd Rail -Composite Rail | Construction | $11,600,000 | 82 | .00 | ▬ | 1.00 | ▼ | 0 | ▬ | Y |
| L70204UA | Station Component Replacement | Design | $31,408,873 | 50 | .50 | ▲ | 1.23 | ▲ | 3 | ▲ | R |
| L70204UO | East Yaphank Station | Design | $20,000,000 | 20 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| L70204UQ | Babylon Station Platform Replacement DES | Design | $4,000,000 | 5 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| L70206VQ | PENN STATION CUSTOMER FACILITIES | Design | $18,172,939 | 20 | 1.54 | ▬ | 1.00 | ▬ | 0 | ▬ | Y |
| L70206VR | PENN STATION COMPLEX IMPROVEMENTS | Design | $11,558,500 | 97 | .90 | ▬ | 1.00 | ▬ | 0 | ▬ | Y |
| L70502LH | Babylon Interlocking Renewal | Design | $32,640,000 | 10 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| **MNR - Metro-North Railroad Program** | | | | | | | | | | | |
| M6020108 | GCT Utilities | Construction | $38,803,168 | 92 | 1.04 | ▬ | 1.03 | ▬ | 2 | ▲ | Y |
| M6020208 | Customer Communication / Connectivity Improvements | Construction | $16,819,045 | 92 | .00 | ▬ | .99 | ▬ | 0 | ▬ | G |

Metropolitan Transportation Authority

## 3rd Quarter 2019 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **MNR - Metro-North Railroad Program** | | | | | | | | | | | |
| M6030212 | Overhead Bridge Program - East of Hudson | Construction | $19,133,689 | 100 | 1.01 | ▼ | .99 | ▬ | 0 | ▬ | Y |
| M6040102 | West of Hudson Signal Improvements | Construction | $63,917,192 | 35 | .00 | ▬ | .94 | ▬ | 0 | ▬ | G |
| M6050101 | Substation Bridge 23 - Construction | Construction | $41,452,052 | 95 | .00 | ▬ | .99 | ▬ | 3 | ▲ | Y |
| M6050103 | Harlem & Hudson Lines Power Improvements | Construction | $41,994,337 | 80 | 1.24 | ▬ | .98 | ▬ | 5 | ▲ | R |
| M6030210 | Replace / Repair Undergrade Bridges | Design | $24,563,306 | 90 | 2.44 | ▲ | .99 | ▬ | 0 | ▬ | Y |
| M7010102 | M-8 Fleet Purchase | Construction | $113,806,778 | 78 | .00 | ▬ | .97 | ▬ | 0 | ▬ | G |
| M7020104 | GCT Fire Protection | Construction | $13,115,020 | 95 | .90 | ▼ | .97 | ▼ | 2 | ▲ | Y |
| M7020107 | GCT PA Head End and VIS Systems | Construction | $57,653,947 | 74 | .32 | ▼ | .96 | ▬ | 2 | ▲ | G |
| M7020207 | Customer Communication-Stations | Construction | $75,625,800 | 39 | .00 | ▬ | .93 | ▼ | 2 | ▲ | G |
| M7020210 | Enhanced Station Initiative, 5 Stations | Construction | $11,430,022 | 61 | .00 | ▬ | .89 | ▼ | 0 | ▬ | G |
| M7020211 | Customer Communication-Systems | Construction | $12,160,364 | 32 | .00 | ▬ | .91 | ▬ | 2 | ▲ | G |
| M7020213 | Enhanced Station Initiative | Construction | $128,696,856 | 61 | 1.72 | ▲ | 1.04 | ▲ | 0 | ▬ | R |
| M7030103 | Rock Slope Remediation | Construction | $16,072,906 | 90 | 1.84 | ▼ | .86 | ▬ | 0 | ▬ | Y |
| M7030104 | Turnouts - Mainline/High Speed | Construction | $44,609,309 | 78 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| M7030105 | GCT Turnouts/Switch Renewal | Construction | $24,582,113 | 100 | .00 | ▬ | .98 | ▬ | -8 | ▼ | G |
| M7030109 | Purchase MoW Equipment | Construction | $22,058,371 | 34 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| M7030111 | 2018 Cyclical Track Program | Construction | $20,925,000 | 100 | .00 | ▬ | 1.00 | ▬ | -1 | ▼ | G |
| M7030112 | 2019 Cyclical Track Program | Construction | $26,705,201 | 35 | .00 | ▬ | 1.00 | ▲ | 0 | ▬ | G |
| M7030201 | Overhead Bridge Program - E of H | Construction | $62,289,787 | 29 | .00 | ▬ | .94 | ▬ | 0 | ▬ | G |
| M7030301 | Rock Slope Remediation | Construction | $12,738,248 | 100 | 1.99 | ▼ | .92 | ▬ | 0 | ▬ | G |
| M7040101 | Network Infrastructure Replacement | Construction | $43,451,820 | 30 | 2.12 | ▬ | .99 | ▬ | 1 | ▲ | Y |
| M7040102 | Harmon to Poughkeepsie SignalSystem | Construction | $85,439,221 | 14 | 2.97 | ▼ | .98 | ▬ | 19 | ▲ | R |
| M7040111 | West of Hudson Signal Improvements | Construction | $21,079,000 | 20 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| M7040112 | Harlem Wayside Comm & Signal Improvements | Construction | $40,217,167 | 34 | 6.17 | ▲ | .99 | ▬ | 0 | ▬ | G |
| M7050104 | East of Hudson Power Rehabilitation | Construction | $13,226,216 | 0 | .00 | ▬ | .88 | ▬ | 0 | ▬ | G |
| M7050105 | Harlem and Hudson Power Improvements | Construction | $21,424,286 | 26 | .00 | ▬ | .86 | ▬ | 1 | ▲ | G |

Metropolitan Transportation Authority

## 3rd Quarter 2019 Traffic Light Report
## Projects in Design and Construction

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|---|---|---|---|---|---|---|---|---|---|---|---|
| **MNR - Metro-North Railroad Program** | | | | | | | | | | | |
| M7050113 | H&H Power (86th St / 110th St) | Construction | $9,016,965 | 80 | 9.14 | ▬ | .90 | ▬ | 5 | ▲ | R |
| M7080113 | Customer Communication-CM | Construction | $17,571,613 | 62 | 9.20 | ▼ | 1.10 | ▬ | 0 | ▬ | Y |
| M7010101 | Locomotive Purchase | Design | $236,174,097 | 32 | .00 | ▬ | .99 | ▬ | 1 | ▲ | G |
| M7020204 | Harlem Line Station Improvements | Design | $24,987,828 | 80 | 1.20 | ▼ | .32 | ▬ | 0 | ▬ | Y |
| M7030209 | Harlem River Lift Bridge | Design | $9,940,569 | 70 | 1.32 | ▬ | .99 | ▬ | 0 | ▬ | G |
| M7030303 | Undergrade Bridge Rehabilitation | Design | $14,945,470 | 18 | .00 | ▬ | .99 | ▬ | 0 | ▬ | G |
| M7030304 | Moodna/Woodbury Viaduct (incl timbers/walkways) | Design | $13,992,503 | 40 | .00 | ▬ | .99 | ▬ | -29 | ▼ | G |
| M7060104 | West of Hudson Capacity Improvements | Design | $23,923,618 | 0 | .00 | ▬ | .98 | ▬ | 0 | ▬ | G |
| **B&T - Bridges and Tunnels Program** | | | | | | | | | | | |
| D701BW14 | Miscellaneous Structural Rehabilitation | Construction | $15,897,162 | 16 | .00 | ▬ | .48 | ▬ | 0 | ▬ | G |
| D701CB18 | CB Scour Protect/Repair/Replace CB/MP Pier Fender | Construction | $62,699,277 | 6 | .00 | ▬ | .95 | ▬ | 0 | ▬ | G |
| D701HH89 | Skewback Retrofit | Construction | $98,453,101 | 62 | 1.17 | ▲ | .98 | ▬ | 0 | ▬ | R |
| D701RK20 | Cable Inspection and Rehabilitation | Construction | $13,969,554 | 7 | .00 | ▬ | .85 | ▲ | 0 | ▬ | G |
| D701RK22 | Interim Repairs - FDR Ramp | Construction | $18,524,955 | 62 | 1.67 | ▼ | 1.03 | ▬ | 0 | ▬ | R |
| D701VN10 | Anchorage & Piers Rehabilitation and Sealing | Construction | $49,401,366 | 21 | .00 | ▬ | 1.00 | ▲ | 0 | ▬ | G |
| D701VN32 | Steel Repair & Concrete Rehabilitation | Construction | $26,973,436 | 5 | .00 | ▼ | .79 | ▬ | 0 | ▬ | G |
| D701VN34 | Main Cable & Suspender Rope Testing - Phase 1 | Construction | $29,498,087 | 75 | .00 | ▬ | 1.20 | ▲ | 0 | ▬ | G |
| D701VN89 | Tower Pier Rehab/Construct Mooring Platform | Construction | $36,193,228 | 35 | .00 | ▬ | .95 | ▬ | 0 | ▬ | G |
| D702RK23 | Construction of New Harlem River Drive Ramp | Construction | $97,717,428 | 16 | .00 | ▼ | .91 | ▼ | 0 | ▬ | G |
| D703BW63 | Open Road Tolling Initiative at BWB | Construction | $49,647,230 | 87 | 1.35 | ▼ | 1.03 | ▬ | 0 | ▬ | R |
| D703HH88 | Toll Plazas & Southbound Approach Reconstruction | Construction | $96,715,241 | 48 | 3.32 | ▲ | 1.00 | ▬ | 0 | ▬ | R |
| D703TN63 | Open Road Tolling Initiative at TNB | Construction | $50,966,175 | 66 | 3.09 | ▼ | .94 | ▬ | 0 | ▬ | R |
| D704AW67 | Overheight Vehicle Detection Systems | Construction | $11,548,688 | 47 | .00 | ▬ | .95 | ▬ | 1 | ▲ | G |
| D704BW39 | Install Electronic Monitoring & Detection Systems | Construction | $33,955,923 | 44 | .81 | ▼ | .93 | ▬ | 0 | ▬ | G |
| D704HC07 | Rehabilitation of HCT Ventilation Systems | Construction | $85,436,047 | 5 | .00 | ▬ | .97 | ▬ | 0 | ▬ | G |
| D704HC30 | Installation of Smoke Detection/Alarm Systems | Construction | $12,180,550 | 12 | .00 | ▬ | 1.04 | ▲ | 0 | ▬ | G |

Metropolitan Transportation Authority

## 3rd Quarter 2019 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **B&T - Bridges and Tunnels Program** | | | | | | | | | | | |
| D704HC64 | Brooklyn Service Building Electrical Rehab. | Construction | $8,586,325 | 56 | .00 | ▬ | .96 | ▬ | -7 | ▼ | G |
| D704HH13 | Replacement of Facility Lighting System | Construction | $13,408,529 | 83 | 1.11 | ▲ | .95 | ▬ | 0 | ▬ | R |
| D704QM81 | Rehab of Tunnel Controls & Communication Systems | Construction | $37,737,396 | 17 | .00 | ▬ | .96 | ▬ | 0 | ▬ | G |
| D704QM91 | Installation of Smoke Detection/Alarm Systems | Construction | $11,879,496 | 16 | .00 | ▬ | .93 | ▬ | 0 | ▬ | G |
| D704RK07 | Electrical/Mechanical Rehab of HR Lift Span | Construction | $34,796,568 | 41 | .69 | ▼ | .95 | ▬ | 1 | ▲ | G |
| D704RK21 | Install Fire Standpipe/Upgrade Protection System | Construction | $21,637,777 | 47 | 2.07 | ▲ | .95 | ▬ | 0 | ▬ | R |
| D704RK60 | Install Electronic Monitoring & Detection Systems | Construction | $48,330,581 | 37 | .51 | ▼ | .92 | ▬ | 0 | ▬ | G |
| D707TN49 | Painting of Suspended Span | Construction | $20,167,464 | 0 | .00 | ▬ | .94 | ▬ | 0 | ▬ | G |
| D707VN49 | Paint Suspended Span Upper & Lower Level Steel | Construction | $66,711,421 | 1 | .00 | ▬ | .92 | ▼ | 0 | ▬ | G |
| **MTA Bus Program** | | | | | | | | | | | |
| U6030226 | Bus Radio System | Construction | $27,857,137 | 25 | .05 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| U7030211 | Bus Radio System - MTA Bus Share | Construction | $34,500,000 | 25 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | G |

Metropolitan Transportation Authority

# Summary of Core Traffic Light Report Design Exceptions

**(Third Quarter 2019 - As of September 30, 2019)**

| 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** | | | | | | | |
| T7030216 | Purchase 45 Standard Electric Buses | Cost | $73.8M | Dec 2019 | During the Third Quarter 2019, the Estimate At Completion (EAC) exceeded the current budget by $19.3 million. This was due to updated market information and greater definition of the scope of the electrical charging equipment which resulted from the solicitation of the initial fifteen all-electric articulated buses contract. | The contract is progressing to award in the First Quarter of 2020; the budget overrun will be resolved by the pending Capital Plan revision. | An Agency evaluation is not required for this project. |
| T7041213 | Renewal: Woodhaven Blvd Jamaica Line | Cost & Schedule | $59.1M | Dec 2019 | During the Third Quarter 2019, the Estimate At Completion (EAC) exceeded the current budget by $15.9 million. This was due to additional structural repair work that was identified during the preliminary engineering phase (PE). | The PE package is approved and funding needs will be addressed by the pending Capital Program and the pending Capital Plan revision. The Design consultant task order is being finalized for conversion to the Design/build contract. | An Agency evaluation is not required for this project. |
| T7041214 | Renewal: 85th St-Forest Parkway Jamaica Line | Cost | $51.3M | Dec 2019 | During the Third Quarter 2019, the Estimate At Completion (EAC) exceeded the current budget by $26.2 million. This was due to additional structural repair work that was identified during the preliminary engineering phase (PE). | The PE package is approved and funding needs will be addressed by the pending capital plan revision. | An Agency evaluation is not required for this project. |
| T7041215 | Renewal: 75th St-Elderts Lane Jamaica Line | Cost | $49.5M | Dec 2019 | Duringthe Third Quarter 2019, the Estimate At Completion (EAC) exceeded the current budget by $24.4 million. This was due to additional structural repair work that was identified during the preliminary engineering phase (PE). | The PE package is approved and funding needs will be addressed by the pending capital plan revision. | An Agency evaluation is not required for this project. |
| T7041216 | Renewal: Cypress Hills Jamaica Line | Cost | $52.3M | Dec 2019 | During the Third Quarter 2019, the Estimate At Completion (EAC) exceeded the current budget by $27.2 million. This was due to additional structural repair work that was identified during the preliminary engineering phase (PE). | The PE package is approved and funding needs will be addressed by the pending capital plan revision. | An Agency evaluation is not required for this project. |
| T7041218 | Renewal: 61st Street -Woodside Flushing Line | Schedule | $2.1M | Jan 2020 | During the Third Quarter 2019, the forecasted Design Completion slipped three months, from October 2019 to January 2020. This was due to the recent transfer of the project to the Infrastructure Division of Capital Program Management. | The design consultant task order is being finalized to include this station with other station renewal projects on Flushing Line. | An Agency evaluation is not required for this project. |
| T7041316 | ADA: Woodhaven Boulevard Jamaica Line | Schedule | $31.8M | Dec 2019 | During the Third Quarter 2019, the forecasted Design Completion slipped three months, from August 2019 to December 2019. This was due to finalizing the task order for the new Design/build method. | The design consultant task order for the Design/build contract is being finalized. | 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. |
| T7090220 | New Substation: 28th St 8th Ave Line | Cost & Schedule | $76.3M | Apr 2020 | During the Third Quarter 2019, the Estimate At Completion (EAC) exceeded the current budget by $13.6 million. This was due to the decision to build a multilevel underground substation instead of a single level substation as originally planned. The higher EAC reflects the new design.<br><br>Also during the Third Quarter 2019, the forecasted Design Completion slipped four months, from December 2019 to April 2020. This slip was due to unresolved real estate and street easement issues. | The real estate and street easement conversations are ongoing; as a result, the current Design Completion forecast is under review. Efforts are being made to reduce project costs; any remaining budget overruns will be dealt with by a budget modification once design is completed. | An Agency ACE evaluation is not required for this project. |

Metropolitan Transportation Authority

# Summary of Core Traffic Light Report Design Exceptions

**(Third Quarter 2019 - As of September 30, 2019)**

| 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** | | | | | | | |
| T7090410 | Rehab Various Circuit Breaker House Enclosures | Cost | $8.9M | April 2020 | During the Third Quarter 2019, the Estimate At Completion (EAC) exceeded the current budget by $1.0 million. This was due a refinement of the estimate in the preliminary engineering (PE) phase that determined additional labor and support costs were needed. | The PE package was approved, which detailed an EAC of $13.3 million. As design progresses, different strategies will be explored to reduce the construction costs. | An Agency evaluation is not required for this project. |
| T7130207 | Purchase 27 Refuse Flats | Schedule | $24.9M | Dec 2020 | During the Third Quarter 2019, the forecasted Design Completion slipped fifteen months, from September 2019 to December 2020. This was due to the prioritization of the more critical R252 flat car procurement and the decision to defer the Refuse Flats to the next Capital Program. | This project has been moved to the 2020-2024 Capital Program, as reflected in the revised schedule. | An Agency evaluation is not required for this project. |
| T7130211 | Purchase Locomotives | Schedule | $205.1M | Oct 2019 | During the Third Quarter 2019, the forecasted Design Completion slipped three months, from July 2019 to October 2020. This was due to an ongoing dialogue with the proposers and NYCT regarding vendor questions. | The Selection and Technical Committees are reviewing the latest proposal and determining NYCT's negotiation positions on multiple items. Construction start has been reforecast for January 2020. | An Agency evaluation is not required for this project. |
| T7160703 | Employee Facility Consolidation: 2nd Ave – 6th Ave Line | Schedule | $14.7M | Jun 2020 | During the Third Quarter 2019, the forecasted Design Completion slipped three months, from March 2020 to June 2020. This was due to a request to review this project in conjunction with ADA accessibility and other access improvement initiatives at the station, which would impact the space available for the employee facility. This urgent study was conducted under the Systemwide ADA Study contract. This work conflict requires a design change to move the project site that had been initially designed. | An agreement between stakeholders needs to be reached on where to move the project site. This is currently in progress. The project team is waiting for an outline of the available space before a site move can be discussed. | An Agency evaluation is not required for this project. |
| T7160727 | Roof Replacement: Tiffany Central Warehouse | Schedule | $16.9M | Jan 2020 | During the Third Quarter 2019, the forecasted Design Completion slipped four months, from September 2019 to January 2020. This was due to efforts to combine the Tiffany roof and exterior walls projects and repackage them as a Design/build solicitation. | A modification to the consultant's contract has been issued to repackage the project based on the new schedule. | 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. |
| **LIRR - Long Island Rail Road** | | | | | | | |
| L70204UA | Station Component Replacement | Schedule | $31.4M | Oct 2019 | During the Third Quarter 2019, the forecasted Design Completion date slipped three months, from July 2019 to October 2019. The delay was due to the need to perform a survey in order to establish an easement from the Town of Huntington. | The designer will be given a contract modification to perform survey work and prepare a request for an easement from the Town of Huntington. Subsequent to the reporting period, the Substantial Completion date has slipped an additional month to November 2019. | 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, 2019 |
|---|---|
| Project Name: Station Ventilators: Phase 7 – 7 Locations / Lower Manhattan | Current Budget: $9.2M |
| | Project EAC: $9.2M |
| | Substantial Completion Date at Award: May 2016 |
| Project No: T60412F2 | Current Substantial Completion Date: Dec 2019 |
| Project Phase: Construction | Phase Complete: 98% |

**Project Description**

The objective of this multi-phase project is to rehabilitate all subway ventilators and gratings rated 4.0 or worse, based on NYCT's asset condition survey. Phase 7 will rehabilitate ventilators at seven locations:

- 8th Street - NYU / Broadway Line
- Whitehall Street / Broadway Line
- 14th Street / Broadway-7th Ave Line
- Houston Street / Broadway-7th Ave Line
- Spring Street / 8th Avenue Line
- Park Place / Clark St Line
- 33rd Street / Lexington Ave Line

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule**

**Schedule:** During the Third Quarter 2019, the forecast Substantial Completion date slipped four months, from August 2019 to December 2019. This delay was due to additional resurfacing work required for ten vent-battery pans at 14th Street / 7th Avenue Station.

**What is Being Done**

**Schedule:** Resurfacing pan work has been completed and is currently awaiting final inspections.

**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, 2019 |
|---|---|
| Project Name: ADA - Platform Gap Retrofit - Various Locations | Current Budget: $11.1M |
| | Project EAC: $12.6M |
| | Substantial Completion Date at Award: Dec 2019 |
| Project No: T6041304 | Current Substantial Completion Date: Dec 2019 |
| Project Phase: Construction | Phase Complete: 71% |

**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 2019, the estimate at completion (EAC) exceeded the current budget by $1.5M. This was due to additional work required at six platform edges as well as a higher than anticipated estimated cost of general orders, materials and labor required to complete the remaining 16 platform edges.

The additional work was required at platforms that originally had 6" x 6" raised button tile (the previous ADA warning strip) which extended the entire length of the platform. The new NYCT standardized warning strip is 2' x 4' tiles and it was noted that having two different types of raised button tile on the same platform would create a potential safety issue. As a result, it was requested that the original tile be completely removed from the entire length of the platform edge and replaced with the new tiles.

All edges are forecasted for completion by the Second Quarter of 2020. It is now estimated the remaining platform edges will require approximately $3.5M total in labor, material, General Orders and full length tile replacement than had been originally estimated.

**What is Being Done**

**Cost:** A Capital Budget Modification is currently being drafted to address the cost overrun of this project.

**IEC Comment**

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

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

| MTA Agency: New York City Transit | Status as of September 30, 2019 |
|---|---|
| Project Name: Demolition of Abandoned Structures – Phase 1 | Current Budget: $15.1M |
| | Project EAC: $15.1M |
| | Substantial Completion Date at Award: Dec 2014 |
| Project No: T6070306 | Current Substantial Completion Date: Dec 2020 |
| Project Phase: Construction | Phase Complete: 74% |

**Project Description**

The objective of this project is to remediate and demolish 50 abandoned structures throughout the system that are in the worst condition. The scope of work includes environmental surveys/designs for the abatement and removal of asbestos, lead based paint, pigeon guano, PCB's, mercury and contaminated soil. The work is being done by NYCT's Environmental Engineering Division Indefinite Quantity (IQ) Hazardous Remediation Contractors.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule**

**Schedule:** During the Third Quarter 2019, the forecasted Substantial Completion date slipped 15 months from September 2019 to December 2020. This was due to the need to procure a new design consultant to complete the remaining 19 demolitions. Prior design contract responsibilities have expired and this phase involves the development of abatement/demolition documents for the remaining 19 structures.

**What is Being Done**

**Schedule:** The request to procure a design consultant was made in June 2019. Presently, NYCT is in the negotiation stage of awarding a contract to a design consultant.

**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, 2019 |
|---|---|
| Project Name: NYCT-Wide Storage Area Network/Disaster Recovery | Current Budget: $22.4M |
| | Project EAC: $22.3M |
| | Substantial Completion Date at Award: Mar 2015 |
| Project No: T6160402 | Current Substantial Completion Date: Dec 2019 |
| Project Phase: Construction | Phase Complete: 85% |

**Project Description**

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.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule**

**Schedule:** During the Third Quarter 2019, the forecasted Substantial Completion date slipped three months, from September 2019 to December 2019. The SAN was shipped and installed January 2019, but the resources were not available to establish the bi-directional communications required to meet connectivity requirements between locations which would allow for the configurations to proceed. The connectivity was successfully established between both locations July 2019, but the schedule needed to be further revised to complete remaining work.

**What is Being Done**

**Schedule:** As of October 2019, configurations are 98% complete. There have been some temporary adjustments to allow isolated testing of some critical applications. Once that milestone is achieved, the application servers located at Livingston Plaza, which are slated to be relocated to 2 Broadway, will be coordinated with all parties.

Subsequent to the reporting period, the milestone for overall Substantial Completion is under review but now anticipated for the First quarter of 2020.

**IEC Comment**

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

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

| MTA Agency: New York City Transit | Status as of September 30, 2019 |
|---|---|
| Project Name: Livingston Plaza - Façade Rehabilitation (Outstanding Work) | Current Budget: $24.6M |
| | Project EAC: $24.6M |
| | Substantial Completion Date at Award: Feb 2020 |
| Project No: T6160717 | Current Substantial Completion Date: Sep 2020 |
| Project Phase: Construction | Phase Complete: 27% |

**Project Description**

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

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule**

**Schedule:** During the Third Quarter 2019, the forecasted Substantial Completion slipped by seven months, from February 2020 to September 2020. This was due to the need for Additional Work Order (AWO) #5, which will include the replacement of lintel masonry on an additional 32 masonry panels.

**What is Being Done**

**Schedule:** NYCT is in the process of negotiating AWO #5. This AWO will include an extension of time to complete the additional masonry repair work and achieve Substantial Completion of the project.

**IEC Comment**

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

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

| MTA Agency: New York City Transit | Status as of September 30, 2019 |
|---|---|
| Project Name: Replace 2 Escalators - Grand Central-42nd St Lex Line | Current Budget: $22.8M |
| | Project EAC: $29.8M |
| | Substantial Completion Date at Award: Feb 2021 |
| Project No: T7040706 | Current Substantial Completion Date: Feb 2021 |
| Project Phase: Construction | Phase Complete: 26% |

**Project Description**

This project will replace two escalators at Grand Central Station, which provide access to the Lexington Line and repair two sets of adjacent street stairs.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Cost**

**Cost:** During the Third Quarter 2019, the Estimate At Completion (EAC) exceeded the current budget by $7.0 million. This was due to additional funding needs of $1.7M for Additional Work Orders (AWOs) and $5.3M for other construction support tasks. These funds are required to provide the additional support services to meet an accelerated schedule that will place the new escalators in service by May 2020.

**What is Being Done**

**Cost:** Subsequent to the reporting period, a budget modification was approved in October 2019 that increased the budget so that it now equals the EAC.

**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, 2019 |
|---|---|
| Project Name: ADA Accessibility - 86th St Station / 4th Avenue Line | Current Budget: $32.5M |
| | Project EAC: $36.1M |
| | Substantial Completion Date at Award: May 2020 |
| Project No: T7041304 | Current Substantial Completion Date: May 2020 |
| Project Phase: Construction | Phase Complete: 42% |

**Project Description**

This project will make the 86th Street Station on the 4th Avenue line fully ADA accessible by installing two ADA compliant elevators, one from the street to the station's mezzanine and one from the mezzanine to the island platform. Additionally, one set of existing stairs will be reconfigured and an additional set of street stairs will be installed on the west side of 4th Avenue and 86th Street.

**Problem Since Last Quarterly Report**

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

**Cost:** During the Third Quarter 2019, the Estimate At Completion (EAC) exceeded the current budget by $3.6M. This was due to additional funding needs for Additional Work Orders (AWOs) and construction administration support services.

**Contingency:** Also during the Third Quarter 2019, AWOs accounted for 54% of the contingency budget at 36% third party phase completion. This was due to the following approved AWOs:

- Mezzanine locker room and bathroom repair.
- Utility relocation at stair S4.
- The relocation of transit wireless equipment.

**What is Being Done**

**Cost:** Subsequent to the reporting period, a budget modification was approved in October 2019.

**Contingency:** Subsequent to the reporting period, contingency funds were increased as a part of an October 2019 budget modification.

**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, 2019 |
|---|---|
| Project Name: Circulation Improvements at Union Square Station - Canarsie Line | Current Budget: $17.5M |
| | Project EAC: $17.5M |
| | Substantial Completion Date at Award: Jul 2020 |
| Project No: T7041416 | Current Substantial Completion Date: Jul 2020 |
| Project Phase: Construction | Phase Complete: 54% |

**Project Description**

This project will improve the passenger circulation at Union Square Station on the Canarsie line. A new escalator will be installed from the east mezzanine to the platform. The stairs from the Broadway line to the Canarsie line will also be modified.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Contingency**

**Contingency:** During the Third Quarter of 2019, there were $0.6M in pending Additional Work Orders (AWOs) compared to a $0.6M contingency budget at 42% third party completion. The depletion of the project contingency was due primarily to AWO #1, which dictated a change in the materials specified for the construction of new stairs from concrete to steel. The decision to change construction materials was made to facilitate quicker installation to accommodate the expedited schedule associated with the new approach in rehabilitating the Canarsie Line tunnel.

**What is Being Done**

**Contingency:** Additional contingency funding has been requested through a Budget Modification Request and is currently been processed.

**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, 2019 |
|---|---|
| Project Name: 2018 Continuous Welded Rail Program (CWR) | Current Budget: $10.8M |
| | Project EAC: $9.9M |
| | Substantial Completion Date at Award: Jun 2019 |
| Project No: T7050210 | Current Substantial Completion Date: Oct 2019 |
| Project Phase: Construction | Phase Complete: 94% |

**Project Description**

This project will reduce the number of broken rails in subway tracks and improve the condition of track plates & ties in select locations of the 6th Avenue and 7th Avenue lines. Work will include surface preparation and replacements of obsolete plates, spikes, and joint rails with new welded rails along with any associated cable and signal work.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule**

**Schedule:** During the Third Quarter of 2019, the forecasted Substantial Completion date slipped by three months, from July 2019 to October 2019. This was due to reprioritization of manpower from this project to projects undertaking pre-final and final inspections for the 2016 and 2017 Track and Switch Programs.

**What is Being Done**

**Schedule:** The goal for the 2015-2019 Capital CWR New Initiative has been completed. Pre-final and final inspections for this project are pending.

Subsequent to the reporting period, Substantial Completion slipped an additional month to November 2019.

**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, 2019 |
|---|---|
| Project Name: 2017 Mainline Track Replacement - Lexington Ave Line | Current Budget: $9.3M |
| | Project EAC: $9.3M |
| | Substantial Completion Date at Award: Dec 2018 |
| Project No: T7050260 | Current Substantial Completion Date: Nov 2019 |
| Project Phase: Construction | Phase Complete: 87% |

**Project Description**

This project will reconstruct segments of mainline track that have reached the end of their useful life on the Lexington Avenue Line. Locations will be determined based on the most recent track condition survey. The scope of work will include the replacement of track, associated equipment and materials, including signals, contact rails, ballast, etc.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule**

**Schedule:** During the Third Quarter of 2019, the forecasted Substantial Completion date slipped by three months, from August 2019 to November 2019. This was due to limited track access.

**What is Being Done**

**Schedule:** The remaining track reconstruction work N/O Grand Central is scheduled to be completed in November 2019 in accordance with the current track access schedule.

Subsequent to the reporting period, Substantial Completion slipped an additional month to December 2019.

**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, 2019 |
|---|---|
| Project Name: 2017 Mainline Track Replacement - Pelham Line | Current Budget: $8.4M |
| | Project EAC: $15.7M |
| | Substantial Completion Date at Award: Feb 2018 |
| Project No: T7050261 | Current Substantial Completion Date: Nov 2019 |
| Project Phase: Construction | Phase Complete: 93% |

**Project Description**

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

**Problem Since Last Quarterly Report**

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

**Cost:** During the Third Quarter 2019, the Estimate At Completion (EAC) exceeded the current budget by $7.3M. This was due to a change in scope from Type II SCRP to Type II Ekki Hilti track reconstruction. The need for the material change was due to the poor condition of the existing track in a segment of the guarded curve half. Subsequently, the support costs for the Type II Ekki Hilti track reconstruction at S/O Longwood Avenue became higher than originally estimated, resulting in overruns for General Orders (GOs), Rapid Transit Operations (RTO) diversions, and labor costs.

**Schedule:** Also during the Third Quarter 2019, the forecasted Substantial Completion slipped three months, from August 2019 to November 2019. This was due to the need to schedule the additional GOs that were required to perform the above Type II Ekki Hilti track reconstruction at S/O 138th Street & 3rd Avenue.

**What is Being Done**

**Cost:** The additional monies required will be funded from savings in the overall 2015 – 2019 In-House Capital Track and Switch Program.

**Schedule:** Subsequent to the reporting period, Substantial Completion slipped an additional month to December 2019.

**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, 2019 |
|---|---|
| Project Name: 2018 Mainline Track Replacement - Astoria Line | Current Budget: $13.5M |
| | Project EAC: $17.3M |
| | Substantial Completion Date at Award: Dec 2018 |
| Project No: T7050270 | Current Substantial Completion Date: Oct 2019 |
| Project Phase: Construction | Phase Complete: 98% |

**Project Description**

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

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule**

**Schedule:** During the Third Quarter 2019, the forecasted Substantial Completion slipped three months, from July 2019 to October 2019. This was due to the need to schedule additional General Orders (GOs) to complete the Emergency Protection Rail (EPR) installation.

**What is Being Done**

**Schedule:** Track reconstruction for this project is substantially complete and pre-final inspections are pending. Subsequent to the reporting period, Substantial Completion slipped an additional month to November 2019.

**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, 2019 |
|---|---|
| Project Name: 2018 Mainline Track Replacement - Eastern Parkway Line | Current Budget: $11.2M |
| | Project EAC: $14.8M |
| | Substantial Completion Date at Award: Nov 2018 |
| Project No: T7050276 | Current Substantial Completion Date: Dec 2019 |
| Project Phase: Construction | Phase Complete: 86% |

**Project Description**

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

**Problem Since Last Quarterly Report**

**Index Trigger(s): Cost**

**Cost:** During the Third Quarter 2019, the Estimate At Completion (EAC) exceeded the current budget by $3.6M. This was due to three weekends of inclement weather that impacted progress on the project and resulted in an overrun in surface costs, Rapid Transit Operations (RTO) diversion costs, labor costs, and material costs.

**What is Being Done**

**Cost:** The additional funds required will be funded through the 2015 – 2019 track reserve funds.

**IEC Comment**

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

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

| MTA Agency: New York City Transit | Status as of September 30, 2019 |
|---|---|
| Project Name: 2018 Mainline Track Replacement - Broadway / 7th Avenue Line | Current Budget: $9.7M |
| | Project EAC: $12.9M |
| | Substantial Completion Date at Award: Dec 2018 |
| Project No: T7050277 | Current Substantial Completion Date: Oct 2019 |
| Project Phase: Construction | Phase Complete: 97% |

**Project Description**

This project will reconstruct segments of mainline tracks on the Broadway-7th Avenue Line that have reached the end of their useful life. Locations were determined based on the latest condition survey. The scope of work includes the replacement of track and associated equipment and materials, such as signals, contact rails, and ballast, etc.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule**

**Schedule:** During the Third Quarter 2019, the forecasted date for Substantial Completion slipped three months, from July 2019 to October 2019. This was due to manpower constraints that delayed the execution of pre-final and final inspections.

**What is Being Done**

**Schedule:** Subsequent to the reporting period, the project achieved Substantial Completion on October 18, 2019.

**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, 2019 |
|---|---|
| Project Name: 2018 Mainline Track Replacement - 4th Avenue Line | Current Budget: $14.2M |
| | Project EAC: $22.1M |
| | Substantial Completion Date at Award: Dec 2019 |
| Project No: T7050288 | Current Substantial Completion Date: Jul 2020 |
| Project Phase: Construction | Phase Complete: 95% |

**Project Description**

This track reconstruction project includes the replacement of mainline track components on the 4th Avenue Line that have reached the end of their useful life. The location of the track segments is determined by the most recent track condition survey and the scope of work includes the replacement of track, associated equipment and materials, including signals, contact rail and ballast, etc.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Cost**

**Cost:** During the Third Quarter 2019, the Estimate at Completion (EAC) exceeded the current budget by $7.9M. This is an additional $2.3M increase in the forecast EAC since the project reported a $5.6M increase in the Second Quarter 2019. It has been determined that this project was under estimated at the time its budget was developed. The overrun was primarily caused by overtime in the infrastructure discipline to do the Ekki/Hilti work on tracks F-1 & F-2. There were also overruns in the allocated budgets for track construction, third rail operations and signals work.

**What is Being Done**

**Cost:** The additional monies required will be funded from the 2015 – 2019 track reserve funds.

**IEC Comment**

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

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

| MTA Agency: New York City Transit | Status as of September 30, 2019 |
|---|---|
| Project Name: 2018 Mainline Switch Replacement - Design and Support | Current Budget: $7. 4M |
| | Project EAC: $9.3M |
| | Substantial Completion Date at Award: Dec 2019 |
| Project No: T7050304 | Current Substantial Completion Date: Dec 2019 |
| Project Phase: Construction | Phase Complete: 80% |

**Project Description**

This project covers the design and support cost needs of mainline switch replacement system-wide. Locations were based on the latest switch condition survey. Switch replacement work includes, as required, replacement of existing turnouts, track switches, switch valves, connecting rails, contact rails, ties, ballast, signal cables including positive and negative connections, and any associated signal equipment work.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Cost**

**Cost:** During the Third Quarter 2019, the Estimate At Completion (EAC) exceeded the current budget by $1.9M. This was due to switch material costs exceeding the established budget.

**What is Being Done**

**Cost:** Overruns for this contract (M44420) will be offset by cost savings realized in the 2018 Mainline Track Design/Support contract (M43866) and other cost savings in the overall 2018 In-House Capital Track and Switch Program.

**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, 2019 |
|---|---|
| Project Name: 2018 Mainline Switch Replacement - 4th Avenue Line | Current Budget: $6.4M |
| | Project EAC: $8.9M |
| | Substantial Completion Date at Award: May 2019 |
| Project No: T7050333 | Current Substantial Completion Date: Oct 2019 |
| Project Phase: Construction | Phase Complete: 97% |

**Project Description**

This project includes the replacement of mainline switches on the 4th Avenue Line. The locations were determined by the most recent condition survey. The scope of work includes the replacement of existing turnouts, track switches, switch valves, connecting rails, contact rails, ties, ballast, signal cables (including positive and negative connections), and any associated signal and equipment tasks.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule**

**Schedule:** During the Third Quarter of 2019, the forecasted Substantial Completion slipped three months, from July 2019 to October 2019. This was due to the reprioritization of manpower from this project to projects undergoing pre-final and final inspections for the 2016 and 2017 Track and Switch Programs.

**What is Being Done**

**Schedule:** Inspections for this project are pending; subsequent to the reporting period, Substantial Completion slipped an additional two months to December 2019.

**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, 2019 |
|---|---|
| Project Name: Livingston Plaza Electrical and, Mechanical Improvements - Phase A | Current Budget: $31.8M |
| | Project EAC: $33.5M |
| | Substantial Completion Date at Award: Mar 2020 |
| Project No: T7160714 | Current Substantial Completion Date: Sep 2020 |
| Project Phase: Construction | Phase Complete: 53% |

**Project Description**

This project will rehabilitate and upgrade the electrical and mechanical systems within the NYCT Livingston Plaza administrative building. Existing systems are approaching the end of their useful life resulting in increased maintenance requirements. This project will also correct known equipment deficiencies and increase the reliability of the electrical and mechanical systems serving the data center by providing redundancy. Work includes installing two new cooling towers on the roof, constructing a mechanical pent house for a new emergency generator, repairing ceilings and walls, and extending the existing uninterruptable power supply (UPS) room.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule**

**Schedule:** During the Third Quarter 2019, the forecasted Substantial Completion slipped six months, from March 2020 to September 2020. There were two causes for the delay:

- The contractor was unable to hire a safety engineer through a sub-contractor in time, which delayed construction start by four months.
- Another two months of delay was anticipated due to a potential change order for replacing the existing uninterruptable power supply (UPS) system that serves critical data centers and communication rooms in the building. The existing UPS is having serious maintenance problems and only the replacement of the batteries associated with the UPS was included in the current contract.

**What is Being Done**

**Schedule:** Due to the mitigations below, Substantial Completion is now expected by June 2020.

- The contractor requested a waiver that enabled them to hire a safety engineer from outside the initial required pool. Once the waiver was granted, the safety engineer came on board. Additionally, the contractor was granted permission to work on multiple floors, concurrently, enabling him to gain one month in the schedule so far.
- The UPS change order is no longer being pursued through this contract. The replacement of the UPS system is now being assigned to an operating contract, reducing the extension of Substantial Completion by another two months.

**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.

Long Island Rail Road

| MTA Agency: Long Island Rail Road | Status as of September 30, 2019 |
|---|---|
| Project Name: Murray Hill Station – New Elevators | Current Budget: $11.5M |
| | Project EAC: $11.7M |
| | Substantial Completion Date at Award: Jun 2019 |
| Project No: L70204UM | Current Substantial Completion Date: Feb 2020 |
| Project Phase: Construction | Phase Complete: 45% |

**Project Description**

This project includes the installation of two new elevators for the eastbound and westbound platforms, and street level improvements to support ADA compliance at the Murray Hill Station in Queens, on the Port Washington Branch. Murray Hill is a below grade station with two 4-car length platforms, an overpass, and two sets of stairs for each platform. Station platforms are located below street level.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule**

**Schedule:** During the Third Quarter 2019, the forecasted Substantial Completion date slipped five months, from September 2019 to February 2020. This was due in part to the contractor being unable to procure an American Institute of Steel Construction Steel Building (AISC BU) certified fabricator who is also a Minority Business Enterprise (MBE)/Women Business Enterprise (WBE) approved subcontractor as required per contract.

**What is Being Done**

**Schedule:** The contractor has procured a MBE/WBE approved subcontractor who is AISC BU certified and is expected to achieve Substantial Completion by February 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.

Long Island Rail Road

| MTA Agency: Long Island Rail Road | Status as of September 30, 2019 |
|---|---|
| Project Name: Amtrak Territory Investments | Current Budget: $67.5M |
| | Project EAC: $68.8M |
| | Substantial Completion Date at Award: Sep 2019 |
| Project No: L70304WV | Current Substantial Completion Date: Dec 2020 |
| Project Phase: Construction | Phase Complete: 76% |

**Project Description**

This project will address track structure conditions through replacement and/or upgrade of track and system components identified by Amtrak and the LIRR. Work includes ERT total track replacement with removal / replacement of Third Rail, running rails, ties, ballast, impedance bonds; installation of new electrical leads; cleanout and repair of drain troughs, and installation of new drain covers on Lines 3 and 4, located within the East River Tunnels. It also includes tunnel flood gates, pump rooms, bench walls, station ventilation plants, and other systems shared by the LIRR and Amtrak that are deemed to need upgrading to a state of good repair.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule**

**Schedule:** During the Third Quarter 2019, the forecasted Substantial Completion slipped 15 months, from September 2019 to December 2020. This was due in part to the lack of Amtrak weekend tunnel outages, during 2019, because of various higher priority projects in Penn Station.

**What is Being Done**

**Schedule:** Amtrak has scheduled 19 weekend outages throughout 2020 in order to complete this task.

**IEC Comment**

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

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

Long Island Rail Road

| MTA Agency: Long Island Rail Road | Status as of September 30, 2019 |
|---|---|
| Project Name: Substation Replacements | Current Budget: $22.9M |
| | Project EAC: $22.9M |
| | Substantial Completion Date at Award: Jun 2020 |
| Project No: L70701XA | Current Substantial Completion Date: Sep 2020 |
| Project Phase: Construction | Phase Complete: 40% |

**Project Description**

This project includes the replacement of Meadowbrook Substation which is operating beyond its useful life. The scope includes the removal of existing switchgear, rectifiers, and transformers; demolition of the existing building, and installation of a new pre-fabricated modular substation building. This houses pre-installed AC switchgear, rectifiers, DC switchgear, control cabinets and associated equipment. New transformers will be installed outside the modular building.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule**

**Schedule:** During the Third Quarter 2019, the forecasted Substantial Completion slipped three months, from June 2020 to September 2020 due to the notification by the manufacturer that the specified relay equipment, was no longer available commercially. This is because the next generation of relay equipment has been released. The new equipment underwent functionality testing and was deemed unacceptable for LIRR operations. In order to make the new equipment compatible for LIRR operations, programing changes are necessary and the testing and approval process would have caused an estimated 6 month delay.

**What is Being Done**

**Schedule:** The contractor was able to locate an alternate supplier, with previous generation of relay equipment available, which could be provided on a modified procurement schedule. This mitigation reduced the delay, in half, to three months.

**IEC Comment**

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

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

Metro-North Railroad

| MTA Agency: Metro-North Railroad | Status as of September 30, 2019 |
|---|---|
| Project Name: Harlem & Hudson Lines Power Improvements | Current Budget: $42.5M & $10.0M |
| | Project EAC: $42.0M & $9.0M |
| | Substantial Completion Date at Award: Aug 2016 & Jan 2019 |
| Project No: M6050103 & M7050113 | Current Substantial Completion Date: Mar 2020 |
| Project Phase: Construction | Phase Complete: 80% |

**Project Description**

The project involves the replacement and expansion of the 86th Street Substation, located within the Park Ave Tunnel. The existing substation is rated at 3.3 megawatts (MW) and is fed from a single Con-Ed source. The new substation will be more robust and redundant to provide 6.6MW of power, utilizing two independent feeds from Con-Ed and two direct current (DC) rectification systems. The project also involves the replacement of existing negative return Reactors at the 110th St. substation with larger capacity units and construction of a new substation at Brewster (B-52).

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule**

**Schedule:** During the Third Quarter 2019, the forecasted Substantial Completion date slipped five months from October 2019 to March 2020 due to the following:

- The requirement for temporary support which was issued by the Engineer of Record, as part of the removal procedure of existing structural columns.
- The contractor's inability to generate and submit required documentation in a timely manner, i.e.: east platform steel drawings, etc.
- Excessive time taken for the contractor to fabricate and deliver east platform steel.
- Unavailability of track outages and equipment support due to other higher priority projects.

Subsequent to the reporting period, the project Substantial Completion date further slipped to September 2020 due to the continuation of the same reasons noted above.

**What is Being Done**

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

- For all parties to identify any unforeseen field conditions or other issues and find rapid resolutions.
- Issue weekly reports identifying all critical documentation that is either due or delinquent.
- Work with the contractor to support fabrication of the structural steel, including design issues and force account availability for delivery and erection.
- Weekly coordination with the Transportation Dept. for track outage priority.

Expedite all review and approval of submittals and documentation submitted by the contractor to meet the revised project schedule.

**IEC Comment**

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

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

Metro-North Railroad

| MTA Agency: Metro-North Railroad | Status as of September 30, 2019 |
|---|---|
| Project Name: Enhanced Station Initiative (ESI) | Current Budget: $122.8M |
| | Project EAC: $128.7M |
| | Substantial Completion Date at Award: Dec 2020 |
| Project No: M7020213 | Current Substantial Completion Date: Dec 2020 |
| Project Phase: Construction | Phase Complete: 61% |

**Project Description**

The purpose of this project is to improve the customer experience, perception, comfort, and convenience of Metro-North Railroad's (MNR) stations, as well as improve the appearance, safety, and overall condition of the stations. This project will also allow MNR to better serve its existing customers and to accommodate future customers. Improvements include installation of new platform canopies, wood ceilings, lighting, USB benches, recycling centers, security cameras, and public Wi-Fi. Stations to be improved under this project include White Plains, Riverdale, Port Chester, Harlem-125th Street, and Crestwood.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Contingency**

**Contingency:** During the Third Quarter 2019, the ESI project had a High Contingency Index of 1.72 due to multiple pending change orders which include the additional cost associated with the Elevator Hall changes on the White Plains Station island platform, fire life safety improvements, security improvements to Harlem-125th Street staircases, unforeseen replacement of structural columns at White Plains Station and procurement of public Wi-Fi equipment and licenses, which was not part of the original scope.

**What is Being Done**

**Contingency:** MNR, the CM, and the Design-Builder have been coordinating with multiple specialty subcontractors to finalize the design and negotiate costs associated with the change orders referenced above. The additional funding required is available from within the project 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.

Metro-North Railroad

| MTA Agency: Metro-North Railroad | Status as of September 30, 2019 |
|---|---|
| Project Name: Harmon to Poughkeepsie Signal System | Current Budget: $87.1M |
| | Project EAC: $85.4M |
| | Substantial Completion Date at Award: Feb 2020 |
| Project No: M7040102 | Current Substantial Completion Date: Sep 2021 |
| Project Phase: Construction | Phase Complete: 14% |

**Project Description**

This project scope is for the replacement of equipment, which has reached the end of its useful life, on the Hudson Line from CP-33, located south of the Croton- Harmon passenger station to the northern limits of Metro-North's owned territory in Poughkeepsie, New York (CP-75.8). Specifically, it includes the replacement of cables using both troughs and direct burial methods; installation hand holes, pull boxes and communication cases; installation of duct banks and conduits under roads and railroad tracks; and conduit and cable trough installations across bridge structures.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule**

**Schedule:** During the Second Quarter of 2019, the project Substantial Completion date slipped 19 months from February 2020 to September 2021. The slippage was due to the lack of track outages and force account support being assigned to other higher priority projects. There were two tasks (pre-ripping and plowing) that were scheduled to start in August 2018 and October 2018 respectively. Those two tasks were postponed until April of 2020 due to other higher priority projects.

**What is Being Done**

**Schedule:** The Rock Slope project that took priority over this project recently ended October 2019. As a result, more track outages and flags are now available to better support this contract. Pre-ripping and plowing will commence per the new schedule, starting in April 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:** An Agency ACE evaluation is not required for this project.

| TA Agency: Bridges and Tunnels | Status as of September 30, 2019 |
|---|---|
| Project Name: Skewback Retrofit at the Henry Hudson Bridge | Current Budget: $100.4M |
| | Project EAC: $98.5M |
| | Substantial Completion Date at Award: Jan 2020 |
| Project No: D701HH89 | Proposed Substantial Completion Date: Feb 2020 |
| Project Phase: Construction | Phase Complete: 62% |

**Project Description**

This project involves the retrofit of the skewbacks, replacement of the concrete pier pedestals on the approach spans and rehabilitation/repair of the lower level north abutment at the Henry Hudson Bridge.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Contingency**

**Contingency:** During the Third Quarter 2019, the high Contingency Index of 1.18 was due to change orders that addressed unforeseen field conditions. The poor bedrock quality and differences in subsurface rock elevations affected the construction of the new pedestals and a significant re-design of the temporary supports for the pedestals was necessary, affecting the new skewback micro-piles. In addition, obstructions were encountered within the existing skewbacks affecting the ability of the contractor to drill the micro-piles through the skewbacks.

**What is Being Done**

**Contingency:** Once the site conditions were found different than expected, the TBTA worked with the Design/build team to reevaluate the design and engineered a solution to reduce cost impacts. Several amendments have been processed and the project management team is currently evaluating additional change order requests. Based on the current assessment of forecast project costs the Authority anticipates completing the project within budget.

**Schedule:** Subsequent to the reporting period, a request for a time extension based upon delays due to the differing field conditions has been submitted by the Design/build team and is under evaluation.

The project team is closely monitoring the work and will continue to mitigate all cost and schedule issues.

**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: Bridges and Tunnels | Status as of September 30, 2019 |
|---|---|
| Project Name: Interim Repairs – FDR Randall's Island Ramp at the Robert F. Kennedy Bridge | Current Budget: $17.9M |
| | Project EAC: $18.5M |
| | Substantial Completion Date at Award: Dec 2019 |
| Project No: D701RK22 | Current Substantial Completion Date: Aug 2019 |
| Project Phase: Construction | Phase Complete: 62% |

**Project Description**

This project will make interim repairs to the FDR Randall Island Ramps of the Robert F. Kennedy Bridge. The scope includes repairs identified by the Biennial Inspection recommendations, which in part includes joint rehabilitation and concrete and steel repairs.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Contingency**

**Contingency:** During the Third Quarter 2019, the high Contingency Index of 1.67 was due to additional work which was required to address unforeseen field conditions and to install temporary shoring to address an urgent safety matter identified during the Biennial Inspection.

**What is Being Done**

**Contingency:** An approved Amendment, dated July 5, 2019, was issued for the additional work added to the project. At of the end of the Third Quarter the contractor was above 90% completion with work, however behind in billing submittals.

Subsequent to the reporting period, the contractor has since submitted payment requisitions that are being processed and this will bring current total billing to 78%. The 78% billing represents 92% of work completed since there will be a contract quantity reduction when the contract is reconciled.

The project achieved Substantial Completion in August 2019.

**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 Bridges and Tunnels

| MTA Agency: Bridges and Tunnels | Status as of September 30, 2019 |
|---|---|
| Project Name: Open Road Tolling and Roadway Improvements at the Bronx-Whitestone and Throgs Neck Bridges | Current Budget: $47.8M & $53.7M |
| | Project EAC: $49.7M & $51.0M |
| | Substantial Completion Date at Award: Apr 2020 |
| Project No: D703BW63 & D703TN63 | Current Substantial Completion Date: Apr 2020 |
| Project Phase: Construction | Phase Complete: 87% & 66% |

**Project Description**

This project is Phase 4 of the Bronx approach roadway civil improvements. These improvements were required after the removal of toll booths and implementation of open road tolling. Phase 4 work includes installation of new roadway sections throughout the Bronx approach areas; new drainage; new barriers and guiderails; roadway lights; security cameras and Weigh in Motion (funded via D704AWX3); and improvements to the alignment of the approaches to meet current design standards at the Bronx Whitestone Bridge and the Throgs Neck Bridge.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Contingency**

**Contingency:** During the Third Quarter 2019, the Contingency Index for BW-63 was 1.35 and for TN-63 it was 3.09. This was mainly due to the Authority seeking to minimize the time during which normal traffic operations on the Bronx-Whitestone and Throgs Neck Bridges would be impacted by shifting lanes during the Stage 1 traffic reconfiguration. The original contract included a requirement for Stage 1 construction work to be completed within 12 weeks at both facilities with an incentive for early completion of up to 21 days.

Seeking to further reduce construction-related traffic impacts to motorists along the Bronx-Whitestone and Throgs Neck Bridge traffic corridors, the Authority issued two contract amendments increasing the incentive period for completion of Stage 1 from 21 days to 42 days, which will reduce the road user costs and enable the benefits of the project to be realized sooner at both facilities.

To further accelerate construction at the Throgs Neck Bridge, the Authority introduced a milestone to complete portions of stage 2 by October 2019. The milestone included the completion of final paving, barrier guiderail and roadway lighting etc.

**What is Being Done**

**Contingency:** While the contingency usage is currently high, the project is forecasting substantial underruns from the original contract amount, which will result in the project being completed under budget.

The Stage 2 acceleration was fully achieved and milestone work was completed as planned reducing road user costs and enabling the benefits of the project to be realized much sooner.

**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: Bridges and Tunnels | Status as of September 30, 2019 |
|---|---|
| Project Name: Reconstruction of Toll Plazas & Southbound Approach at the Henry Hudson Bridge | Current Budget: $96.5M |
| | Project EAC: $96.7M |
| | Substantial Completion Date at Award: Jan 2021 |
| Project No: D703HH88 | Current Substantial Completion Date: Mar 2021 |
| Project Phase: Construction | Phase Complete: 48% |

**Project Description**

The project involves the reconstruction of the upper and lower level toll plaza decks and southbound approaches of the Henry Hudson Parkway at the Henry Hudson Bridge. The work will bring the remaining spans of the bridge structure and approaches to current seismic standards, will include infrastructure and utility upgrades, plus re-alignment of the lower level geometrics for traffic improvements with better sight distance for the traveling public.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Contingency**

**Contingency:** During the Third Quarter of 2019, the high Contingency Index of 3.32 was due to change orders which addressed unforeseen field conditions, including differential bedrock levels and subsurface conditions which required the installation of additional micro-piles, the re-design of the temporary supports and significant material quantity revisions.

**What is Being Done**

**Contingency:** Several change orders have been processed and approved for this additional work, including the latest amendment which was approved in November 2019.
The project management team is closely monitoring the work and will continue to mitigate all cost and schedule issues. As of November 2019, there are additional change orders pending, however, based on the current assessment of projected project costs we anticipate completing the project within budget.

**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: Bridges and Tunnels | Status as of September 30, 2019 |
|---|---|
| Project Name: Replacement of Facility Lighting System at the Henry Hudson Bridge | Current Budget: $14.1M |
| | Project EAC: $13.4M |
| | Substantial Completion Date at Award: Jan 2021 |
| Project No: D704HH13 | Current Substantial Completion Date: Mar 2021 |
| Project Phase: Construction | Phase Complete: 83% |

**Project Description**

This project replaces the lighting on the north and southbound lanes of the Henry Hudson Parkway just south of the bridge. This includes the replacement of light poles, luminaries, foundations, wiring, and conduits required for this lighting.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Contingency**

**Contingency:** During the Third Quarter 2019, the high Contingency Index of 1.11 was due to a change in design of the wiring system. In order to minimize impacts to traffic and to facilitate the installation of the new cables associated with the new lighting, the wiring was re-routed and additional manholes installed, resulting in material quantity revisions.

**What is Being Done**

**Contingency:** Based upon approved and pending change orders to date, the construction project is forecast to be approximately $150K over the third party project contingency. The additional funding required is available from within the existing project contingency and a budget modification is not anticipated.

**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: Bridges and Tunnels | Status as of September 30, 2019 |
|---|---|
| Project Name: Install Fire Standpipe/Upgrade Protection System at the Robert F. Kennedy Bridge | Current Budget: $22.6M |
| | Project EAC: $21.6M |
| | Substantial Completion Date at Award: Mar 2020 |
| Project No: D704RK21 | Current Substantial Completion Date: Jan 2020 |
| Project Phase: Construction | Phase Complete: 47% |

**Project Description**

This project involves an upgrade to the fire protection system at the Robert F. Kennedy Bridge. Services include design and installation of new fire standpipe systems at the Bronx span, Manhattan Harlem River Lift Span, as well as the Randall's Island viaduct and the Queens approach viaduct of the Robert F. Kennedy Bridge to meet the latest NFPA 502 fire protection standards; and new bollards or other approved barriers to protect fire department connections from vehicular damage.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Contingency**

**Contingency:** During the Third Quarter 2019, the high Contingency Index of 2.10 was due to a need to modify the Standpipe Bracket Support, in order to address a potential safety condition. This resulted in a high Contingency Index due to the usage of a large percentage of the approved project contingency ($900K) vs the available third party contingency budget ($925K) at 47% overall project completion.

**What is Being Done**

**Contingency:** Project Management has prepared and submitted an amendment to the contract for the above change order, which was executed on August 28, 2019.

No additional change orders are anticipated and the project is forecast to be completed within the amended budget.

**IEC Comment**

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

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

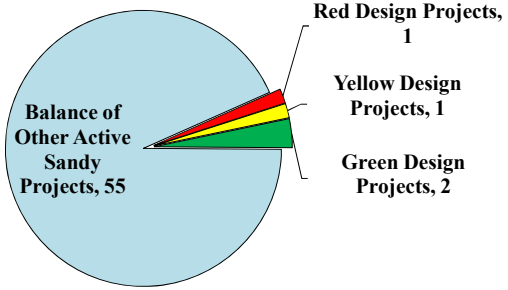
Metropolitan Transportation Authority

# 3rd Quarter 2019 Traffic Light Report on MTA SANDY Program

**A total of 59 Active Sandy Projects were Reviewed for the 3rd Quarter 2019**

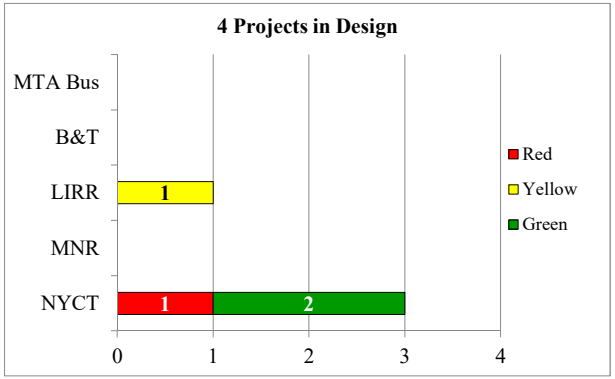
**The 59 active projects include 4 projects in Design, 10 in Post-Design to Construction Award, 45 in Construction**

## 4 of 59 Projects in Design

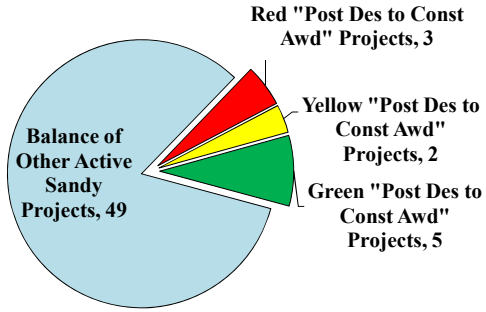



**Summary of Projects in Design:** 4 projects were reviewed in the design phase this quarter with 2 (50%) designated Green, 1 (25%) Yellow and 1 (25%) was Red. The one Red project was for a schedule variance. The variance was due to scope clarification.

**Last Quarter:** 4 projects were reviewed in the design phase this quarter with 2 (50%) designated Green, 1 (25%) Yellow and 1 (25%) was Red.

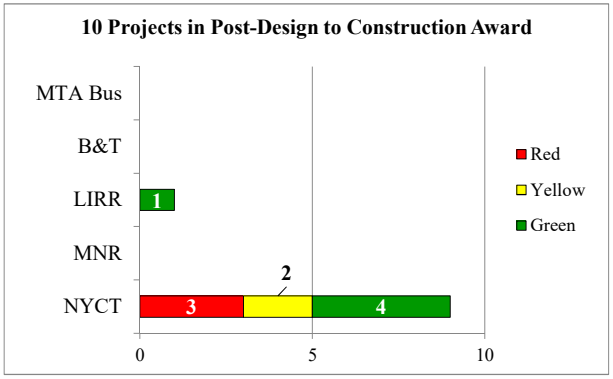



## 10 of 59 Projects in Post-Design to Construction Award

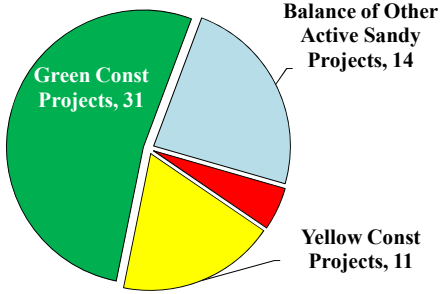



**Summary of Projects in Post-Design to Construction Award:** 10 projects were reviewed in this phase with 5 (50%) designated Green, 2 (20%) Yellow and 3 (30%) Red. All 3 of the projects designated Red were for a schedule variance. The schedule variances were due in part to bids being significantly higher than engineer's estimate and project delivery method being changed from an Invitation

**Last Quarter:** 12 projects were reviewed in this phase with 7 (58%) designated Green, 3 (25%) Yellow and 2 (17%) Red.

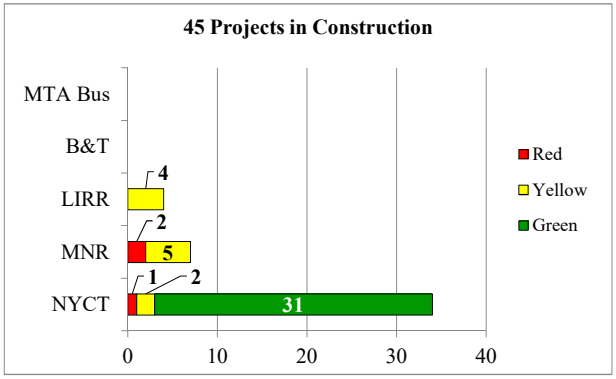



## 45 of 59 Projects in Construction




**Summary of Projects in Construction:** 45 projects were reviewed in this phase with 31 (69%) designated green, 11 (24%) Yellow, and 3 (7%) Red. All 3 of the projects designated Red were for a schedule variance. The schedule variances were due in part to scope modification and slow utility complany submittal reviews.

**Last Quarter:** 48 projects were reviewed in this phase with 33 (69%) designated green and 15 (31%) yellow.



# MTA Sandy Recovery Projects Terms and Definitions

## 3rd Quarter 2019 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: 4** |
|---|
| 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: 10** |
|---|
| 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: 45** |
|---|
| Green: Indices less than 110% and index movement less than 10%<br>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 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<br>(Note: Current Budget is not Budget at Award) |
| ➢ Cost Contingency Index = % Contingency Spent/% 3rd Party Contract Completion<br>– Contingency used includes expended & pending AWOs.<br>– 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. |

Metropolitan Transportation Authority

## 3rd Quarter 2019 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 | $164,367,005 | 3 | .46 | ▲ | 1.00 | ▬ | 0 | ▬ | G |
| ET100307 | Mitigation: Long Term Perimeter Protection at Coney Island Yard | Construction | Mitigation | $349,769,875 | 13 | .51 | ▼ | .99 | ▬ | 0 | ▬ | G |
| **Canarsie Tube** | | | | | | | | | | | | |
| ET040222 | Recovery: Shaft Excavation - 1 Avenue (Canarsie Tube) | Construction | Recovery | $17,835,502 | 95 | .21 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| ET050209 | Recovery: Mainline Track (Canarsie Tube) | Construction | Recovery | $32,806,612 | 72 | .04 | ▼ | 1.00 | ▬ | 0 | ▬ | G |
| ET060213 | Recovery: Tunnel Lighting (Canarsie Tube) | Construction | Recovery | $47,719,138 | 61 | .00 | ▬ | .99 | ▬ | 0 | ▬ | G |
| ET060219 | Recovery: Pump Room (Canarsie Tube) | Construction | Recovery | $17,511,167 | 75 | .14 | ▼ | 1.00 | ▬ | 0 | ▬ | G |
| ET080211 | Recovery: Signals (Canarsie Tube) | Construction | Recovery | $36,380,305 | 55 | .06 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| ET090211 | Recovery: 2 Circuit Breaker Houses (Canarsie Tube) | Construction | Recovery | $34,778,677 | 70 | .00 | ▬ | .99 | ▬ | 0 | ▬ | G |
| ET090212 | Recovery: Power Cable, Communication Cable and Ducts (Canarsie Tube) | Construction | Recovery | $275,390,340 | 39 | .26 | ▼ | .87 | ▬ | 0 | ▬ | G |
| ET090309 | Mitigation: Power Cable, Communication Cable and Ducts (Canarsie Tube) | Construction | Mitigation | $100,628,800 | 52 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| **148th Street Yard** | | | | | | | | | | | | |
| ET100209 | Recovery: Power Cable at 148 Street Yard | Construction | Recovery | $14,570,909 | 10 | .17 | ▬ | .98 | ▬ | 0 | ▬ | G |
| ET100309 | Mitigation: Long Term Perimeter Protection at 148th Street Yard | Construction | Mitigation | $92,799,786 | 17 | .47 | ▲ | .72 | ▲ | 0 | ▬ | G |
| **Rutgers Tube** | | | | | | | | | | | | |
| ET050210 | Recovery: Mainline Track (Rutgers Tube) | Post Des to Const Awd | Recovery | $8,093,094 | 100 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| ET080213 | Recovery: Signals (Rutgers Tube) | Post Des to Const Awd | Recovery | $9,964,848 | 100 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| ET090219 | Recovery: Power and Communication Cables (Rutgers Tube) | Post Des to Const Awd | Recovery | $55,678,402 | 100 | .00 | ▬ | 1.01 | ▬ | 0 | ▬ | G |

Metropolitan Transportation Authority

## 3rd Quarter 2019 Traffic Light Report
## Sandy Projects in Design, Post-Design to Construction Award or Construction

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▼ = 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 | $34,181,008 | 0 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| ET100218 | Recovery: 207 Street Yard Signal System | Construction | Recovery | $300,431,918 | 7 | .04 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| ET100219 | Recovery: Yard Track (207 Street Yard) | Construction | Recovery | $61,674,669 | 12 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| ET100220 | Recovery: Yard Switches (207 Street Yard) | Construction | Recovery | $50,839,784 | 0 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| ET100310 | Mitigation: Long Term Perimeter Protection at 207th Street Yard | Construction | Mitigation | $171,285,644 | 7 | .00 | ▬ | 1.01 | ▬ | -38 | ▼ | G |
| ET100312 | Mitigation: 207th Street Yard Portal | Construction | Mitigation | $27,310,129 | 80 | .12 | ▲ | 1.00 | ▬ | 0 | ▬ | G |
| **All Other NYCT Projects** | | | | | | | | | | | | |
| ET040317 | Mitigation: Upgrade Emergency Booth Communication System | Construction | Mitigation | $78,355,360 | 29 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| ET040322 | Mitigation: Street Level Openings | Construction | Mitigation | $46,699,866 | 79 | .47 | ▼ | 1.00 | ▬ | 0 | ▬ | G |
| ET040323 | Mitigation: Upgrade Backup Command Center | Construction | Mitigation | $9,554,786 | 27 | .00 | ▬ | .92 | ▬ | 0 | ▬ | G |
| ET040325 | Mitigation: Internal Station Hardening | Construction | Mitigation | $16,648,706 | 21 | .00 | ▬ | 1.01 | ▬ | 0 | ▬ | G |
| ET040327 | Mitigation: Street Level Openings at 7 Stations and 1 Fan Plant | Construction | Mitigation | $68,445,887 | 60 | .10 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| ET040328 | Mitigation: Street Level Openings at 9 Stations | Construction | Mitigation | $60,434,783 | 76 | .03 | ▲ | .99 | ▬ | 0 | ▬ | G |
| ET060305 | Mitigation: 17 Fan Plants and Adjacent Tunnels | Construction | Mitigation | $46,439,194 | 89 | 1.06 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| ET060320 | Mitigation: 11 Fan Plants | Construction | Mitigation | $29,012,172 | 78 | .91 | ▼ | 1.00 | ▬ | 0 | ▬ | G |
| ET060321 | Mitigation: 4 Fan Plants | Construction | Mitigation | $34,635,218 | 69 | .67 | ▼ | 1.00 | ▬ | 0 | ▬ | G |
| ET060330 | Mitigation: 1 Fan Plant on the Flushing Line | Construction | Mitigation | $13,730,126 | 0 | .00 | ▬ | 1.00 | ▲ | 0 | ▬ | G |
| ET070309 | Mitigation: Long Term Flood Protection at Hammels Wye | Construction | Mitigation | $24,885,606 | 99 | .99 | ▲ | 1.00 | ▬ | 3 | ▲ | R |
| ET120307 | Mitigation: Various Bus Depots | Construction | Mitigation | $26,422,164 | 21 | .15 | ▲ | 1.00 | ▬ | 0 | ▬ | G |
| ET160311 | Mitigation: Zerega Maintenance Facility | Construction | Mitigation | $8,253,350 | 0 | .00 | ▬ | 1.00 | ▲ | 0 | ▬ | G |

Metropolitan Transportation Authority

## 3rd Quarter 2019 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **NYCT - New York City Transit Sandy Program** | | | | | | | | | | | | |
| **All Other NYCT Projects** | | | | | | | | | | | | |
| ET060317 | Mitigation: Conversion of 2 Pump Trains | Design | Mitigation | $19,119,839 | 95 | .00 | ▬ | 1.15 | ▬ | 4 | ▲ | R |
| ET070209 | Recovery: Wrap-up Rockaway Line | Design | Recovery | $31,059,729 | 75 | .00 | ▬ | 1.03 | ▬ | 1 | ▲ | G |
| ET090304 | Mitigation: Two Substations (Montague Tube) | Design | Mitigation | $7,470,179 | 75 | .00 | ▬ | .99 | ▬ | 0 | ▬ | G |
| ET070308 | Mitigation: Steinway Portal | Post Des to Const Awd | Mitigation | $15,159,993 | 100 | .00 | ▬ | 1.01 | ▬ | 0 | ▬ | G |
| ET090308 | Mitigation: Deployable Substations | Post Des to Const Awd | Mitigation | $48,280,226 | 100 | .00 | ▬ | 1.52 | ▬ | 0 | ▬ | Y |
| ET090310 | Mitigation: Back-up Power Control Center | Post Des to Const Awd | Mitigation | $16,881,641 | 98 | .00 | ▬ | 1.64 | ▲ | 13 | ▲ | R |
| ET100314 | Mitigation: 207th Street Yard Sewers | Post Des to Const Awd | Mitigation | $129,521,515 | 100 | .00 | ▬ | 7.07 | ▲ | 0 | ▬ | Y |
| ET160310 | Mitigation: Consolidated Revenue Facility | Post Des to Const Awd | Mitigation | $16,925,571 | 100 | .00 | ▬ | 1.47 | ▬ | 6 | ▲ | R |
| ET160312 | Mitigation: Tiffany Central Warehouse | Post Des to Const Awd | Mitigation | $25,624,822 | 100 | .00 | ▬ | 1.73 | ▼ | 9 | ▲ | R |
| ES070211 | Recovery: Reconstruction of Clifton Car Repair Shop | Construction | Recovery | $34,890,731 | 15 | 2.43 | ▬ | .99 | ▬ | 1 | ▲ | Y |
| ES070302 | Mitigation: Reconstruction of Clifton Car Repair Shop | Construction | Mitigation | $167,732,374 | 27 | .07 | ▬ | 1.00 | ▬ | 1 | ▲ | Y |
| ES070303 | Mitigation: St. George Terminal Yard | Construction | Mitigation | $51,352,194 | 5 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | G |
| **LIRR - Long Island Rail Road Sandy Program** | | | | | | | | | | | | |
| **All Other Projects** | | | | | | | | | | | | |
| EL0303ZH | Flood and Emergency Management Equipment Mitigation | Construction | Mitigation | $20,585,053 | 0 | .00 | ▬ | 1.02 | ▬ | 0 | ▬ | Y |
| EL0502ZC | Restoration of the Long Beach Branch | Construction | Recovery | $68,666,958 | 95 | .02 | ▬ | 1.00 | ▬ | 0 | ▬ | Y |
| EL0602ZD | West Side Storage Yard Restoration | Construction | Recovery | $43,512,962 | 48 | .00 | ▬ | 1.06 | ▬ | 0 | ▬ | Y |
| EL0602ZL | Long Island City Yard Restoration | Construction | Recovery | $28,308,917 | 70 | -.29 | ▲ | 1.16 | ▬ | 0 | ▬ | Y |

## 3rd Quarter 2019 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **LIRR - Long Island Rail Road Sandy Program** | | | | | | | | | | | | |
| **All Other Projects** | | | | | | | | | | | | |
| EL0603ZP | West Side Yard & East River Tunnel Mitigation | Design | Mitigation | $94,529,494 | 57 | .00 | ▬ | 1.04 | ▬ | 0 | ▬ | Y |
| EL0603ZS | Long Island City Yard Resiliency | Post Des to Const Awd | Mitigation | $26,287,019 | 0 | .00 | ▬ | 1.46 | ▬ | 0 | ▬ | G |
| **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 | $92,686,625 | 53 | 1.28 | ▼ | .94 | ▬ | 0 | ▬ | Y |
| EM040301 | Power and Signals Mitigation | Construction | Mitigation | $46,307,241 | 6 | .00 | ▬ | .92 | ▬ | 0 | ▬ | Y |
| EM040302 | Hudson Line Power and Signal Resiliency | Construction | Mitigation | $35,152,702 | 10 | .00 | ▬ | 1.00 | ▬ | 0 | ▬ | Y |
| EM050206 | Power Infrastructure Restoration Phase 1 | Construction | Recovery | $170,462,175 | 51 | 1.81 | ▼ | .96 | ▬ | 0 | ▬ | Y |
| **All Other Projects** | | | | | | | | | | | | |
| EM030202 | Right of Way Restoration | Construction | Recovery | $7,634,999 | 94 | .00 | ▬ | .95 | ▬ | 12 | ▲ | R |
| EM030301 | Rail Vacuum Mitigation | Construction | Mitigation | $5,266,038 | 100 | .65 | ▼ | .87 | ▬ | 1 | ▲ | Y |
| EM050208 | Power Infrastructure Restoration - Substations | Construction | Recovery | $44,798,611 | 89 | 1.12 | ▬ | .98 | ▬ | 7 | ▲ | R |
| EM050209 | Power Infrastructure Restoration - Harlem River Lift Bridge | Construction | Recovery | $7,751,347 | 78 | .00 | ▬ | .99 | ▬ | 0 | ▬ | Y |

Metropolitan Transportation Authority

# Summary of Sandy Traffic Light Report Design Exceptions

**(Third Quarter 2019 - As of September 30, 2019)**

| 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 | Jan 2020 | During the Third Quarter 2019, the forecasted design completion slipped 4 months, from Sep 2019 to January 2020. This was due to the proposers requesting an extension of time because of NYCT's requests for additional clarification to their proposals. | The request for proposal (RFP) process is ongoing as proposers respond to NYCT's requests for additional information. | 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, 2019 |
|---|---|
| Project Name: Mitigation - Long Term Flood Protection at Hammels Wye | Current Budget: $24.9M |
| | Project EAC: $24.9M |
| | Substantial Completion Date at Award: May 2019 |
| Project No: ET070309 | Current Substantial Completion Date: Oct 2019 |
| Project Phase: Construction | Phase Complete: 99% |

**Project Description**

This project will a build a flood wall around the perimeter of the Hammels Wye campus on the Rockaway Line in Queens, which contains critical equipment such as a signal compressor, hydraulic rooms, circuit breaker houses, crew quarters, a signal tower, and a power substation. Resiliency measures will prevent flooding from the Jamaica Bay and the Atlantic Ocean during storm events and minimize service disruptions.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule**

**Schedule:** During the Third Quarter 2019, the forecasted Substantial Completion slipped three months, from July 2019 to October 2019. This was due to a 77 working day - time extension issued for Additional Work Order (AWO) #14. AWO #14 consists of a Heating, Ventilation, Air Conditioning (HVAC) modification for the signal compressor building.

**What is Being Done**

**Schedule:** Subsequent to the reporting period, Substantial Completion was achieved on October 30, 2019.

**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, 2019 |
|---|---|
| Project Name: Sandy Mitigation - Back-up Power Control Center | Current Budget: $10.3M |
| | Project EAC: $16.9M |
| | Original Award Date: Sept 2019 |
| Project No: ET090310 | Current Award Date: Oct 2020 |
| Project Phase: Post-Design to Construction Award | Phase Complete: 85% |

**Project Description**

This project will design and build a back-up Power Control Center (PCC) to provide the BMT Division emergency traction power Supervisory Control and Data Acquisition (SCADA) system control at Jay Street Substation, in the event that the main PCC at 53rd Street, Manhattan is not functional or inaccessible.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule**

**Schedule:** During the Third Quarter 2019, the forecasted award date slipped 13 months, from September 2019 to October 2020. This was due to the recently enacted New York State Design/build legislation. This project achieved Final Design Completion for invitation for bid (IFB) procurement in March 2019; the legislation now requires this project to be combined with the main SCADA Upgrade and be delivered as a Design/build procurement.

**What is Being Done**

**Schedule:** The contract documents are being modified to be a Design/build contract. The revised budget is pending approval so that the project can be advertised.

**IEC Comment**

**Budget and Schedule Performance:** The IEC agrees substantially 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, 2019 |
|---|---|
| Project Name: Mitigation - Consolidated Revenue Facility | Current Budget: $11.4M |
| | Project EAC: $16.9M |
| | Original Award Date: Jul 2018 |
| Project No: ET160310 | Current Award Date: Jun 2020 |
| Project Phase: Post-Design to Construction Award | Phase Complete: 0% |

**Project Description**

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

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule**

**Schedule:** During the Third Quarter 2019, the forecasted award date slipped six months, from December 2019 to June 2020. This was due to the request to transfer this project to the Department of Buses and initiate a redesign after the bid for this project came back significantly over the estimated budget.

**What is Being Done**

**Schedule:** Department of Buses has completed studies to value engineer this project. After the selection of the best option to reduce cost, design consultant services to complete the project are now being requested. Re-design is forecast to begin December 2019 in order to meet the current June 2020 award date.

**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, 2019 |
|---|---|
| Project Name: Mitigation - Tiffany Central Warehouse | Current Budget: $14.7M |
| | Project EAC: $25.6M |
| | Original Award Date: Jul 2018 |
| Project No: ET160312 | Current Award Date: Jun 2020 |
| Project Phase: Post-Design to Construction Award | Phase Complete: 0% |

**Project Description**

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.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule**

**Schedule:** During the Third Quarter 2019, the forecasted award date slipped nine months, from September 2019 to June 2020. This was due to the time required to accommodate changes in the project documents and delivery. Early in 2019 proposed work at the Consolidated Revenue Facility and the Tiffany Central Warehouse were split into separate contracts and the Tiffany Warehouse project was transferred to the Department of Buses. Separate repair projects planned for the Tiffany Warehouse were bundled, combining the scopes of work of the Tiffany Warehouse Wall Repairs (C33891) and the Tiffany Warehouse Roof Replacement (C33841). In addition, the project delivery method was changed from an Invitation for Bid (IFB) to a Design/build.

**What is Being Done**

**Schedule:** The design consultant task order has been revised to combine the multiple Tiffany Warehouse projects and to complete this project as a Design/build. Subsequent to this report, design commenced in October 2019 and is forecasted to be completed in February 2020.

**IEC Comment**

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

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

Metro-North Railroad

| MTA Agency: Metro-North Railroad | Status as of September 30, 2019 |
|---|---|
| Project Name: Recovery - Right of Way Restoration at Various Locations | Current Budget: $8.0M |
| | Project EAC: $7.6M |
| | Substantial Completion Date at Award: Sep 2015 |
| Project No: EM030202 | Current Substantial Completion Date: Jul 2020 |
| Project Phase: Construction | Phase Complete: 94% |

**Project Description**

Superstorm Sandy generated strong winds and severe storm surge/flooding which damaged and downed trees affecting the Right-Of-Way (ROW), critical infrastructure, and significant Hudson River shoreline erosion over more than half of the 60 plus mile Hudson Line. Although trees that fell directly onto the ROW were initially removed, work remained along the wooded ROW of the Hudson, as well as the Harlem and New Haven lines. Damaged trees were identified and removed in all locations. This work ensured that the critical infrastructure of the railroad remained unobstructed and that service would not be impacted. The tree removal required track outages and coordination with other projects to take advantage of track outage opportunities to maximize efficiencies.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule**

**Schedule:** During the Third Quarter 2019, the forecast Substantial Completion date slipped 12 months, from July 2019 to July 2020.

The tree-cutting and original scope of the rip-rap work was completed in the first quarter of 2018. The project utilized surplus funds from within the project to place additional rip rap in areas that would benefit from more rock reinforcement. The rip rap operation will continue into the Second Quarter of 2020 with a Substantial Completion date of July 2020.

**What is Being Done**

**Schedule:** As a result of recent inspections the following locations were selected for shoreline reinforcement: Milepost (MP) 11.5 through 13 Riverdale (Bronx); MP 17 Near Greystone (North Yonkers); MP 22 Irvington; MP 24/25 Tarrytown; MP 27 Phillips Manor (Sleepy Hollow); MP 29 Scarborough (Briarcliff Manor); MP 46 Peekskill; MP 71.5 New Hamburg. This additional work is expected to be completed by July 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.

Metro-North Railroad

| MTA Agency: Metro-North Railroad | Status as of September 30, 2019 |
|---|---|
| Project Name: Power Infrastructure Restoration of Hudson Line Substations | Current Budget: $45.7M |
| | Project EAC: $44.8M |
| | Substantial Completion Date at Award: Feb 2017 |
| Project No: EM050208 | Current Substantial Completion Date: Mar 2020 |
| Project Phase: Construction | Phase Complete: 89% |

**Project Description**

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

**Problem Since Last Quarterly Report**

**Index Trigger (s): Schedule**

**Schedule:** During the Third Quarter 2019, the forecasted Substantial Completion date slipped seven months from August 2019 to March 2020 due to longer than expected acceptance reviews on various electrical substation components by the local utility company. In addition, numerous power feeder cut-over cancellations at the Riverdale & Tarrytown substations by the local utility company also contributed to the delay.

**What is Being Done**

**Schedule:** The project team is in constant communication with the local utility company to schedule the power feeders cut-over in a phased approach. The cut-over for Riverdale Substation was completed in November 2019. The Tarrytown Substation cut-over is scheduled for January 2019, the Croton-Harmon Substation for March 2020, and the Brewster Substation for March 2020.

**IEC Comments**

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

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

# Projects in CPOC's Risk-Based Monitoring Program

**(3rd Quarter 2019 Traffic Light Report – Period Ending September 30, 2019)**

**The following projects in CPOC's Risk-based Monitoring Program are currently reported on by the responsible agency in accordance with the CPOC Work Plan schedule, and are continually monitored by the Independent Engineering Consultant. Monitored Capital Program projects are not 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** | | **Agency** | **Project** |
| **2010-14** | **2015-19** | | |
| **Capital Construction** | | | |
| | X | MTACC | Second Avenue Subway Phase 2 |
| X | X | MTACC | East Side Access & Regional Investments |
| | X | MTACC | Penn Station Access |
| | X | MTACC | LIRR Expansion Project – Floral Park to Hicksville |
| **Signals and Communications** | | | |
| X | X | LIRR/MNR | Positive Train Control |
| | X | NYCT | Communications Based Train Control – 8th Ave Line |
| X | | NYCT | Communications Based Train Control - Queens Blvd. West-Phase 1 |
| | X | NYCT | Communications Based Train Control - Queens Blvd. West-Phase 2 |
| X | X | NYCT | Integrated Service Information and Management B Division |
| X | X | NYCT/MTA Bus | Replace Bus Radio System |
| X | | NYCT/MTA Bus | Construct Bus Operations Command Center |
| **Subway Car, Bus and Rolling Stock Procurement** | | | |
| X | X | NYCT | New Subway Car Procurement |
| X | X | NYCT | New Bus Procurement |
| X | X | LIRR/MNR | Commuter Rail Road Rolling Stock Procurement |
| **Passenger Stations Program** | | | |
| X | | NYCT | Sea Beach Line - Renewal of 9 Stations |
| | X | NYCT | ADA Reconstruction Times Square Station |
| | X | NYCT/CRR | New Fare Payment System - Phase 2 |

# Projects in CPOC's Risk-Based Monitoring Program
## (3rd Quarter 2019 Traffic Light Report – Period Ending September 30, 2019)

| Capital Program | | Agency | Project |
|---|---|---|---|
| 2010-14 | 2015-19 | | |
| **Shops and Yards** | | | |
| X | | MNR | Harmon Shop Replacement Phase V, Stage 1 |
| | X | MNR | Harmon Shop Replacement Phase V, Stage 2 |
| X | | LIRR | New Mid Suffolk Electric Yard |
| | X | LIRR | Morris Park Diesel Locomotive Shop |
| **Line Structures and Track** | | | |
| | X | NYCT | Myrtle Avenue Viaduct Replacement |
| X | | LIRR | Jamaica Capacity Improvements Phase 1 |
| X | X | LIRR | Main Line Double Track - Farmingdale to Ronkonkoma |
| **Bridges and Tunnels** | | | |
| | X | B&T | Throgs Neck Bridge Replace Suspended Span Deck |
| **Sandy Program** | | | |
| Sandy Program | | MNR | Hudson Line Phase 1 & 2 Power and Communication & Signal Restoration |
| Sandy Program | | NYCT | Canarsie Tube Restoration and Resiliency |
| Sandy Program | | NYCT | Reconstruct Clifton Repair Shop |
| Sandy Program | | NYCT | Coney Island Yard Long Term Perimeter Protection |
| Sandy Program | | NYCT | 207th Street Yard Long Term Perimeter Protection |