



Metropolitan Transportation Authority

# Capital Program Oversight Committee Meeting

## April 2017

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### Committee Members

F. Ferrer, Acting Chair

I. Greenberg

S. Metzger

J. Molloy

M. Pally

J. Samuelsen

L. Schwartz

P. Trottenberg

J. Vitiello

P. Ward

C. Wortendyke

N. Zuckerman

# Capital Program Oversight Committee Meeting

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

Monday, 4/24/2017  
1:15 - 2:15 PM ET

## 1. PUBLIC COMMENTS PERIOD

## 2. APPROVAL OF MINUTES MARCH 20, 2017

- *Minutes from March '17 - Page 3*

## 3. COMMITTEE WORK PLAN

- *2017 - 2018 CPOC Committee Work Plan - Page 6*

## 4. NYCT CAPITAL PROGRAM UPDATE

- *Progress Report on Enhanced Stations Initiative - Page 8*
- *IEC Project Review on Enhanced Stations Initiative - Page 18*
- *Progress Report on Signals and Train Control Division - Page 21*
- *IEC Project Review on Signals and Train Control - Page 26*
- *Progress Report on Systems and Security Division - Page 31*
- *IEC Project Review on Systems and Security - Page 53*
- *Appendix NYCT Canarsie Tunnel Rehabilitation Risk Assessment Brief - Page 62*
- *Appendix ESA CQ033 - Midday Storage Yard Risk Assessment Brief - Page 65*

## 5. CAPITAL PROGRAM STATUS

- *Commitments, Completions, and Funding Report - Page 67*

## 6. QUARTERLY TRAFFIC LIGHT REPORTS

- *Fourth Quarter 2016 Core & Sandy Traffic Light Reports - Page 83*

## 7. EXECUTIVE SESSION

Date of next meeting: Monday, May 22, 2017 at 1:45 PM

**MINUTES OF MEETING**  
**MTA CAPITAL PROGRAM OVERSIGHT COMMITTEE**  
**March 20, 2017**  
**New York, New York**  
**1:45 P.M.**

MTA CPOC members present:

Hon. Fernando Ferrer  
Hon. Ira Greenberg  
Hon. John Molloy  
Hon. Mitchell Pally  
Hon. Carl Wortendyke

MTA CPOC members not present:

Hon. Susan Metzger  
Hon. John Samuelsen  
Hon. Lawrence Schwartz  
Hon. Polly Trottenberg  
Hon. James Vitiello  
Hon. Peter Ward  
Hon. Neal Zuckerman

MTA Board members present:

Hon. Andrew Albert  
Hon. Veronica Vanterpool

MTA staff present:

Veronique Hakim  
Craig Stewart  
Michael Wetherell

MTACC Staff present:

Daniel Creighton  
Anthony D'Amico  
Tim Gianfrancesco  
Bill Goodrich  
Eve Michel

Independent Engineering Consultant staff present:

Joe DeVito  
Dianne Rinaldi  
Darlene Rivera

\* \* \*

Acting Chairman Ferrer called the March 20, 2017 meeting of the Capital Program Oversight Committee to order at 1:30 P.M.

**Public Comments Period**

There was one public speaker in the public comments portion of the meeting: Jason Pineiro.

**Meeting Minutes**

Upon motion duly made and seconded, the CPOC members approved the minutes to the previous meeting held on February 21, 2017.

### **Committee Work Plan**

Mr. Stewart announced that there were no changes in the Work Plan, but that the Traffic Light Report, originally scheduled for publication this month, will instead be provided next month.

### **MTACC Report on Cortland Street #1 Line**

Mr. Creighton reported that project Substantial Completion is August 2018 and that the project budget remains \$158 million, excluding risk reserve. In its Project Review, the IEC concurred with the agency that the previously reported schedule contingency of 6 months has been consumed. The IEC then stated its opinion that continued delays in negotiating Bulletin 2 changes will delay project completion, adding that the current project budget does not include anticipated schedule impact costs related to Bulletin 2 changes. The IEC then provided the observation that contractor productivity, as measured in work completed and billed per month, has decreased since last report. Further, the IEC stated that in order to meet the completion date of August 2018, a four-fold increase in productivity, to \$3.2 million per month, is required, otherwise, if the current rate of productivity were to continue, project completion would be delayed significantly. Finally, the IEC recommended that a comprehensive recovery schedule be developed that includes: Bulletin 2 changes as well as all known changes to the project scope; additional milestones for critical issues and work items required for the station opening; and agreement from the contractor, subcontractors and MTACC to implement the recovery schedule. 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.

### **MTACC Report on East Side Access**

Mr. Goodrich reported that the project is on schedule for a December 2022 Revenue Service Date and that, while the project budget remains \$10.178 billion, there have been a number of soft cost increase trends that are putting pressure on the budget. Mr. Goodrich further stated that MTACC is reviewing these cost trends and reviewing mitigation measures under the current budget. In its Project Review, the IEC confirmed MTACC's budget and schedule figures, but cited a number of risks to the cost contingency, including soft costs, third party and force account cost due to extended project schedule; the IEC concurred with MTACC that the budget is under review and that variances may require additional funding. With respect to schedule, the IEC projected a reduction of 6 months to the 22-month Program Schedule Contingency stemming from issues associated with Systems Contract CS179. The IEC offered a number of Observations on the project, including regarding Manhattan (GCT Concourse & Facilities Fit-out, and GCT Caverns and Track), delays associated with Systems Contract CS179, and Harold, in which the IEC stated that the latest ESA schedule shows Harold remaining on the program critical path, 3 months later than Manhattan/Systems. 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.

### **MTACC Second Avenue Subway Phase 2 Overview**

Mr. Gianfrancesco provided an overview of the project, including the SAS complete project profile, and the following aspects of the SAS Phase 2 Project: alignment, benefits; plan and profile; construction methods, and current status of the project, including design, and environmental and community outreach. Further details of the presentation, and Committee Members' comments and questions with respect thereto, are included in the video recording of the meeting maintained in MTA's records.

### **MTACC/MNR Penn Station Access Project Update**

Ms. Michel provided an update on the project, including proposed infrastructure modifications and current project activities, which comprise the following: continue environmental analysis; work with stakeholders (MNR, LIRR, Amtrak, and CTDOT) on the alignments; alignment information is being

used for the Operation and Power Simulations; and prepare for the General Engineering Consultant RFP. Further details of the presentation, 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. Stewart reported on 2017 Commitment and Completion goals through February. The MTA plans \$7.3 billion in commitments, including 51 major commitments that will be tracked throughout the year. The MTA made two major commitments in February and has now committed four year-to-date. Five major commitments planned for February are delayed. Through February, agencies committed \$572 million versus a \$1.015 billion year-to-date goal. By year end, the MTA forecasts meeting its 2017 commitments goal. In terms of completions in 2017, agencies plan a total of \$5.0 billion, including 34 "major" completions that will be tracked throughout the year. The MTA achieved two major completions in January and no additional completions were planned for or achieved in February. Through February, agencies completed \$146 million versus a \$172 million year-to-date goal. By year end, the MTA forecasts meeting or exceeding its 2017 completions goal.

### **QUARTERLY CAPITAL CHANGE ORDER REPORT** *(for information only)*

Mr. Stewart then brought the Committee's attention to the Quarterly Change Order Report covering the 4<sup>th</sup> quarter of 2016.

### **Adjournment**

Upon motion duly made and seconded, Acting Chairman Ferrer adjourned the March 20, 2017 meeting of the MTA Capital Program Oversight Committee at 2:30 PM.

Respectfully submitted,  
Michael Jew-Geralds  
Office of Construction Oversight



## **2017-2018 CPOC Committee Work Plan**

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I. Recurring Agenda Items

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

II. Specific Agenda Items

**May**

LIRR Capital Program Update

- Jamaica Capacity Improvements
- Main Line Double Track

MNR Capital Program Update

- Harmon Shop Replacement
- Hudson Line Sandy Restoration

**June**

Quarterly MTACC Capital Program Update

- Cortlandt Street Station
- East Side Access
- Second Avenue Subway Phase II
- Penn Station Access

LIRR and MNR Update on Positive Train Control (PTC)  
NYCT Communication Based Train Control (CBTC)  
Quarterly Change Order Report  
Quarterly Traffic Light Reports

**July**

NYCT Capital Program Update

- Sandy Recovery and Resiliency Update
- Update on Track Program

**September**

Quarterly MTACC Capital Program Update  
Update on Minority, Women and Disadvantaged Business Participation  
Update on Small Business Development Program  
Quarterly Change Order Report  
Quarterly Traffic Light Reports

**October**

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

**November**

NYCT Capital Program Update  
NYCT, LIRR, MNR Update on New Fare Payment System  
CPOC Committee Charter Review

**December**

Quarterly MTACC Capital Program Update  
Quarterly Change Order Report  
Quarterly Traffic Light Reports

**January**

NYCT Capital Program Update

**February**

B&T Capital Program Update  
LIRR and MNR Update on Positive Train Control (PTC)  
Update on Minority, Women and Disadvantaged Business Participation

**March**

Quarterly MTACC Capital Program Update  
Quarterly Change Order Report  
Quarterly Traffic Light Reports

**April**

NYCT Capital Program Update  
Update on Capital Program Security Projects (in Executive Session)

# CPM Stations Division Enhanced Station Initiative

## Capital Program Oversight Committee



**William Montanile, P.E.**  
**Program Manager**

**April 2017**



# Overview

## STATIONS

### Package 1

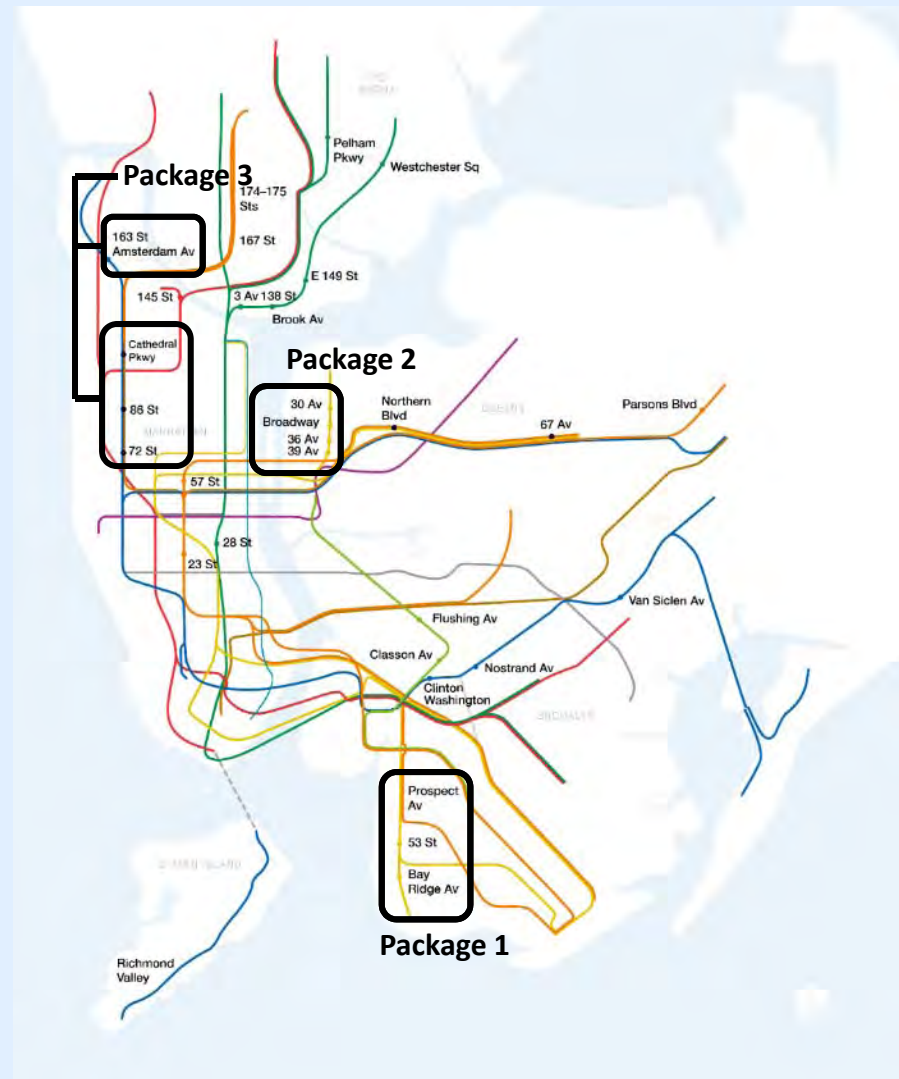
Prospect Avenue  
53 Street  
Bay Ridge Avenue

### Package 2

30 Avenue  
Broadway  
36 Avenue  
39 Avenue

### Package 3

163 St - Amsterdam Avenue  
Cathedral Pkwy (110 Street)  
86 Street  
72 Street



# Scope & Key Elements

1. State of Good Repair
2. Proposed Customer-facing Improvements
  - New canopies and totems at station entrances
  - New furniture
  - Technology integration (incl. Dashboard)
  - Improved finishes
  - Improved wayfinding
  - New lighting scheme
  - Decluttering
3. Design-Build Contracting
4. Get In, Get Done and Get Out



# Package 1

General Information	
Contractor	Citnalta/Forte with Urbahn/HAKS
Award	November 30, 2016
Stations	Prospect Avenue 53 Street Bay Ridge Avenue  R line in Brooklyn



# Package 1 Overview




Item	Comments
Schedule	Substantial Completion is November 2017 – contract on schedule
Cost	Current Budget is \$118 million – contract on budget

## Highlights

- Limited construction permit 03/24/17 (113 calendar days)
  - ✓ Removals at 53 Street Station
  - ✓ Platform edge demolition and reconstruction
  - ✓ Waterproofing over track at Prospect Avenue Station
- 53 Street Station bypass commenced 03/27/17
  - ✓ Reopen Fall 2017



# Package 1 Top Risks

Status	Risk	Mitigation
 Green	Track access	Weekly coordination meetings with ongoing work throughout entire system.
 Green	Unforeseen site conditions	Advanced probes taken to identify substrates. Immediate dispatch of ESI team, Contractor and Design Professional to address unforeseen conditions.
 Green	Material delivery	Early identification and approval of long lead items. Weekly updates on delivery of critical materials.

## Highlights

- Four risk workshops held with the Program Facilitator
- Lessons learned inform future packages



# Platform Edge Demolition



# Platform Edge Replacement



# Platform Barrier





# Upcoming Packages

## Package 2

- Approved by Board 04/03/17
- Awarded 04/14/17

**QUEENS**

30 Av	N W
Broadway	N W
36 Av	N W
39 Av	N W

## Package 3

- RFP release pending

**MANHATTAN**

163 St-Amsterdam Av	C
Cathedral Pkwy (110 St)	B C
86 St	B C
72 St	B C



# April 2017 CPOC IEC Project Review



## Enhanced Station Initiative



# Schedule & Budget Review

- **Schedule:**
  - **Package 1 (4<sup>th</sup> Ave. Brooklyn)** has kept to schedule with the planned closure of 53<sup>rd</sup> Street Station for 165 days which commenced on March 27<sup>th</sup>. However, recent delays to the start of fabrication of the dashboard, totems and canopies need to be recovered or mitigated to avoid delay to the construction.
  - **Package 2 (Astoria)** was approved on schedule and awarded on April 14<sup>th</sup>.
- **Budget:** Package 1 is on budget and the cost contingency has not been tapped.



# IEC Observations

- The Program Team should be recognized for organizing itself in accord with current Design-Build best practices including co-locating all team members and installing direct representatives of key NYCT User Groups with the team.
- IEC supports the Program Team's efforts to improve the schedule control of the fabrication of long lead industrial design units -- such as custom light fixtures, canopies, totems, and dashboards.
- The Program Team has put in place a thorough and wide-ranging process for assessing the design development and the lessons learned from Package 1. This information will benefit future packages.

# Signals and Train Control Division

Robert Gomez, P.E.  
Program Officer

April 2017

Capital Program Oversight Committee



# Signals and Train Control Division Projects

## Project Name

## Phase

ISIM-B: Module 1 – Train Position Monitoring System (TPMS)

Construction

ISIM-B: Module 3 – Large Scale Display, Data Warehouse at RCC

In Procurement

### Interlockings

2 Interlockings: Union Turnpike & 71st Ave, QBL

Construction

Dyre Avenue Line Signals

Construction

34th Street Interlocking

Construction

W. 4th Street Interlocking

Construction

Kings Highway Interlocking, Culver

Construction


Roosevelt Avenue Interlocking, QBL

Closeout




# ISIM-B: Module 1 – Train Position Monitoring System (TPMS)

- Contractor: Yonkers Electric Contracting Corp. & U.S. Information System JV (Joint Venture)
- Award (W-32784): November 17, 2015
- Project Description: This project will furnish and install equipment at 26 locations on the B Division to acquire field data from the signaling system. This data is required for ISIM-B (Module 3) and for Automatic Train Supervision (ATS) outside of CBTC territory

## Overall Status

Status	Item	Comments
 Green	<b>Schedule</b>	19% complete. Substantial Completion December 2018, contract is on schedule
	<b>Cost</b>	\$56M – project is within budget


### Legend

	Red	Significant impacts with potential impacts on Revenue Service Date, Cost, or Customer Benefit Milestones
	Yellow	Impacts which can lead to cost increases or schedule delays on individual milestones or contracts.
	Green	No Near Term Impact for Design, Procurement & Construction. Successful management of major activity to stay on schedule or budget.




# ISIM-B: Module 3 – Large Scale Display, Data Warehouse at RCC

- Project Status: In Procurement - RFP
- Award (W-32789): 3<sup>rd</sup> Quarter 2017 – delayed by 2 Quarters
- Project Description: This project will furnish and install large scale display and data warehouse at RCC. In addition, furnish and install 41 workstations at RCC and 47 workstations at 28 field locations.

## Overall Status

Status	Item	Comments
 Yellow	<b>Schedule</b>	Design completed June 2015; Construction duration 53 months. Scope was revised in December 2016. Proposals received on April 19, 2017 and are being evaluated. Award projected for August 2017 (delayed by 2 Quarters)
	<b>Cost</b>	Approximately \$100M – Total project budget (The budget is being reduced based on scope change.)

### Legend

	Red	Significant impacts with potential impacts on Revenue Service Date, Cost, or Customer Benefit Milestones
	Yellow	Impacts which can lead to cost increases or schedule delays on individual milestones or contracts.
	Green	No Near Term Impact for Design, Procurement & Construction. Successful management of major activity to stay on schedule or budget.



# Interlockings

Contract No.	Description	Schedule	Budget
S-32769	2 Interlockings, QBL	S/C delayed by an additional 2 quarters to May 2018	No Impact: \$298M
S-32773	Dyre Avenue	S/C delayed by 5 months to November 2017	Impact: \$226M + \$7M(Approx.) Budget Modification underway = \$233M
S-32764	34 <sup>th</sup> Street	On Schedule	No Impact: \$185M
S-32765	West 4 <sup>th</sup> Street	On Schedule	No Impact: \$174M
S-32176	Kings Highway	On Schedule	No Impact: \$174M
S-32749	Roosevelt Avenue	On Schedule	No Impact: \$103M

# April 2017 CPOC IEC Project Review



## NYCT Signals & Train Control



# IEC Project Review

## NYCT Signals & Train Control

- Integrated Service Information & Management, B Division (ISIM-B) Modules 1 & 3
- Interlocking Projects



# ISIM-B Module 1

## Schedule and Budget Review

- **Schedule:** Project is in the construction phase and is on schedule.
- **Budget:** The IEC concurs that Module 1 project is currently within budget.



# ISIM-B Module 3

## Schedule and Budget Review

- **Schedule:** Proposals were received on April 19, 2017. In the opinion of the IEC, and due to project complexity, it will be challenging to award this contract in Q3 2017.
- **Budget:** The project team has announced a reduction in the Module 3 budget (\$30M).



# Interlockings

- Each of the below interlockings achieved a Green reporting status in the December 2016 Traffic Light Report:
  - 34<sup>th</sup> Street Interlocking
  - W 4<sup>th</sup> Street Interlocking
  - Roosevelt Avenue Interlocking
- The Dyre Avenue Line Signal project is delayed by 5 months.
- The IEC is concerned that any additional slippage at Union Turnpike & 71<sup>st</sup> Avenue interlockings could potentially impact the CBTC QBL installation contract.



# Systems & Security Division

Mark Bienstock, P.E.  
Program Officer

Capital Program Oversight Committee

April 2017

MTA New York City Transit



# Systems and Security Division Projects

## Project Name

VHF Radio System Upgrade  
Flushing Line Public Address System  
Help Point  
Passenger Stations Local Area Network (PSLAN)  
B Division Train Arrival  
Bus Radio System  
Bus Command Center

## Phase

Complete  
Construction  
Construction  
Construction  
Construction  
Construction  
Construction





## VHF Radio System Upgrade – W32686

- Awarded: February 10, 2012
- Contractor: Nokia/ALU
- Project Description: This project provided for the delivery and installation of a new VHF radio system for Subways to replace legacy equipment that only operated in wideband mode. The new radio equipment is configured to operate in narrowband mode meeting the FCC mandate.



# VHF Radio System Upgrade – W32686

## Overall Status

Item	Comments
Schedule	Substantial Completion was achieved on December 30, 2016.
Cost	Within Budget of \$221M

## Highlights

Progress	<ul style="list-style-type: none"><li>• Completed FCC mandated narrowband transition of all 114 base stations on 6/30/16.</li><li>• This project achieved Substantial Completion on December 30, 2016.</li></ul>
180 Day Look Ahead	<ul style="list-style-type: none"><li>• Continue with close-out activities.</li></ul>



# Flushing Line Public Address System

- Awarded: December 30, 2016
- Contractor: TC Electric
- Project Description: Furnish and install new Public Address and Customer Information Screens with real time train arrival information on the Flushing Line. Relies on Flushing CBTC for train tracking and arrival information. This project is Module 2 of the ISIM-B Program.



# Flushing Line Public Address System

## Overall Status

Item	Comments
Schedule	Substantial Completion is scheduled for March 2019.
Cost	Total Project Budget is \$53.12M

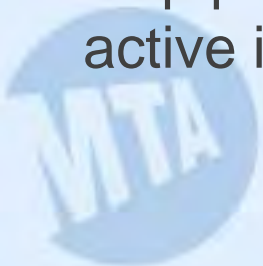
## Highlights

Progress	<ul style="list-style-type: none"><li>• Project Management team under review.</li><li>• Started Field Surveys</li></ul>
180 Day Look Ahead	<ul style="list-style-type: none"><li>• Project Management team approval.</li><li>• Continue Field Surveys</li><li>• Shop drawings review and approval for installation work.</li></ul>

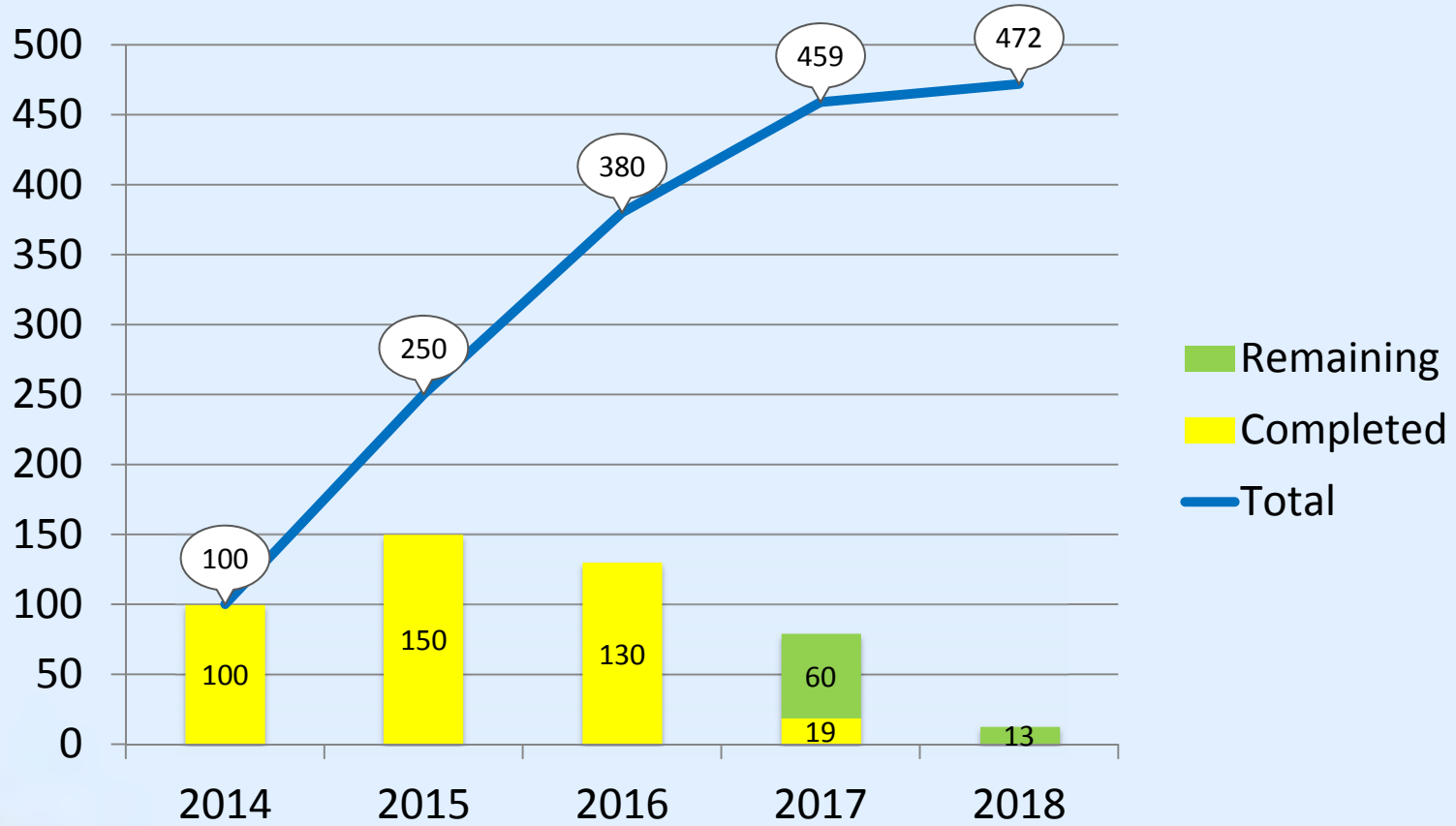


# Help Point

Help Points are a customer communications system for information and emergency reporting. They are highly visible with faster response times & improved audio quality. They also feature induction loop technology for the hearing impaired. An average of 7 help points units are installed in underground stations and 5 units in elevated stations. 2,492 help points units are currently active in 399 stations.



# Help Point Stations



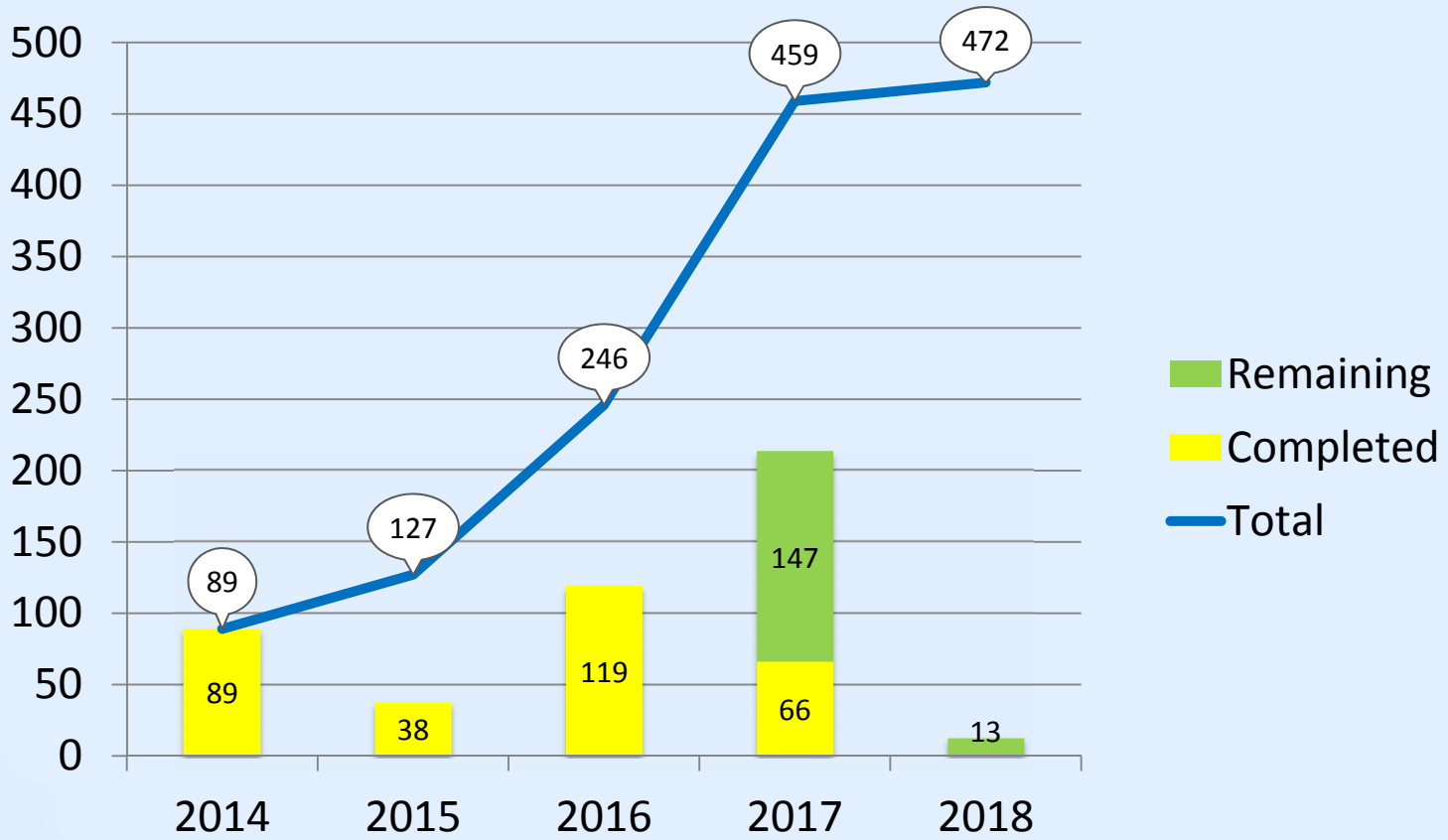
As of April 4, 2017



# Passenger Stations Local Area Network (PSLAN)

The Passenger Station Local Area Network extends the high speed fiber optic data network throughout all passenger stations to support various stations applications. The program consists of 278 partial PSLAN (access nodes installed only in fare control areas), and 194 full PSLAN (access nodes also installed on station platforms).

# Passenger Station LANs



MTA New York City Transit





## B Division Train Arrival – W32800

- Awarded: December 30, 2016
- Contractor: NYCT Department of Subways  
MTA Information Technology  
Transit Wireless, LLC.
- Project Description: This project will install new LCD screens in 271 B Division Subway Stations and display train arrival information.



# B Division Train Arrival – W32800

## Overall Status

Item	Comments
Schedule	Substantial Completion – Plan to expedite by December 2017.
Cost	Within Budget of \$95M

## Highlights

Progress	<ul style="list-style-type: none"><li>• Completed Customer Information Screen designs for 90 underground stations.</li><li>• Completed beacon network design for all underground stations.</li><li>• NYCT installed 100 LCD Screens.</li><li>• Transit Wireless started installation of beacon receiver network.</li><li>• NYCT completed installation of beacons on B Division subway trains.</li></ul>
180 Day Look Ahead	<ul style="list-style-type: none"><li>• Continue LCD screen and beacon receiver installation underground.</li><li>• Start LCD screen and beacon receiver installation aboveground.</li><li>• Continue commissioning train arrival system in stations.</li></ul>



# Second Avenue Subway



MTA New York City Transit



# 63<sup>rd</sup> Street



MTA New York City Transit



## Bus Radio System – W32366

- Awarded: March 2, 2016
- Contractor: Parsons Transportation Group
- Project Description: This project will design, furnish, and install a new digital radio system for NYCT and MTA Bus.



# Bus Radio System W32366

## Overall Status

Item	Comments
Schedule	Substantial Completion forecast is January 2, 2021 – on schedule
Cost	Within Budget of \$272M

## Highlights

Progress	<ul style="list-style-type: none"><li>• Completed surveying of base station sites.</li><li>• Obtained FCC License for 2 Broadway base station site.</li><li>• Preliminary Design Review completed.</li><li>• Critical Design Review achieved on February 28, 2017.</li></ul>
180 Day Look Ahead	<ul style="list-style-type: none"><li>• Update System Integration Plan.</li><li>• Continue with bus equipment surveys.</li></ul>



# Bus Radio System W32366

## Contract Critical Milestones and Issues

Status	Activity	Date Needed	Issues
● Green	Critical Design Review	July 2017	Critical design review was completed on 02/28/2017.
● Green	Factory Acceptance of Base Stations	June 2018	None
● Green	Retrofit and Testing of 200 Buses for Staten Island Pilot	August 2019	Structural remediation needed at East New York Radio Tower to support additional antenna load.
● Green	Retrofit All Remaining Buses	August 2020	None
● Green	Substantial Completion	January 2021	None

●	Red	Significant impacts with potential impacts on Revenue Service Date, Cost, or Customer Benefit Milestones
●	Yellow	Impacts which can lead to cost increases or schedule delays on individual milestones or contracts.
●	Green	No Near Term Impact for Design, Procurement & Construction. Successful management of major activity to stay on schedule or budget.

## Bus Command Center (C-43753)

- Awarded: June 26, 2015
- Contractor: MPCC Corp.
- Project Description: Design and construct a new, modern, secure command center for NYCT and MTA Bus operations.





# Bus Command Center

## Overall Status

Item	Comments
Schedule	Substantial Completion (SC) forecast is November 29, 2017, 78 calendar days beyond the current contractual SC date of September 13, 2017
Cost	Within Budget of \$76.6M

## Highlights

### Progress





- Completed foundation work and steel erection
- Started Installation of concrete wall panels
- Completed roof metal deck and concrete slabs
- Started mechanical, electrical, and plumbing installation work




### 180 Day Look Ahead

- Installation of roofing membrane and green roof
- Complete building enclosure
- Complete installation of major systems (HVAC, Electrical and Fire Alarm)
- Furnish and Install furnishings, fixtures and equipment
- Start testing and commissioning

# Bus Command Center

## Critical Milestones and Issues

Status	Activity	Date Needed	Issues
 Green	Foundations Complete	September 2016	Foundations completed in September.
 Yellow	Steel Erection and Floor/Roof Slabs Complete	April 2017	Bankruptcy of original steel fabrication and erection sub-contractor impacted the schedule.
 Yellow	Building Enclosed and Weather-tight	May 2017	Design issues associated with the approval and fabrication of the concrete wall panels impacted the schedule. We are working with the Contractor to mitigate delays.
 *Yellow	Substantial Completion (SC)	November 2017	The current contractual SC is September 2017. The SC date is forecast for November 2017 due to delays associated with design issues of precast concrete wall panels and anti-graffiti coating. An extension of time is being prepared.

	Red	Significant impacts with potential impacts on Revenue Service Date, Cost, or Customer Benefit Milestones
	Yellow	Impacts which can lead to cost increases or schedule delays on individual milestones or contracts.
	Green	No Near Term Impact for Design, Procurement & Construction. Successful management of major activity to stay on schedule or budget.

\* Revenue Service date for this project is beyond Substantial Completion date

# New Bus Command Center



East New York, Brooklyn  
20,000 ft<sup>2</sup> building footprint

MTA New York City Transit

# New Bus Command Center (Site Photos)



**December 2016**



**January 2017**



**March 2017**



**April 2017**



# April 2017 CPOC IEC Project Review



## NYCT Systems & Security



# Project Status Review NYCT Systems & Security

- Flushing Line Public Address System
- B Division Train Arrival
- Bus Radio System
- Bus Command Center



# Flushing Line Public Address System Schedule and Budget Review

- **Schedule:** 27-month project on schedule for substantial completion by March 2019.
- **Budget:** The project is on budget with Construction Contract within engineer estimates.



# B-Division Train Arrival System Schedule & Budget Review

- **Schedule:**
  - Project is proceeding on Schedule
  - Transit is working on plan to meet accelerated delivery schedule for all 271 stations
  - Intent is to go in-service on line-by-line basis
- **Budget:**
  - Project is within Budget (\$93M)





# B-Division Train Arrival System IEC Observations

- Predicted train arrival accuracy is based on real time information provided by RTO personnel
- Close coordination between internal resources and Transit Wireless is necessary to achieve the accelerated rollout schedule
  - Development of an integrated project schedule would be helpful



# Bus Radio System Schedule & Budget Review

- **Schedule:** Substantial completion date is January 2021 and the project is currently on schedule to meet this date.
- **Budget:** The IEC concurs that the project is within the budget of \$272M.



# Bus Radio System IEC Observations

- Critical Design review performed ahead of schedule.
- As reported by the project Team;
  - Existing East New York tower
    - Required for the pilot program (critical path).
    - Structural remediation and repair is required based on a structural analysis performed by the contractor. The construction work should commence this year as to not affect pilot rollout.
- Interim Milestones may be challenging.



# Bus Command Center Schedule & Budget Review

- **Schedule:**
  - As reported, the current schedule submitted by the contractor shows a delay of 78 calendar days from September 13, 2017 to November 29, 2017.
  - Upon a review by the IEC of the contractors latest milestone schedule, the IEC agrees with NYCT's current completion forecast.
- **Budget:**
  - The project is within budget with sufficient contingency remaining to complete the project.



# Bus Command Center IEC Observation

This project is forecast to be complete in sufficient time to support the installation of the Bus Radio System.



MTA Agency: New York City Transit

Risk Assessment Report Date: October 20, 2016

Project Name: NYCT Canarsie Tunnel Rehabilitation

Status of Project when Risk Assessment was Performed: Pre-Award

**Project Description**

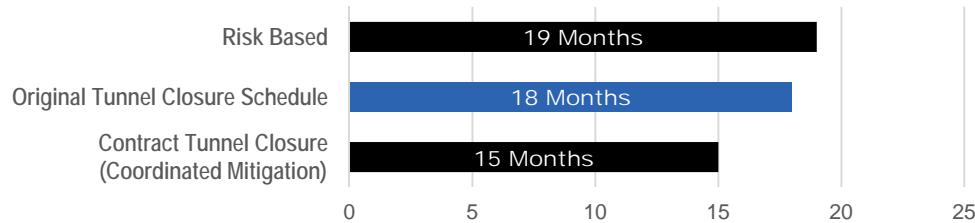
This project provides for rehabilitation and upgrading of the New York City Transit's (NYCT) L Line Canarsie tunnel facilities from 1<sup>st</sup> Avenue Station in Manhattan to Bedford Avenue Station in Brooklyn. A critical aspect of the project is to not exceed the 15 months planned for the tunnel closure and service outage that has been publically announced.

**Risk Assessment Findings**

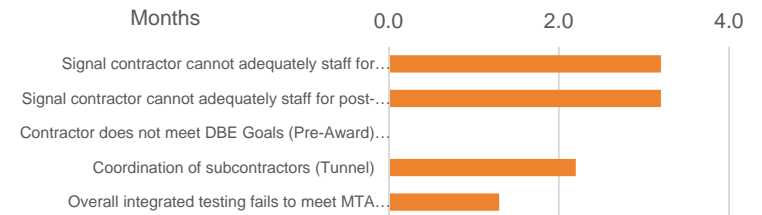
This report addresses the risk duration for the tunnel closure only. However, the risk cost is shown for the overall project. The risk assessment was conducted prior to the negotiation of the Canarsie project. Based on the Risk Assessment results at the 80% Confidence Level, the mitigated Risk-Informed duration for the tunnel closure was 19 months, 1 month variance from the project baseline schedule duration of 18 months. The project risk informed cost at the 80% Confidence Level was \$1163 M, \$280 M above the project budget of \$883 M. The RFP process facilitated a coordinated mitigation with the contractor which yielded favorable results of a 15 months duration for the tunnel closure and a final project cost of \$855 M, including contingency and risk reserve. The contractor accepted a \$410 K/day LDs on the tunnel closure milestone and \$62 K/day LDs on the project Substantial Completion milestone. The project was awarded April 13, 2017, to Judlau OHL Group/TC Electric Joint Venture.

**Risk Informed Cost and Schedule Results**

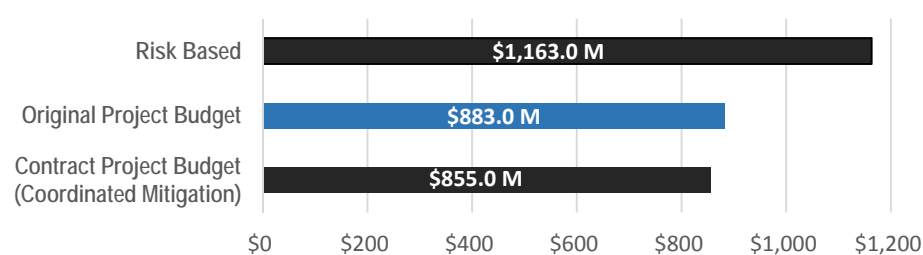
**Risk Informed Milestone for Tunnel Closure Duration @ 80% vs. Baseline Schedule**



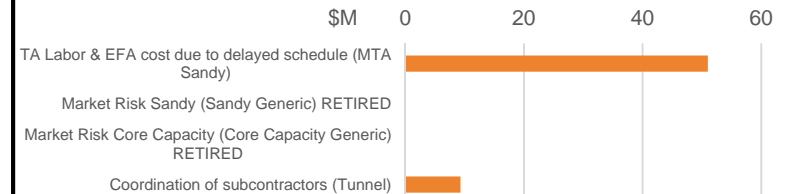
**Top Schedule Risks (Relative Contribution)**



**Overall Project Cost @ 80 % Risk Informed Project Costs**



**Top Cost Risks (Relative Contribution)**





## Summary of Major Schedule Risks &amp; Mitigations

Risks	Mitigation Measure	Resources Required	Time Frame for Mitigation
<b>Top Schedule Risks</b>			
Signals contractor cannot adequately staff for system reprogramming to restart service (Tunnel)	Signals contractor ensures required technicians available to perform system reprogramming when needed. Timely coordination between CM, Signals contractor & NYCT Signal Group established and maintained leading up to the critical CBTC work to restart service.	NYCT CM and Consultant CM	Tunnel completion.
Signals contractor cannot adequately staff for post-award CBTC (GO's)	Timely coordination between CM, Signals contractor & NYCT Signal Group established for the critical post-award CBTC work.	NYCT CM and Consultant CM	Tunnel completion.
Coordination of subcontractors	Installations among subcontractors to be properly scheduled and arranged coordination drawings and shop drawing submittals accurately prepared and approved	NYCT, design consultant, consultant CM, Contractor and Subcontractors	Award to substantial completion.
Overall integrated testing fails to meet MTA requirements (Tunnel).	Coordination of CM, Contractor and NYCT forces to conduct appropriate installation quality and equipment pre-testing in order to avoid unexpected problems with testing and commissioning.	NYCT PM, CM and Contractor	Award through tunnel replacement completion.
Contractor does not meet DBE Goals (Pre-Award) RETIRED	Contractor agreed to goals	N/A	Award



**Summary of Major Cost Risks & Mitigations**

Risks	Mitigation Measure	Resources Required	Time Frame for Mitigation
<b>Top Cost Risks</b>			
TA Labor & EFA cost due to delayed schedule (MTA Sandy)	Contractor commitment to schedule Liquidated Damages associated with delay Closely Monitor and support Contractor progress	NYCT and consultant CM	Project Duration
Market Risk Sandy (Sandy Generic) RETIRED	Contract awarded at fixed price	N/A	Procurement
Market Risk Core Capacity (Core Capacity Generic) RETIRED	Contract awarded at fixed price	N/A	Procurement
Coordination of subcontractors (Tunnel)	Installations among subcontractors to be properly scheduled and arranged Coordination drawings and shop drawing submittals accurately prepared and approved Conflicts of subcontractors activities cause delays and/or rework.	NYCT, design consultant, consultant CM, Contractor and Subcontractors	Award to substantial completion





MTA Agency: MTA Capital Construction

Risk Assessment Report Date: July 2016

Project: East Side Access CQ033- Midday Storage Yard

Status of Project (at time of assessment): Procurement

**Project Description**

The CQ033 contract is for the construction of a Midday Storage Yard for storage of Long Island Railroad (LIRR) equipment. The work includes demolition and removal of existing structures and utilities including the railroad bridge; preparation of the yard site for installation of rail, signal, power and communication systems and associated new buildings.

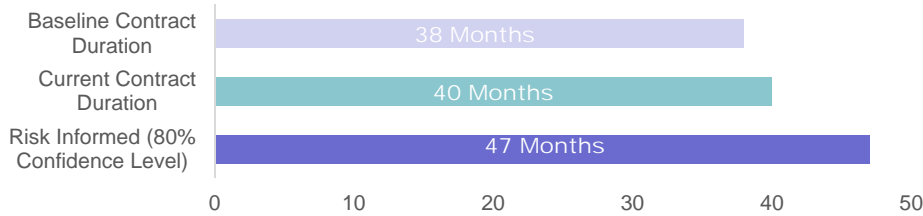
**Risk Assessment Findings**

The Risk Assessment results show that for the 80% Confidence Level, the contract may take up to 47 months, adding 9 months to the risk baseline schedule duration of 38 months. As part of risk informed decision, the contract duration was subsequently reviewed and revised to 40 months.

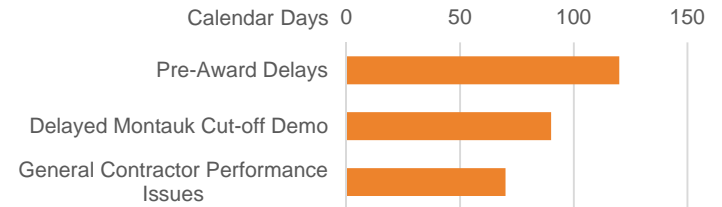
The Risk Assessment results also show that for 80% Confidence Level, the project may cost up to \$305 million including 10% Pre-Bid and 7% Post-Bid Contingency. The baseline cost estimate at the time of the risk assessment was \$286 million, which includes 5% Pre-Bid and 5% Post-Bid contingency, and is \$19 million below the risk informed cost. The project budget was subsequently reviewed and revised to account for additional scope (\$12 million) and market conditions (\$10 million). The revised project budget is now \$308 million which includes 5% Post-Bid Contingency. Both cost and schedule results are mitigated.

**Risk Informed Cost and Schedule Results**

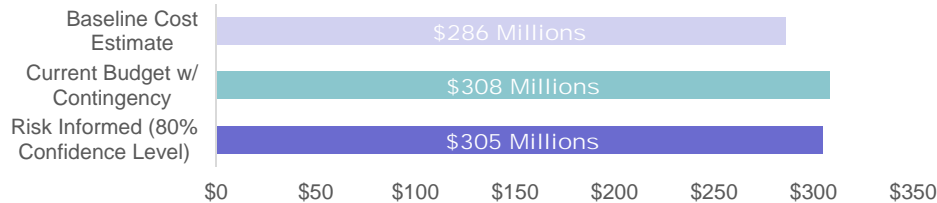
**Schedule Results**



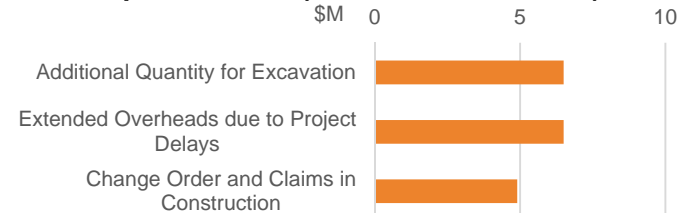
**Top Schedule Risks (Relative Contribution)**



**Cost Results**



**Top Cost Risks (Relative Contribution)**





## Summary of Major Schedule and Cost Risks &amp; Mitigations

Risks	Mitigation Measure	Time Frame for Mitigation
<b>Top Schedule Risks</b>		
Pre-Award Delays	<p><b>Delayed NYSDOT Design Variance approvals:</b> During the risk assessment, it was identified that the approval of some variances requested by LIRR are taking longer than planned. This delayed the advertising date and to mitigate any further delay, the Project advertised the contract without approved variances, while the MTA worked with NYSDOT to obtain approval in time for bid opening.</p> <p><b>Delayed design and MTA Legal approvals:</b> During the bid period, the project worked to expedite addendum process and responses to contractor questions.</p>	Procurement (Realized/ Mitigated)
Delayed Montauk Cut-off Demo:	<p><b>Missed or unavailable general outages:</b> 3 each, 55 hour outages specific to the Montauk Cut Off Demo are planned and opportunities to piggy back onto scheduled weekly maintenance outages are also identified.</p> <p><b>Delayed LIRR/ Amtrak approval:</b> ESA provided the railroads with a recommended work sequence for their concurrence. After railroad concurrences, ESA added appropriate contract language to reflect railroad comments and/or requirements.</p>	Early Construction
General Contractor Performance Issues	Contract documents require the Contractor to establish, implement and maintain a Contractor Quality Program (CQP) that meets FTA requirements and they are to perform all work in accordance with the CQP. The MTA will proactively audit the Contractor to ensure compliance with the CQP. In addition, the MTACC Project management team have focused upon the need for contractor staff to have adequate experience working in this type of environment and will be requiring the contractor to provide appropriate management resources and experienced staff.	Project Duration
<b>Top Cost Risks</b>		
Additional Quantity for Excavation	Additional excavation above the quantities shown on the drawings were known. A geotechnical investigation of the site was performed to quantify the magnitude. The cost of additional excavation was added to budget as an allowance.	Procurement (Mitigated)
Extended Overheads due to project delays	The cost exposure is due to extended overheads associated with project delays coming from schedule risks. ESA added a series of milestones in other contracts to vacate the site so that the contractor can start timely once it is onboard. The Project Team will focus primarily on schedule risks which drive cost growth.	Project Duration
Change Order and Claims in Construction	Building Information Modeling (BIM) has been developed in an attempt to reduce the potential for issues. Earlier detection of different field conditions has advanced the decision process, minimizing cost and schedule delays.	Project Duration

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# **MTA Capital Program Commitments & Completions**

## **through March 31, 2017**

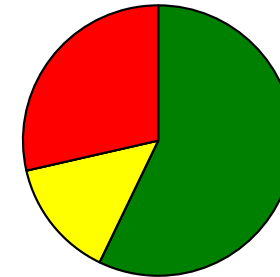
### Capital Projects – Major Commitments – March 2017

In 2017, agencies plan a total of \$7.3 billion in overall commitments with 51 major commitments planned.

Through March, agencies committed \$1.1 billion versus a \$1.4 billion YTD goal. Eight major commitments were made on time and four remain delayed including three NYCT projects (Structural Repairs/4<sup>th</sup> Ave, B-Division Beacons Train Arrival System, and Mainline Track & Switches) and one LIRR commitment (PTC force account). Two other commitments were late, but have now been made: the LIRR's track program and a district office award for MTA PD. All delays are explained on the following pages. In addition, the LIRR committed \$100 million for the Moynihan Train Hall (this commitment was not part of the original 2017 goals).

The MTA forecasts meeting or exceeding its end of year \$7.3 billion commitment goal.

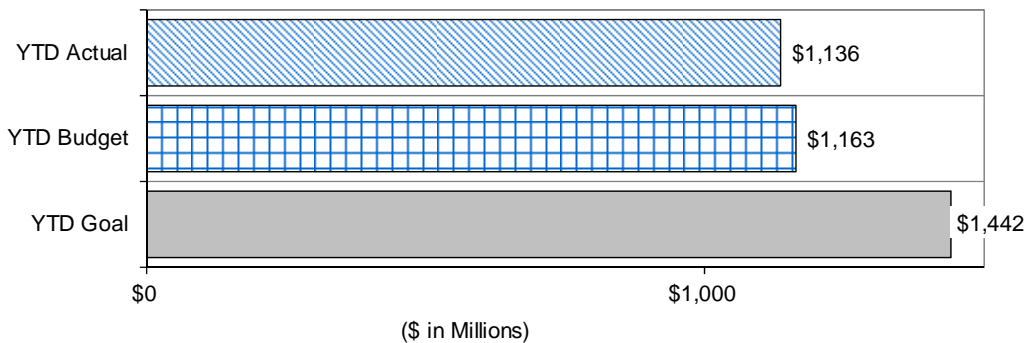
### Year-to-Date Major Commitments



	Count	Percent	Change from Prior Month
<b>GREEN</b> = Commitments made/forecast w/in Goal	<b>8</b>	<b>57%</b>	↑ 4
<b>YELLOW</b> = Commitments delayed beyond Goal (already achieved)	<b>2</b>	<b>14%</b>	↑ 2
<b>RED</b> = Commitments delayed beyond Goal (not yet achieved)	<b>4</b>	<b>29%</b>	↓ 1
<b>Total</b>	<b>14</b>	<b>100%</b>	<b>↑ 5</b>

### Budget Analysis

2017 Annual Goal	\$7,280	(\$ in millions)
2017 Forecast	105%	of Annual Goal
Forecast left to Commit	85%	(\$6,503)



### Year-to-Date Agency Breakdown

2017 Goals	Prior month variance		
	GREEN	YELLOW	RED
<b>New York City Transit</b>			
1 3	—	—	+1 RED
<b>Long Island Rail Road</b>			
1 1	—	+1 YELLOW	-1 RED
<b>Metro-North Railroad</b>			
1	—	—	—
<b>Bridges and Tunnels</b>			
6	+4 GREEN	—	—
<b>Capital Construction Company</b>			
	—	—	—
<b>MTA Bus Company</b>			
	—	—	—
<b>MTA Police Department</b>			
1	—	+1 YELLOW	-1 RED

## Capital Projects – Major Commitments – March 2017 – Schedule Variances

Project	Commitment	Goal	Forecast
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### 4 All-Agency Red Commitments (1 new this month)

#### NYCT

##### Line Structures

Structural Repairs / 4th Ave	Construction Award	Feb- 17	Apr- 17
		\$84.4M	\$84.4M

Bids have been taken and the project award is delayed due to NYCT budget adjustment procedures resulting from a high bid (goal includes the impact of the higher bid).

##### Signals & Communications

B- Division Beacon Train Arrival System, Phase 2	Construction Award	Feb- 17	Apr- 17
		\$70.0M	\$70.0M

Delayed pending funding allocation

##### Track

<b>Mainline Track &amp; Switch Program (18 Projects) - 1st Qtr (New Item)</b>	Construction Award	Mar- 17	May- 17
		\$217.8M	\$217.8M

2017 Yard Track (\$2.3M) and 2017 Yard Switches (\$3.7M) remain to be awarded. The 2017 Yard Track & Switch projects were delayed due to attention on other priorities including meeting obligations in the 2015- 2016 Track & Switch Mainline projects and commencing the 2017 Mainline Track & Switch program. In addition, inclement weather conditions during the 1st Qtr prevented working in the yards.

#### LIRR

##### Commuications and Signals

Positive Train Control	Force Account	Feb- 17	Nov- 17
		\$49.1M	\$49.1M

\$28.9 million was committed in March with the balance to be awarded by November 2017.

Funding for force account activities have been adjusted based on updated cash flow needs and not all funding needed to be committed in March. The overall PTC beneficial use date is unaffected and remains 12/2018.

## Capital Projects – Major Commitments – March 2017 – Schedule Variances

Project	Commitment	Goal	Actual
---------	------------	------	--------

### 2 All-Agency Yellow Commitments (2 new this month)

#### LIRR

##### Track

<b>2017 Track Program (New Item)</b>	Construction Award	Feb- 17 \$75.0M	Mar- 17 (A) \$75.0M
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Full administrative reviews and approvals had not been concluded by the end of February and full commitment was delayed until March.

#### MTA PD

<b>Nassau County District Office (New Item)</b>	Construction Award	Feb- 17 \$7.0M	Mar- 17 (A) \$7.0M
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A lease was signed with the property owner in February. Administrative reviews and procedures to award the project have delayed forecast award to March.

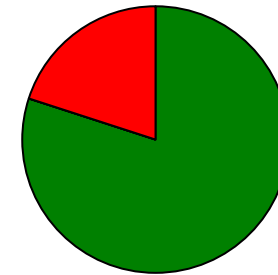
### Capital Projects – Major Completions – March 2017

In 2017, agencies plan a total of \$5.0 billion in overall completions with 34 major completions planned.

Through March, agencies have completed \$382 million versus a \$482 million YTD goal. Four major completions were achieved on time; two in January and two in March. One major completion is delayed (the LIRR’s Escalator Replacement Program project) and explained on the following page.

The year-to-date shortfall is mostly due to several smaller completions at NYCT which are delayed, but forecast for completion later in the year. By year-end, the MTA forecasts meeting or exceeding its \$5.0 billion goal.

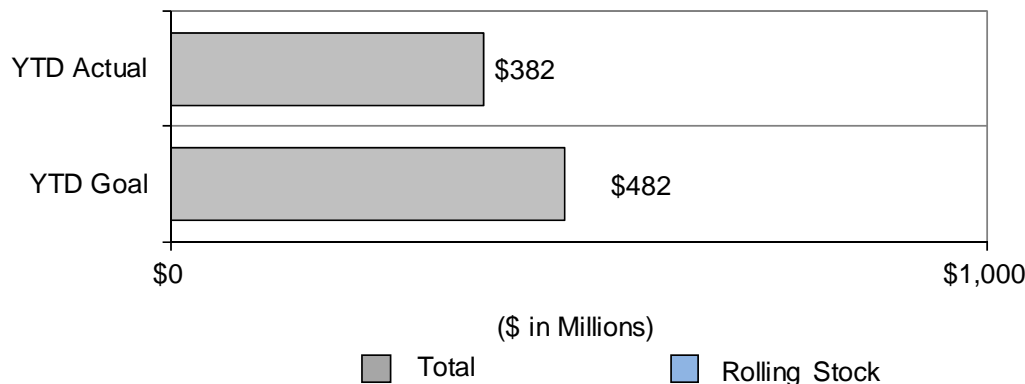
### Year-to-Date Major Completions



	Count	Percent	Change from Prior Month
<b>GREEN</b> = Completions made/forecast within Goal	4	80%	↑ 2
<b>YELLOW</b> = Completions delayed beyond Goal (already achieved)	0	-	-
<b>RED</b> = Completions delayed beyond Goal (not yet achieved)	1	20%	↑ 1
<b>Total</b>	<b>5</b>	<b>100%</b>	<b>↑ 3</b>

### Budget Analysis

2017 Annual Goal \$4,970 (\$ in millions)  
 2017 Forecast 102% of Annual Goal  
 Forecast left to Complete 92% (\$4,701)



### Year-to-Date Agency Breakdown

2017 Goals	Prior month variance		
	GREEN	YELLOW	RED
<b>New York City Transit</b>			
2	+1 GREEN	----	----
<b>Long Island Rail Road</b>			
2 1	+1 GREEN	----	+1 RED
<b>Metro-North Railroad</b>			
	----	----	----
<b>Bridges and Tunnels</b>			
	----	----	----
<b>Capital Construction Company</b>			
	----	----	----
<b>MTA Bus Company</b>			
	----	----	----
<b>MTA Police Department</b>			
	----	----	----

## Capital Projects – Major Completions – March 2017 – Schedule Variances

Project	Completion	Goal	Forecast
<b>1 All-Agency Red Completions (1 new this month)</b>			
<b>LIRR</b>			
<i>Stations</i>			
<b>Escalator Replacement Program</b>	Construction Award	Mar-17 \$11.2M	Apr-17 \$10.5M
Delay due to a testing issue at Baldwin Station.			



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# **MTA Capital Program Commitments & Completions Quarterly Report of Prior Years' Delays**

### Prior Years' Major Commitments – Quarterly Update: March 2017

The status of 2014, 2015 and 2016 major commitments delayed beyond 2016 are tracked until committed and reported to CPOC quarterly.

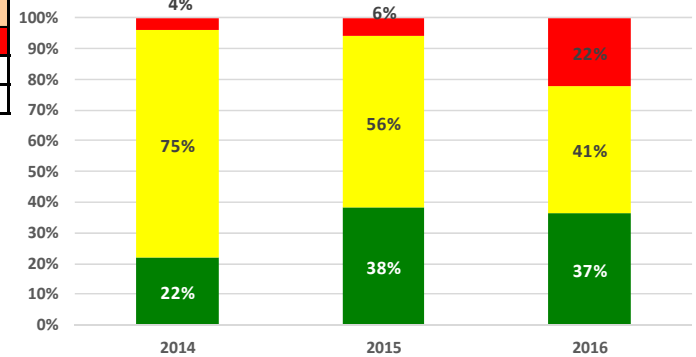
In 2014, agencies set an overall MTA commitments goal of \$6.5 billion including 55 major commitments. In 2014, \$5.8 billion was committed, including 39 major commitments. Of the 16 major commitments that slipped from 2014, nine were made in 2015 and seven slipped beyond 2015. Five of these commitments were made in 2016. The remaining two projects will continue to be tracked as part of this report. To date, \$7.1 billion has been committed against the original \$6.5 billion goal.

In 2015, agencies set an overall MTA commitments goal of \$3.2 billion including 34 major commitments. In 2015, 25 major commitments totaling \$2.9 billion were made. Nine major commitments slipped beyond 2015 and seven achieved in 2016. Two remain delayed and are forecast for award in 2017. To date, \$3.1 billion has been committed against the original \$3.2 billion goal.

In 2016, agencies set an overall MTA commitments goal of \$6.6 billion including 41 major commitments. In 2016, 27 major commitments totaling \$5.0 billion were made. Fourteen major commitments are now forecast for 2017 with five achieved so far in 2017.

Actual		MTA-Wide Prior Years' Major Commitments													Post 2017	
Goal	Total	On Time	Achieved Late	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	
2014	55	12	41								1					1
2015	34	13	19						1		1					
2016	41	15	12	1	1	3	3	2	1		1				2	

% of Project Status by Year



This chart tracks when all major commitments are forecast/achieved versus original goal, starting with those that were committed within 2014, 2015 and 2016, followed by those that slipped beyond 2016. Green represents projects that were achieved on-time, yellow represents projects that were delayed but have since been committed, and red represents projects that are still delayed. Projects that are red will become yellow when they are committed.

**GREEN** = Commitments made/forecast w ithin Goal      **YELLOW** = Commitments delayed beyond Goal (already achieved)      **RED** = Commitments delayed beyond Goal (not yet achieved)

**Prior Year Major Commitments – March 2017– Schedule Variances**
**Actual Results Shaded**

Project	Commitment	Goal	Forecast
<b>13 All-Agency Red Commitments</b>			
<b>NYCT</b>			
<i>Stations</i>			
ADA: Phase 2: 57 Street - 7 Avenue / Broadway	Construction Award	Nov-14 \$35.9M	Aug-17 \$73.2M
Project schedule slipped due to existing ducts in the vicinity of excavation which impact design completion schedule. The design schedule was further delayed due to the need to study alternatives for providing ADA access to the 57th Street Station. Design of new scheme started in September 2015. Project cost increased reflecting estimates of the new design scheme.			
ADA: 68 St- Hunter College / Lexington	Construction Award	Sep-16 \$66.8M	Aug-17 \$116.3M
Award Schedule impacted pending resolution of Real estate issues. Project cost increased due additional scope that resulted in additional architectural , structural, electrical and utility relocation work.			
Renew Five Astoria Line Stations	Construction Award	Dec-16 \$71.5M	Jun-17 \$8.7M
Four of the stations are combined into package #2 of the Enhanced Stations Initiative and will be reported in the ESI program. The remaining station is scheduled for award in June.			
<i>Sandy Recovery &amp; Mitigation</i>			
Sandy: 148th Yard Long- Term Perimeter Protection & Power Cable	Construction Award	Dec-16 \$135.1M	Aug-17 \$124.9M
Award continued to be delayed to accommodate MTA Real estate property acquisition. Design was delayed further to proceed with 500 year storm design and provide Cat 2 + 3' resiliency for tower.			
Sandy Repairs: Rutgers and Cranberry Tubes	Construction Award	Jun-14 \$154.M	Feb-22 \$165.M
Award of the tubes is done via separate contracts. The Cranberry tube contract awarded in December 2014 while the Rutgers tube was rescheduled to 2022 due to construction sequencing of the tubes. Project cost increased reflecting unfavorable bids received for Cranberry contract.			

Project	Commitment	Goal	Forecast
<b>NYCT (Continued)</b>			
Sandy: 207th Yard Perimeter Protection & Power Cable	Construction Award	Oct-16 \$222.7M	Dec-17 \$196.3M
NYCT continues to work to resolve issues with NYC DEP regarding the perimeter protection design.			
Sandy Canarsie Tube Restoration & Core Capacity Improvements	Construction Award	Nov-16 \$883.3M	Apr-17 \$739.6M
Project delayed to April to seek Board approval for the award. Project cost does reflects only partial funding for support costs. Full funding will be reported upon agreement on allocations of Sandy and Core projects			
<i>Work Equipment</i>			
Work Train & Special Equipment: 54 Flat Cars	Purchase Award	Dec-15 \$33.5M	Jun-17 \$33.5M
Award re- scheduled to December 2016 due to funding constrains. This project was not considered for priority funding in the first half of 2016. Procurement is working on the Authorization Resolution for the Board approval to proceed with the RFP process. Procurement is finalizing its review of the technical specification.			
<b>LIRR</b>			
<i>Stations</i>			
Nostrand Avenue Station	Construction Award	Nov-16 \$21.0M	Apr-17 \$15.7M
Reflects ongoing Procurement process			

**Prior Year Major Commitments – March 2017– Schedule Variances**
**Actual Results Shaded**

Project	Commitment	Goal	Forecast
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**MNR**
**Signals & Communications**

Positive Train Control	Construction Award	Dec-16	May-17
		\$57.0M	\$57.0M

The design of the radio communications was delayed due to radio coverage issues therefore delaying the installation construction which which was rescheduled to be awarded in March 2017. Due to an unfavorable bid the contract is to be re-bid and the award has now been rescheduled to May 2017. \$46.7m of the original goal has been committed to date.

Positive Train Control	Construction Award	Dec-16	May-17
		\$45.3M	\$45.3M

The design of the radio communications was delayed due to radio coverage issues therefore delaying the installation construction which which was rescheduled to be awarded in March 2017. Due to an unfavorable bid the contract is to be re-bid and the award has now been rescheduled to May 2017. \$17.1m of the original goal has been committed to date.

**MTACC**
**East Side Access**

Mid-Day Storage Yard (CQ033)	Construction Award	Nov-16	Apr-17
		\$266.0M	\$299.7M

Additional time required for extended review process and delay in completion of design documents. Budget updated to reflect new estimate.

**MTA PD**
**Communications**

Penn Station / Atlantic Tunnel Radio Upgrade	Construction Award	Dec-16	Dec-17
		\$25.0M	\$25.0M

The schedule delay is due to ongoing MOU negotiations between users of the radio system as well as for considerations of other possible upcoming construction work at Penn Station external to this project.

Project	Commitment	Goal	Actual
---------	------------	------	--------

**5 All-Agency Yellow Commitments (5 new this quarter)**
**NYCT**
**Sandy Recovery & Mitigation**

<b>Sandy Mitigation: 7 Stations (8 Stns M/Q/Bx Initiative) (New Items)</b>	Construction Award	May-16	Mar-17 (A)
		\$96.3M	\$53.9M

Scope includes Internal Station Hardening. Delayed advertisement resulted in delayed bid opening. Bids received on January 25th. Bid protest was submitted but denied on 2/24.

<b>Sandy Mitigation: 9 Stations (9 Stns BK/Q Initiative) (New Item)</b>	Construction Award	Jun-16	Mar-17 (A)
		\$100.7M	\$56.3M

Delay in advertisement postponed award. This was the result of additional time required for design phase drawing, spec and contract document approvals.

**Power**

<b>Power Upgrade: RCC, PCC (New Item)</b>	Construction Award	Jul-16	Jan-17 (A)
		\$50.2M	\$55.5M

Project awarded in January. Project cost increased reflecting unfavorable bid

**MNR**
**Track**

<b>Rock Slope Remediation (West of Hudson) (New Item)</b>	Construction Award	Dec-16	Feb-17 (A)
		\$15.0M	\$10.0M

Due to a protracted procurement the construction award was delayed until February 2017. Actual commitment is lower than the forecasted due to a favorable low competitive bid for construction.

**B&T**

<b>Installation of Fire Standpipe and Upgrade of Fire Protection System (New Item)</b>	Construction Award	Dec-16	Mar-17 (A)
		\$17.0M	\$19.4M

The delay was attributable to previously outstanding compliance with reporting obligations which have since been resolved.

## Prior Years' Major Completions – Quarterly Update: March 2017

The status of 2014, 2015 and 2016 major completions delayed beyond 2016 are tracked until achieved and are reported to CPOC quarterly.

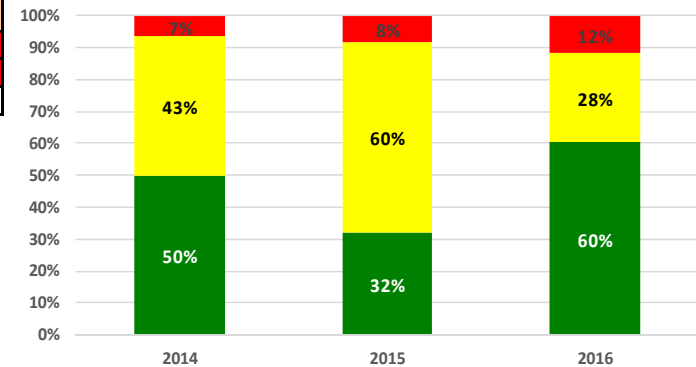
In 2014, agencies set an overall MTA completions goal of \$5.7 billion including 46 major completions. In 2014, \$4.5 billion was completed, including 28 major completions. Of the 18 major completions that slipped from 2014, nine were made in 2015 and nine slipped beyond 2015. Since 2015, six of these completions were achieved in 2016. The remaining three projects are forecast for completion in 2017 and 2018. To date, \$6.4 billion has been completed against the original \$5.7 billion goal.

In 2015, agencies set an overall MTA completions goal of \$2.6 billion including 25 major completions. In 2015, 19 major completions totaling \$2.1 billion were made. The remaining six major completions slipped beyond 2015 and four of the six were achieved in 2016. Two remain delayed and are forecast beyond 2017. To date, \$2.2 billion has been completed against the original \$2.6 billion goal.

In 2016, agencies set an overall MTA completions goal of \$4.6 billion including 43 major completions. In 2016, 36 major completions totaling \$4.1 billion were made including several MTACC contracts associated with 2<sup>nd</sup> Ave Subway Phase 1 which achieved beneficial use in December 2016. The seven remaining major completions are forecast for 2017 with two achieved so far in 2017.

Actual Goal	MTA-Wide Prior Years' Major Completions													Post 2017		
	On Time	Achieved Late	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17		Dec-17	
Total	114															
2014	46	23	20					1	1							1
2015	25	8	15													2
2016	43	26	10	1	1		2	1	2							

% of Project Status by Year



This chart tracks when all major completions are forecast/achieved versus original goal, starting with those that were completed within 2014, 2015 and 2016, followed by those that slipped beyond 2016. Green represents projects that were achieved on-time, yellow represents projects that were delayed but have since been completed, and red represents projects that are still delayed. Projects that are red will become yellow when completed.

**GREEN** = Completions made/forecast within Goal      **YELLOW** = Completions delayed beyond Goal (already completed)      **RED** = Completions delayed beyond Goal (not yet achieved)

## Prior Year Major Completions – March 2017– Schedule Variances

Project	Completion	Goal	Forecast	Project	Completion	Goal	Forecast
<b>10 All-Agency Red Completions</b>				<b>MNR</b>			
<b>NYCT</b>				<b>Grand Central Terminal</b>			
<b>Stations</b>				GCT Leaks Remediation	Construction Completion	Dec-16	Jun-17
SIR: Station Construction Arthur Kill	Construction Completion	Aug-16	May-17			\$18.6M	\$18.6M
		\$23.2M	\$24.M	Due to unforeseen deteriorated structural steel and existing conditions that differ from the contract drawings the project completion has been rescheduled for June 2017.			
The current delay is for the demolition of the adjacent Nassau and Atlantic Stations which will be replaced by Arthur Kill. The platforms will be removed under upcoming weekend GOs. Substantial Completion will be declared after this is complete.				<b>MTA Bus</b>			
<b>ADA &amp; Station Renewal at Ozone Park- Lefferts Blvd/ LIB</b>				<b>Bus Company Projects</b>			
ADA & Station Renewal at Ozone Park- Lefferts Blvd/ LIB	Construction Completion	Aug-16	Apr-17	Security Upgrades - Rockaway and Baisley Park	Construction Completion	Sep-16	Apr-17
		\$23.9M	\$23.5M			\$9.9M	\$9.9M
Project delayed due Gutter Support Design Modification at the East End. Contractor has requested time extension for this work.				Delay due to ongoing negotiations for remaining AWOs.			
<b>Depots / Rolling Stock</b>				<b>MTACC</b>			
<b>AVLM: Paratransit - 2,273 Vehicle</b>				<b>East Side Access</b>			
AVLM: Paratransit - 2,273 Vehicle	Purchase	Dec-14	Jun-17	Plaza Substation and Structures (CQ032)	Construction Completion	Aug-16	Jun-17
		\$35.8M	\$37.0M			\$250.2M	\$257.7M
Delays due to deployment of new servers to meet agency- wide operating system compliance and to prewire an additional 433 paratransit vehicles. The project was further delayed due to server consolidation and the procurement of a modification for additional consultant work.				Substantial completion date delayed to reflect additional Con Ed utility work at the yard services building and associated as- built's required.			
<b>Signals and Communications</b>				GCT Councourse Finishes Early Work			
PA/CIS at 45 Stations - Install Cable	Construction Completion	Dec-15	Jan-18	Construction Completion		Apr-14	May-17
		\$56.1M	\$56.1M			\$56.7M	\$58.0M
Project delayed to 2018 due to slow progress of work. In- house forces were diverted to address other safety sensitive projects.				Delay due to substantial SCADA (supervisory control and data acquisition) redesign work. Delays in the delivery of the medium voltage switchgear has delayed forecasted substantial completion. Additionally, a facility control room leak has developed and mitigation is required. Current delay due to productivity being lower than expected.			
<b>LIRR</b>							
<b>Signals and Communications</b>							
Centralized Traffic Control	Construction Completion	Jun-15	May-18				
		\$12.9M	\$12.9M				
As a result of a re- evaluation of the Theater Operations, it was determined that a re- design of the Theater is necessary.							
<b>Power</b>							
F Circuit Breaker House	Purchase	Oct-14	Feb-18				
		\$7.2M	\$7.2M				
Project on- hold pending power load study.							

## Prior Year Major Completions – March 2017– Schedule Variances

*Actual Results Shaded*

Project	Completion	Goal	Actual
<b>2 All-Agency Yellow Completions (2 new this quarter)</b>			
<b>NYCT</b>			
<i>Stations</i>			
<b>Replace 11 Hydraulic Elevators (New Item)</b>	Construction Completion	Aug-16 \$24.M	Feb-17 (A) \$24.2M
Project completion was delayed due to scope changes including the redesign of the electrical distribution room (EDR), exterior wall panel, ramp work, and various communications issues.			
<i>Track</i>			
<b>2016 Annual Track Program (New Item)</b>	Construction Completion	Dec-16 \$17.6M	Jan-17 (A) \$17.6M
Completion delayed due to December snowstorm that prevented completion of the final crossing.			

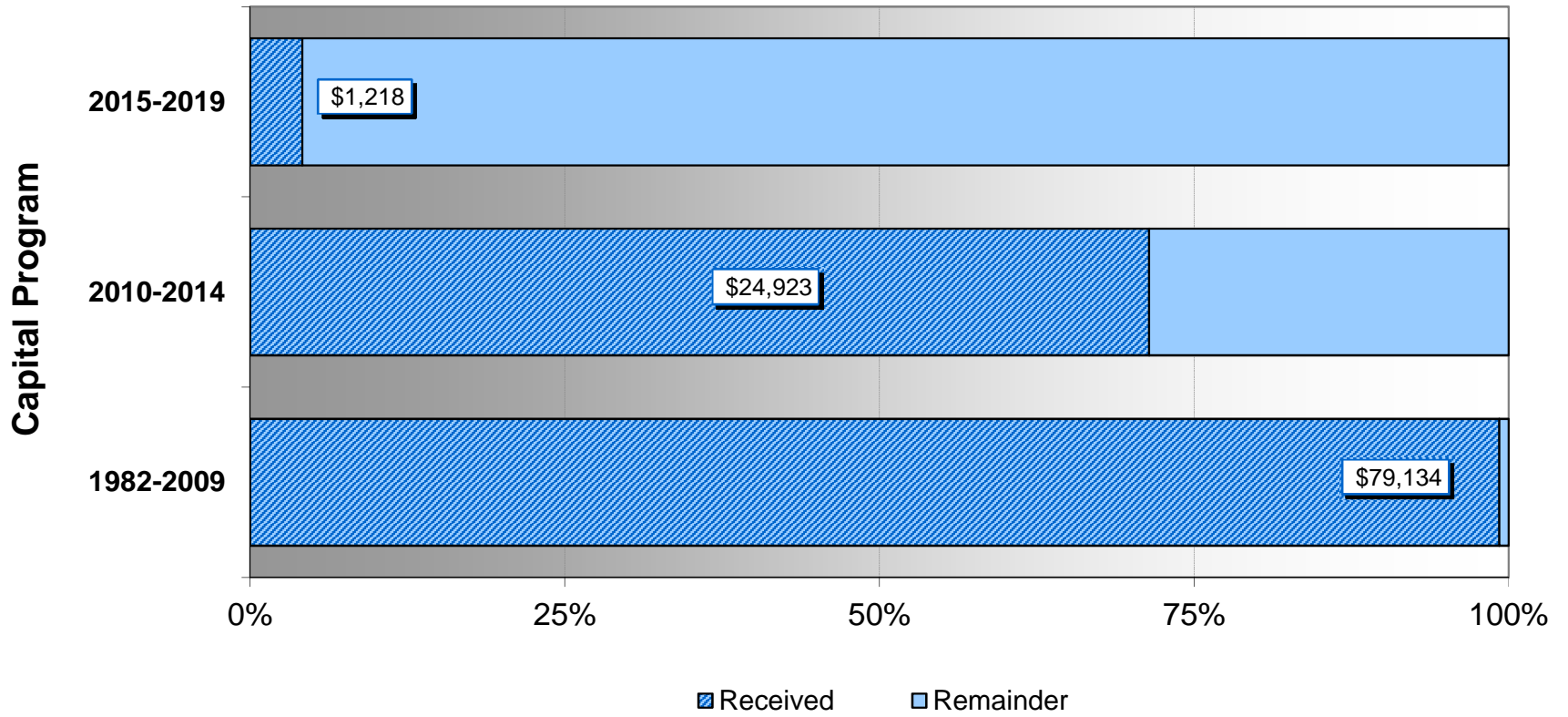
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## Status of MTA Capital Program Funding



# Capital Funding (March 31, 2017)

\$ in millions



## Capital Funding Detail (March 31, 2017)

\$ in millions

	Funding Plan	Receipts		
	Current	Thru February	This month	Received to date
<b>2005-2009 Program</b>	24,504	23,916	\$3	23,919

	Funding Plan	Receipts		
	Current	Thru February	This month	Received to date
<b>2010-2014 Program</b>				
Federal Formula, Flexible, Misc	\$5,839	\$5,614	\$ -	\$5,614
Federal High Speed Rail	295	295	-	295
Federal Security	206	100	-	100
Federal RIFF Loan	-	-	-	-
City Capital Funds	774	607	-	607
State Assistance	770	150	250	400
MTA Bus Federal and City Match	132	103	-	103
MTA Bonds (Payroll Mobility Tax)	12,703	10,754	-	10,754
Other (Including Operating to Capital)	1,538	1,432	-	1,432
B&T Bonds	2,111	1,916	-	1,916
Hurricane Sandy Recovery				
<i>Insurance Proceeds/Federal Reimbursement</i>	9,376	3,423	30	3,453
PAYGO	160	160	-	160
<i>Sandy Recovery MTA Bonds</i>	758	-	-	-
<i>Sandy Recovery B&amp;T Bonds</i>	230	119	(30)	89
<b>Total</b>	<b>34,892</b>	<b>24,673</b>	<b>250</b>	<b>24,923</b>

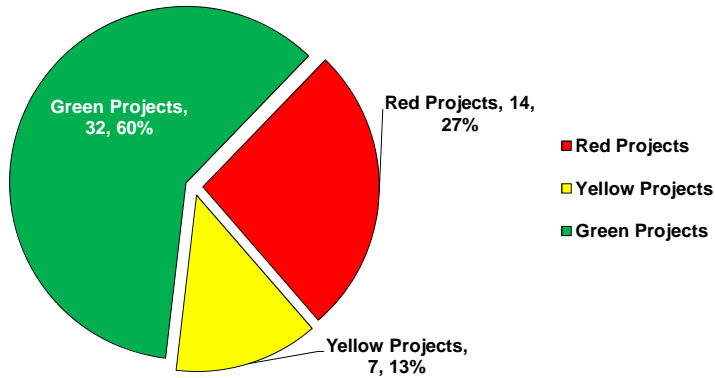
	Funding Plan	Receipts		
	Current	Thru February	This month	Received to date
<b>2015-2019 Program</b>				
Federal Formula, Flexible, Misc	\$6,275	\$87	\$ -	\$87
Federal Core Capacity	100	-	-	-
Federal New Start	500	-	-	-
State Assistance	8,336	-	-	-
City Capital Funds	2,492	80	-	80
MTA Bonds	5,889	-	-	-
Asset Sales/Leases	600	-	-	-
Pay-as-you-go (PAYGO)	1,846	1,014	-	1,014
Other	562	36	-	36
B&T Bonds & PAYGO	2,856	-	-	-
<b>Total</b>	<b>29,456</b>	<b>1,218</b>	<b>-</b>	<b>1,218</b>



4th Quarter 2016 Traffic Light Report on MTA Core Capital Program Projects

A total of 253 Projects were Reviewed for the 4th Quarter 2016

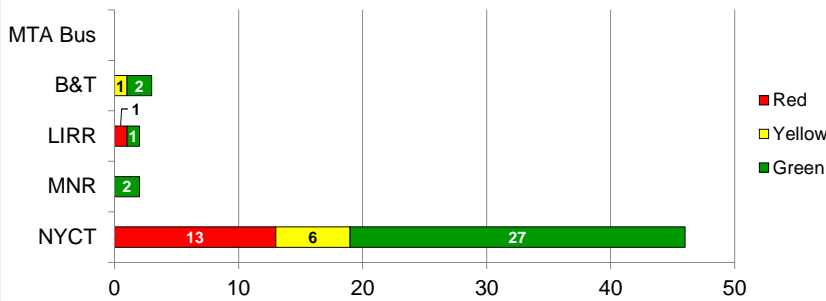
53 Projects in Design



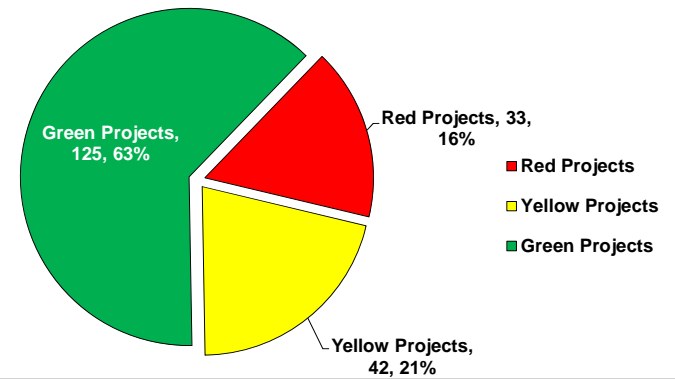
**Projects in Design:** 53 projects were reviewed in the design phase with 32 (60%) projects designated green, 7 (13%) yellow, and 14 (27%) were red. This is an increase of 8 Red projects since the 3<sup>rd</sup> quarter 2016. Of the 14 red projects, all 14 projects were red for a schedule variance. The schedule variances ranged from 3 to 8 months and were due in part to delays in completing the final drawings, permitting issues, and design revisions.

**Last Quarter:** 55 projects were reviewed in the design phase with 44 (80%) projects designated green, 5 (9%) yellow, and 6 (11%) were red.

53 Projects in Design



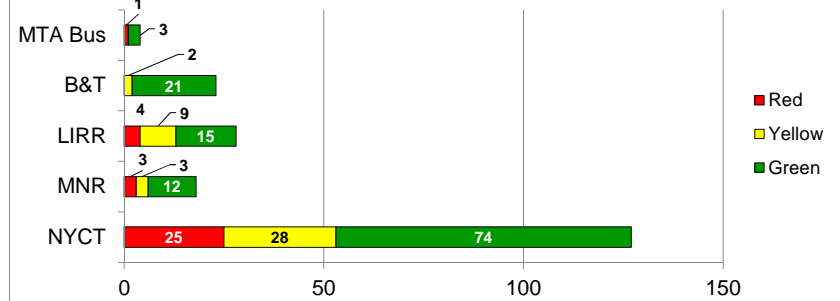
200 Projects in Construction



**Projects in Construction:** 200 projects were reviewed in the construction phase with 125 (63%) designated green, 42 (21%) yellow and 33 (16%) red. This is a increase of 14 red projects since the 3<sup>rd</sup> quarter 2016. Of the 33 red projects, 28 (82%) were red for a schedule variance, 4 for a cost variance, and 1 for both contingency and schedule variances. For the 28 projects designated red for schedule, the variances ranged from 3 to 12 months. The schedule variances were due in part to numerous contractor claims, reprioritization of in-house workforce, inability to secure hazardous material remediation contractors, lack of General Orders, and added scope.

**Last Quarter:** 205 projects were reviewed in the construction phase with 140 (68%) designated green, 45(22%) yellow and 20 (10%) red.

200 Projects in Construction



## Terms and Definitions

### 4<sup>th</sup> Quarter 2016 Traffic Light Report on MTA Core Capital Program Projects

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 one-page 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: 53**

- Green: Indices less than 115% and index movement 15% or more
- Red: Cost or Contingency Index: An EAC increase of 15% (or index movement of 15% 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: 200**

- Green: Indices less than 110% and index movement 10% or more. 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 50% or higher. Threshold for NYCT is \$15M or more, other agencies \$5M or more.
- Excludes projects in CPOC's Risk-Based Monitoring Program listed at end of report



- |  |
|--|
| ➤ Only projects with budgets of \$5M or greater are included in the report |
| ➤ Projects in design must be at a 30% completion level or greater          |

**4th Quarter 2016 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

Description	Capital Plan	Phase	Total Project EAC	% Phase Complete	Contingency Index	Cont. Trend	Cost Index	Cost Trend	Schedule Variance (Months)	Sched. Trend	Traffic Light
<b>NYCT - New York City Transit Program</b>											
PA/CIS B Division Furnish/Deliver CIS 89 Stations	05 - 09	Construction	\$8,400,000	63	.00	■	1.00	■	8	▲	R
Public Address / Customer Information Screens - Phase 3	05 - 09	Construction	\$105,911,228	74	1.15	▼	.99	■	2	▲	Y
Stn Comm Room HVAC Ph 1	05 - 09	Construction	\$46,046,811	89	.55	■	1.02	■	3	▲	R
Yard Fencing: 2 Locs (38th St, Linden)	05 - 09	Construction	\$16,969,100	100	.06	■	1.05	■	0	■	Y
Depot Equipment	05 - 09	Construction	\$5,154,661	73	.00	■	1.01	■	-5	▼	Y
Replacement of MetroCard Electronic Components	10 - 14	Construction	\$30,000,000	57	.00	■	1.00	■	12	▲	R
Passenger Station Local Area Network at 6 Stations	10 - 14	Construction	\$6,120,000	15	.00	■	1.00	■	0	■	G
Passenger Station Local Area Network at 188 Stations	10 - 14	Construction	\$73,499,981	38	.00	■	1.20	■	0	■	Y
Replace 11 Hydraulic Elevators	10 - 14	Construction	\$26,185,198	90	.80	▲	1.00	■	3	▲	R
Replace 7 Hydraulic Elevators	10 - 14	Construction	\$29,347,472	54	.13	■	1.00	■	0	■	G
Renewal of Ozone Park - Lefferts Blvd Station on the Liberty Line	10 - 14	Construction	\$7,621,772	74	.61	▼	1.03	■	4	▲	R
Renewal of Avenue X Station on the Culver Line	10 - 14	Construction	\$19,777,394	62	.89	■	1.04	■	0	■	Y
Renewal of Avenue U Station on the Culver Line	10 - 14	Construction	\$16,506,974	29	1.27	▲	.99	■	0	■	G
Renewal of Avenue P Station on the Culver Line	10 - 14	Construction	\$15,340,176	35	.84	▲	1.01	■	0	■	G
Renewal of Bay Parkway Station on the Culver Line	10 - 14	Construction	\$14,156,752	36	1.34	▲	1.01	■	0	■	G
Renewal of 18 Avenue Station on the Culver Line	10 - 14	Construction	\$19,700,620	33	.98	▲	1.00	■	0	■	G
Renewal of Ditmas Avenue Station on the Culver Line	10 - 14	Construction	\$20,976,347	99	.92	▲	1.02	■	0	■	Y
Renewal of Avenue I Station on the Culver Line	10 - 14	Construction	\$17,040,685	42	1.08	▲	1.01	■	0	■	G
Renewal of Pennsylvania Avenue Station on the New Lots Line	10 - 14	Construction	\$15,167,800	86	.08	■	1.11	■	0	■	Y
Renewal of Rockaway Avenue Station on the New Lots Line	10 - 14	Construction	\$15,018,979	88	.46	■	1.11	■	0	■	Y
Renewal of Saratoga Avenue Station on the New Lots Line	10 - 14	Construction	\$13,943,419	85	.06	■	1.06	■	0	■	G
Renewal of Junius Street Station on the New Lots Line	10 - 14	Construction	\$13,524,020	3	.71	▲	1.01	■	0	■	G
Renewal of Sutter Avenue Station on the New Lots Line	10 - 14	Construction	\$13,529,116	11	.16	▼	1.02	■	0	■	G
Renewal of Van Siclen Avenue Station on the New Lots Line	10 - 14	Construction	\$16,085,986	88	.22	■	1.11	■	0	■	Y
Component Repairs at 4 Stations on the Jamaica Line	10 - 14	Construction	\$82,123,095	5	.00	■	.99	■	0	■	G

**4th Quarter 2016 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

Description	Capital Plan	Phase	Total Project EAC	% Phase Complete	Contingency Index	Cont. Trend	Cost Index	Cost Trend	Schedule Variance (Months)	Sched. Trend	Traffic Light
<b>NYCT - New York City Transit Program</b>											
Component Repairs at 2 Stations on the Culver Line	10 - 14	Construction	\$21,247,903	29	1.34	▲	1.00	■	0	■	G
Component Repairs at 2 Stations on the Queens Boulevard Line	10 - 14	Construction	\$13,774,774	100	.42	▲	1.00	■	0	■	G
Ventilator Repairs at 5 Locations in Upper Manhattan and the Bronx	10 - 14	Construction	\$5,872,617	79	.00	■	1.00	■	2	▲	Y
Component Repairs at Eastchester-Dyre Avenue Station on the Dyre Avenue Line	10 - 14	Construction	\$28,109,889	40	2.66	▲	1.09	▲	0	■	G
Component Repairs at 2 Stations on the Canarsie Line	10 - 14	Construction	\$21,843,182	100	.08	■	1.32	▲	-1	▼	R
Ventilator Repairs at 8 Locations in Lower Manhattan	10 - 14	Construction	\$5,114,406	71	.00	■	1.00	■	2	▲	Y
Reconstruction of Hard Rail Track Panels at 9 Stations on the Sea Beach Line	10 - 14	Construction	\$8,057,796	72	.00	■	1.00	■	0	■	Y
Ventilator Repairs at 3 Locations in Southeast Brooklyn	10 - 14	Construction	\$6,454,000	66	.00	■	1.00	■	2	▲	Y
Ventilator Repairs at 4 Locations in North Brooklyn	10 - 14	Construction	\$5,408,636	9	.00	■	1.06	■	0	■	Y
ADA Accessibility at 23 St Station on the Lexington Av Line	10 - 14	Construction	\$17,540,112	100	.98	▲	.99	■	3	▲	R
ADA Accessibility at Ozone Park-Lefferts Blvd Station on the Liberty Line	10 - 14	Construction	\$21,678,502	74	.36	■	1.00	■	4	▲	R
Access Improvements at Grand Central Station	10 - 14	Construction	\$23,473,065	60	.86	■	1.00	■	2	▲	G
2015 Mainline Track Replacement on the Queens Boulevard Line	10 - 14	Construction	\$49,328,099	87	.00	■	1.00	■	0	■	G
2015 Mainline Track Replacement on the 8th Avenue Line	10 - 14	Construction	\$18,626,232	91	.00	■	1.00	■	0	■	G
2015 Mainline Track Replacement on the Broadway 7th Avenue Line	10 - 14	Construction	\$14,399,527	87	.00	■	1.00	■	5	▲	R
2015 Mainline Switch Replacement on the 6th Avenue Line	10 - 14	Construction	\$7,131,107	97	.00	■	.80	■	0	■	G
Replace Tunnel Lighting from Roosevelt Av-36 St on the Queens Blvd Line	10 - 14	Construction	\$52,192,907	40	.00	■	1.00	■	12	▲	R
New Vent Plant at 46 St on the Queens Blvd Line	10 - 14	Construction	\$82,338,068	74	.49	■	1.00	■	5	▲	R

**4th Quarter 2016 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

Description	Capital Plan	Phase	Total Project EAC	% Phase Complete	Contingency Index	Cont. Trend	Cost Index	Cost Trend	Schedule Variance (Months)	Sched. Trend	Traffic Light
<b>NYCT - New York City Transit Program</b>											
Replace Ventilation Controls at 22 Locations	10 - 14	Construction	\$16,199,489	52	.00	■	.99	■	0	■	G
Rehab of Pumps at 2 Locations in Manhattan	10 - 14	Construction	\$13,316,433	29	.61	▼	1.00	■	3	▲	R
Demolish Abandoned Structures	10 - 14	Construction	\$15,149,820	42	.00	■	.99	■	12	▲	R
Overcoat Painting from Broadway Junction-New Lots Ave on the Canarsie Line	10 - 14	Construction	\$28,127,850	100	.00	■	1.00	■	1	▲	G
Structural Repairs at 9 Avenue Station on the West End Line	10 - 14	Construction	\$23,603,052	100	.12	■	1.03	■	0	■	Y
Modernize Signal Interlockings at 71st Avenue and Union Turnpike on the Queens Boulevard Line	10 - 14	Construction	\$297,834,663	67	1.10	▲	.99	■	2	▲	R
Modernize Signals and Interlockings on the Dyre Avenue Line	10 - 14	Construction	\$226,943,801	84	.52	▼	1.00	■	0	■	G
Modernize Signal Interlocking at Roosevelt Avenue on the Queens Boulevard Line	10 - 14	Construction	\$101,355,148	100	.51	▲	1.00	■	0	■	G
Modernize Signal Interlocking at 34th Street on the 6th Avenue Line	10 - 14	Construction	\$179,994,319	45	.06	■	.99	■	0	■	G
Modernize Signal Interlocking at West 4th Street on the 6th Avenue Line	10 - 14	Construction	\$174,010,929	38	.05	▼	.99	■	0	■	G
Automated Train Supervision: Hardware and Software Upgrade	10 - 14	Construction	\$5,900,000	90	.00	■	1.00	■	1	▲	Y
Replacement of Fiber Optic Cable - Phase 1	10 - 14	Construction	\$11,987,526	45	.00	■	1.36	▼	0	■	Y
Public Address/Customer Info Screen Systems	10 - 14	Construction	\$64,342,713	63	.00	■	.97	■	0	■	G
Upgrade/Expansion of Communication Rooms - Phase 1	10 - 14	Construction	\$15,974,045	8	.00	■	.92	■	0	■	G
Replacement of Subway Radio Portable Units	10 - 14	Construction	\$6,719,210	60	.00	■	1.00	■	3	▲	R
Upgrade Ventilation Systems in 19 Communication Rooms	10 - 14	Construction	\$11,223,891	70	8.06	▲	1.03	■	0	■	G
Passenger Station Local Area Network at 30 Stations	10 - 14	Construction	\$26,514,729	95	.73	■	1.00	■	6	▲	R
Help Point at 93 Stations	10 - 14	Construction	\$79,003,652	69	.17	▲	1.03	■	0	■	Y
Integrated Service Information & Management B-Division, Module 1	10 - 14	Construction	\$59,160,238	17	.61	▼	1.00	■	0	■	G
Integrated Service Information & Management B-Division, Module 2	10 - 14	Construction	\$65,678,461	0	.00	■	1.00	■	14	▲	G



**4th Quarter 2016 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

Description	Capital Plan	Phase	Total Project EAC	% Phase Complete	Contingency Index	Cont. Trend	Cost Index	Cost Trend	Schedule Variance (Months)	Sched. Trend	Traffic Light
<b>NYCT - New York City Transit Program</b>											
Install Help Point Systems at 61 Stations	10 - 14	Construction	\$26,689,995	91	.00	■	.95	■	-1	▼	Y
Repair/Replace Underground Substation Hatchways - Phase 3	10 - 14	Construction	\$11,182,822	50	.00	■	.99	■	0	■	G
Replace Power System Negative Cables on 4th Avenue Line, Phase 2	10 - 14	Construction	\$5,000,000	0	.00	■	1.00	■	0	■	G
Yard Lighting at Jerome and Pelham Yards	10 - 14	Construction	\$19,957,177	100	.42	■	1.32	■	-1	▼	Y
Rehab 3 Car Washers at 3 Yards	10 - 14	Construction	\$17,068,520	70	.30	■	.98	■	0	■	G
2015 Mainline Track Replacement on the Brighton Line	10 - 14	Construction	\$20,443,517	98	.00	■	1.92	■	0	■	G
2015 Mainline Track Replacement on the West End Line	10 - 14	Construction	\$8,972,684	93	.00	■	1.85	▼	0	■	Y
Replacement of Bus Radio System	10 - 14	Construction	\$200,573,347	10	.06	▼	.99	■	0	■	G
Manhattanville Comprehensive Facade Repairs	10 - 14	Construction	\$21,898,845	40	.00	■	1.00	■	1	▲	Y
New Bus Command Center Building	10 - 14	Construction	\$52,038,207	30	.62	■	1.00	■	5	▲	R
Purchase 65 Non-Revenue Vehicles	10 - 14	Construction	\$11,222,176	97	.00	■	1.00	■	0	■	Y
Purchase Vacuum Trains	10 - 14	Construction	\$34,704,131	27	.00	■	.99	■	0	■	G
NYCT-Wide Storage Area Network/Disaster Recovery	10 - 14	Construction	\$20,825,478	81	.00	■	1.02	■	8	▲	R
Wide Area Network/Local Area Network Equipment Replacement Phase 1	10 - 14	Construction	\$9,609,800	95	.00	■	1.00	■	1	▲	Y
Fire Sprinkler/Alarm Systems at 11 Employee Facilities	10 - 14	Construction	\$26,623,673	95	.88	■	1.00	■	0	■	G
Replace Fire Alarm at 207 St Overhaul Shop	10 - 14	Construction	\$12,783,298	36	.73	▼	.99	■	0	■	G
Groundwater, Soil Remediation	10 - 14	Construction	\$6,474,193	77	.00	▼	.99	■	0	■	G
Rehabilitation of Employee Facility at 207th Street on the 8th Av Line	10 - 14	Construction	\$6,650,000	98	.00	■	1.00	■	6	▲	R
Livingston Plaza Repairs	10 - 14	Construction	\$27,257,503	46	-2.23	▼	1.00	■	12	▲	R
Facility Roof Repair/Replacement Phase 4	10 - 14	Construction	\$16,316,079	47	.68	▼	.99	■	6	▲	R
Design of New "B" Division Railcar	10 - 14	Design	\$12,967,058	50	.00	■	1.04	■	0	■	Y

**4th Quarter 2016 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

Description	Capital Plan	Phase	Total Project EAC	% Phase Complete	Contingency Index	Cont. Trend	Cost Index	Cost Trend	Schedule Variance (Months)	Sched. Trend	Traffic Light
<b>NYCT - New York City Transit Program</b>											
ADA Accessibility at 57 St Station on the Broadway Line - Phase 2	10 - 14	Design	\$66,800,000	85	.00	■	.00	■	3	▲	R
Purchase 138 Standard CNG Buses	15 - 19	Construction	\$85,050,000	21	.00	■	1.00	■	0	■	G
Station Signage at Various Locations	15 - 19	Construction	\$10,775,787	3	.00	■	1.00	■	0	■	G
Water Condition Remedy - 2015	15 - 19	Construction	\$8,709,553	0	.00	■	.98	■	0	■	G
2016 Mainline Track Replacement	15 - 19	Construction	\$6,436,204	97	.00	■	.08	▼	0	■	G
2015 Welded Rail Installation on the Queens Boulevard Line	15 - 19	Construction	\$21,811,608	46	.00	■	1.09	▲	-2	▼	G
2016 Welded Rail Installation on the Queens Boulevard Line	15 - 19	Construction	\$25,408,608	80	.00	■	.92	▲	0	■	G
2016 Track Force Account	15 - 19	Construction	\$35,000,000	0	.00	■	1.00	■	0	■	G
2015 Mainline Track Replacement on the Queens Boulevard Line	15 - 19	Construction	\$29,266,714	87	.00	■	1.00	■	0	■	G
2015 Mainline Track Replacement on the Flushing Line	15 - 19	Construction	\$21,095,988	95	.00	■	1.32	▲	0	■	R
2015 Mainline Track Replacement on the 8 Avenue Line	15 - 19	Construction	\$39,761,430	91	.00	■	.95	■	0	■	G
2015 Welded Rail Installation on the 8th Avenue Line	15 - 19	Construction	\$44,515,446	98	.00	■	1.00	■	0	■	G
2016 Mainline Track Replacement on the Brighton Line	15 - 19	Construction	\$14,684,078	95	.00	■	1.31	▲	0	■	G
2016 Mainline Track Replacement on the Jamaica Line	15 - 19	Construction	\$18,692,042	67	.00	■	2.00	■	0	■	G
2016 Mainline Track Replacement on the Queens Boulevard Line	15 - 19	Construction	\$46,784,630	19	.00	■	2.54	▲	0	■	G
2016 Mainline Track Replacement on the Dyre Avenue Line	15 - 19	Construction	\$12,456,949	35	.00	■	3.26	■	0	■	G
2016 Welded Rail Installation on the 8th Avenue Line	15 - 19	Construction	\$61,473,711	64	.00	■	1.00	▼	0	■	G
2016 Mainline Track Replacement on the Pelham Line	15 - 19	Construction	\$7,599,125	96	.00	■	4.23	▲	0	■	G
2016 Mainline Track Replacement on the White Plains Road Line	15 - 19	Construction	\$14,459,054	77	.00	■	2.28	▼	0	■	Y
2016 Mainline Track Replacement on the 8 Avenue Line	15 - 19	Construction	\$52,775,539	20	.00	■	.94	■	0	■	G
2016 Mainline Switch Replacement	15 - 19	Construction	\$9,458,668	91	.00	■	.33	■	0	■	G
2015 Mainline Switch Replacement on the Broadway-7th Avenue Line	15 - 19	Construction	\$10,308,723	90	.00	■	1.10	■	0	■	G
2015 Mainline Switch Replacement on the Dyre Avenue Line	15 - 19	Construction	\$8,663,722	80	.00	■	1.14	▼	0	■	Y

**4th Quarter 2016 Traffic Light Report  
Projects in Design and Construction**

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Description	Capital Plan	Phase	Total Project EAC	% Phase Complete	Contingency Index	Cont. Trend	Cost Index	Cost Trend	Schedule Variance (Months)	Sched. Trend	Traffic Light
<b>NYCT - New York City Transit Program</b>											
2016 Mainline Switch Replacement on the Jamaica Line	15 - 19	Construction	\$5,309,423	89	.00	■	1.00	■	0	■	G
2016 Mainline Switch Replacement on the 6th Avenue Line	15 - 19	Construction	\$11,816,646	66	.00	■	1.68	■	0	■	Y
2016 Mainline Switch Replacement on the Queens Boulevard Line	15 - 19	Construction	\$16,435,225	75	.00	■	2.52	▼	0	■	G
Structural Rehabilitation of the Bridge over Atlantic Railroad on the Myrtle Line	15 - 19	Construction	\$22,046,567	0	.00	■	1.00	▼	0	■	G
Structural Rehabilitation of Viaduct and Deck on the Myrtle Line	15 - 19	Construction	\$131,002,486	0	.00	■	1.00	▼	0	■	G
Modernize Signal Interlocking at Kings Highway on the Culver Line	15 - 19	Construction	\$169,651,254	1	.00	■	.99	▼	0	■	G
Modification to Signal Control Lines - Phase 6	15 - 19	Construction	\$33,011,628	30	.00	■	1.00	■	6	▲	R
AC to DC Line Relay Conversion on the Fulton Line	15 - 19	Construction	\$13,545,979	87	.00	■	1.00	■	0	■	G
Modification of Signal Key-By Circuits - Phase 4	15 - 19	Construction	\$18,429,499	9	.00	■	1.00	■	0	■	G
Copper Cable Upgrade/Replacement - Phase 4	15 - 19	Construction	\$12,115,228	38	.00	■	1.00	■	0	■	G
Help Point at 28 Stations (In-House)	15 - 19	Construction	\$17,267,600	100	.00	■	1.00	■	-1	▼	G
Help Point at 41 Stations	15 - 19	Construction	\$29,937,784	20	.00	■	1.35	■	0	■	R
Help Point at 39 Stations (In-House)	15 - 19	Construction	\$22,479,000	85	.00	■	1.00	■	3	▲	R
Help Point at 49 Stations (Transit Wireless)	15 - 19	Construction	\$21,307,000	100	.00	■	1.00	■	-1	▼	G
Help Point Material Purchase	15 - 19	Construction	\$14,235,500	100	.00	■	1.00	■	0	■	G
Replace Roof at 1 Substation	15 - 19	Construction	\$8,126,628	0	.00	■	1.02	■	0	■	G
Yard Fencing at 2 Locations	15 - 19	Construction	\$11,039,704	100	.00	■	1.00	■	0	■	G
Enterprise Asset Management (EAM)	15 - 19	Construction	\$41,156,000	0	.00	■	1.00	■	0	■	G
Employee Facility Component Repairs at 10 Locs in Manhattan	15 - 19	Construction	\$10,245,942	83	.00	■	1.05	■	0	■	G
Replace 2 Escalators and 2 stairs at Grand Central Station	15 - 19	Design	\$13,255,670	35	.00	■	1.00	■	0	■	G
Jay Street Escalator Realignment	15 - 19	Design	\$15,000,000	50	.00	■	1.00	▼	5	▲	R
Renewal of Borough Hall Station on the Lexington Avenue Line	15 - 19	Design	\$36,492,498	60	.00	■	.84	■	5	▲	R
Renewal of 138 St - Grand Concourse Station on the Jerome Line	15 - 19	Design	\$21,963,291	45	.00	■	1.00	■	0	■	G

**4th Quarter 2016 Traffic Light Report  
Projects in Design and Construction**

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Description	Capital Plan	Phase	Total Project EAC	% Phase Complete	Contingency Index	Cont. Trend	Cost Index	Cost Trend	Schedule Variance (Months)	Sched. Trend	Traffic Light
<b>NYCT - New York City Transit Program</b>											
Renewal of Astoria Boulevard Station on the Astoria Line	15 - 19	Design	\$18,016,265	40	.00	■	1.00	■	3	▲	R
Repair of Platform Components at 2 Locations on the Pelham Line	15 - 19	Design	\$5,233,825	40	.00	■	1.00	■	0	■	G
Repair of Platform Components at 2 Locations on the Lenox Line	15 - 19	Design	\$5,618,437	35	.00	■	1.00	■	0	■	G
Repair of Platform Components at 7 Locations on the Canarsie Line	15 - 19	Design	\$24,973,058	40	.00	■	1.00	▼	0	■	G
ADA Accessibility at Astoria Boulevard Station on the Astoria Line	15 - 19	Design	\$34,967,226	40	.00	■	1.00	■	3	▲	R
ADA Accessibility at 86 Street Station on the 4 Avenue Line	15 - 19	Design	\$26,374,736	75	.00	■	.91	■	1	▲	G
ADA Accessibility at Gun Hill Road Station on the Dyre Line	15 - 19	Design	\$42,030,404	90	.00	■	1.01	■	3	▲	R
ADA Accessibility at Eastern Parkway-Brooklyn Museum Station on the Eastern Parkway Line	15 - 19	Design	\$27,618,273	50	.00	■	.88	■	0	■	G
ADA Accessibility at Times Square Shuttle - Phase 3	15 - 19	Design	\$244,650,000	40	.00	■	1.00	■	2	▲	G
ADA Accessibility at 59 Street Station on the 4 Avenue Line	15 - 19	Design	\$42,052,269	55	.00	■	.86	■	0	■	G
Access Improvements: Grand Central, Phase 2	15 - 19	Design	\$78,521,000	60	.00	■	1.04	■	3	▲	R
Station Entrance and Structural Work at 8 Avenue on the Sea Beach Line	15 - 19	Design	\$14,202,098	90	.00	■	.94	■	3	▲	R
Reconstruction of Times Square Shuttle - Phase 3	15 - 19	Design	\$30,350,000	40	.00	■	1.00	■	2	▲	G
2017 Mainline Track Replacement	15 - 19	Design	\$5,458,596	40	.00	■	.06	▼	0	■	G
2017 Mainline Switch Replacement	15 - 19	Design	\$9,050,328	32	.00	■	.15	▼	0	■	G
Rehabilitation of Vent Plant at Forsyth Street on the 6th Avenue Line	15 - 19	Design	\$101,945,212	57	.00	■	1.01	■	2	▲	G
Structural Rehabilitation of the Livonia Yard Overpass & Retaining Wall	15 - 19	Design	\$13,690,265	65	.00	■	.87	■	0	■	G
Overcoat Painting and Steel Repair at Myrtle Avenue to DeSales on the Jamaica Line	15 - 19	Design	\$45,795,092	50	.00	■	1.00	■	0	■	G
Overcoat Painting and Steel Repair at East New York Leads and Loops	15 - 19	Design	\$24,500,354	60	.00	■	.87	■	4	▲	R

**4th Quarter 2016 Traffic Light Report  
Projects in Design and Construction**

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Description	Capital Plan	Phase	Total Project EAC	% Phase Complete	Contingency Index	Cont. Trend	Cost Index	Cost Trend	Schedule Variance (Months)	Sched. Trend	Traffic Light
<b>NYCT - New York City Transit Program</b>											
Modernize 2 Signal Interlockings: 30 Street and 42 Street North on the 8 Avenue Line	15 - 19	Design	\$248,947,200	30	.00	■	1.00	■	0	■	G
Substation Renewal: Burnside Av BXC	15 - 19	Design	\$31,093,293	35	.00	■	1.00	■	0	■	G
Renewal of Avenue Z Substation on the Culver Line	15 - 19	Design	\$34,893,875	45	.00	■	1.00	■	0	■	G
Replace 25Hz Frequency Converters at 10 Substations	15 - 19	Design	\$24,699,915	60	.00	■	.99	■	0	■	G
Rehab Circuit Breaker House #586 on the Culver Line	15 - 19	Design	\$14,473,698	40	.00	■	1.00	■	0	■	G
Rehab Ducts at Stanton Street Substation	15 - 19	Design	\$12,445,469	30	.00	■	.88	■	8	▲	R
Upgrade Central Electronics Shop at Woodside Facility	15 - 19	Design	\$15,376,811	50	.00	■	1.04	■	2	▲	G
Heavy Shop Equipment	15 - 19	Design	\$10,000,000	48	.00	■	1.00	■	6	▲	R
Component Rehab at Gun Hill Depot	15 - 19	Design	\$16,199,415	92	.00	■	1.34	■	0	■	Y
Component Rehab at Queens Village Depot	15 - 19	Design	\$35,675,871	40	.00	■	1.00	■	0	■	G
Component Rehab at Casey Stengel Depot	15 - 19	Design	\$10,805,400	45	.00	■	.51	■	0	■	G
Component Rehab at Zerega Central Maintenance Facility (SBMP)	15 - 19	Design	\$10,385,150	75	.00	■	1.03	■	1	▲	G
Storage Tank Replacement	15 - 19	Design	\$26,168,192	80	.00	■	1.16	■	0	■	Y
Elevator Upgrade at 5 Depots	15 - 19	Design	\$16,188,757	90	.00	■	1.00	■	3	▲	R
Purchase 27 Refuse Flats	15 - 19	Design	\$24,854,608	96	.00	■	1.00	■	0	■	Y
Purchase 12 3-Ton Crane Cars	15 - 19	Design	\$26,587,843	40	.00	■	.93	▼	0	■	Y
Purchase Locomotives	15 - 19	Design	\$99,546,956	50	.00	■	.97	■	0	■	Y
Replace Fire Alarm Systems at 3 Locations	15 - 19	Design	\$20,999,822	85	.00	■	.79	■	2	▲	G
Improvements to Electrical and Mechanical Systems at Livingston Plaza	15 - 19	Design	\$56,911,746	83	.00	■	1.01	■	6	▲	R
Rehabilitation of St. George Interlocking	10 - 14	Construction	\$14,093,139	100	.00	■	.99	■	0	■	G
Construction of New Power Substation: Prince's Bay	10 - 14	Construction	\$25,131,825	82	.06	▼	.99	■	0	■	G
Construction of New Station: Arthur Kill	10 - 14	Construction	\$24,025,687	97	1.20	▲	1.00	■	2	▲	Y

**4th Quarter 2016 Traffic Light Report  
Projects in Design and Construction**

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Description	Capital Plan	Phase	Total Project EAC	% Phase Complete	Contingency Index	Cont. Trend	Cost Index	Cost Trend	Schedule Variance (Months)	Sched. Trend	Traffic Light
<b>NYCT - New York City Transit Program</b>											
Replacement of Car Fleet	15 - 19	Design	\$256,303,812	50	.00	■	1.10	■	0	■	G
Rehabilitation of Amboy Road Bridge	15 - 19	Design	\$5,857,658	50	.00	■	1.00	■	0	■	G
<b>LIRR - Long Island Rail Road Program</b>											
New Elevators - Flushing - Main St	05 - 09	Construction	\$24,619,074	26	.12	▲	1.00	■	0	■	G
Main Line Corridor Improvements -Hicksville North Siding	05 - 09	Construction	\$51,237,723	2	.00	■	1.01	■	0	■	G
Main Line Corridor Improvements -Hicksville Station Improvements	05 - 09	Construction	\$69,236,208	10	.00	■	.98	■	4	▲	R
Wantagh Station Platform Replacement	10 - 14	Construction	\$22,467,816	16	.00	■	1.00	■	0	■	G
Escalator Replacement Program	10 - 14	Construction	\$11,174,245	85	.06	▲	1.00	■	2	▲	Y
Construction equipment purchase used for track program	10 - 14	Construction	\$7,000,000	96	.00	■	1.00	■	0	■	Y
East River Tunnel Track Replacement	10 - 14	Construction	\$43,601,000	77	1.28	▲	1.00	■	0	■	Y
Bridge Rehabilitation Program	10 - 14	Construction	\$24,600,000	98	.93	▲	1.00	■	0	■	Y
150th Street - Jamaica Bridge Rehabilitation	10 - 14	Construction	\$24,824,404	97	.00	■	1.00	■	0	■	Y
Private Branch Exchange / Wayside Phone systems replacement - Phase 1	10 - 14	Construction	\$10,500,000	100	.00	■	1.00	■	0	■	G
Radio Coverage Improvements	10 - 14	Construction	\$10,300,000	97	.00	■	1.00	■	0	■	Y
Speonk to Montauk Signalization	10 - 14	Construction	\$73,000,000	75	.64	▼	1.00	■	0	■	Y
Centralized Train Control	10 - 14	Construction	\$12,940,000	90	.80	▼	1.00	■	12	▲	R
Employee Facilities Renewals	10 - 14	Construction	\$10,454,658	95	.00	■	.99	■	3	▲	R
Replacement of Port Washington Substation	10 - 14	Construction	\$21,047,440	37	.00	■	.80	▼	1	▲	G
Replacement of Richmond Hill Substation	10 - 14	Construction	\$12,017,791	4	.00	■	1.00	■	7	▲	R
Replacement of Penn Station Substation	10 - 14	Design	\$22,100,000	8	11.73	▼	1.00	■	3	▲	R
Gct/ESA Unified Trash Facility	15 - 19	Construction	\$11,100,000	15	.00	■	1.00	■	0	■	G
2016 Annual Track Program	15 - 19	Construction	\$65,000,000	90	.00	■	1.00	■	1	▲	G
Retaining Walls / Right Of Way Projects	15 - 19	Construction	\$12,000,000	8	.00	■	1.00	■	0	■	Y

**4th Quarter 2016 Traffic Light Report  
Projects in Design and Construction**

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Description	Capital Plan	Phase	Total Project EAC	% Phase Complete	Contingency Index	Cont. Trend	Cost Index	Cost Trend	Schedule Variance (Months)	Sched. Trend	Traffic Light
<b>LIRR - Long Island Rail Road Program</b>											
Amtrak Territory Improvements	15 - 19	Construction	\$67,500,000	53	.00	■	1.00	■	0	■	G
Communications Pole Line Replacement	15 - 19	Construction	\$7,700,000	20	.00	■	1.00	■	0	■	G
Signal Normal Replacement Program	15 - 19	Construction	\$40,000,000	7	.00	■	1.00	■	0	■	G
Positive Train Control	15 - 19	Construction	\$118,679,777	1	95.23	▲	.94	▼	0	■	G
Station Replacement	15 - 19	Construction	\$81,000,000	4	.00	■	1.00	■	0	■	G
Substation Components	15 - 19	Construction	\$42,400,000	6	.00	■	1.00	■	0	■	G
3Rd Rail - Protection Board	15 - 19	Construction	\$8,800,000	9	.00	■	1.00	■	0	■	Y
3Rd Rail - Composite Rail	15 - 19	Construction	\$12,000,000	3	.00	■	1.00	■	0	■	G
EAM Reserve	15 - 19	Construction	\$8,000,000	0	.00	■	1.00	■	0	■	G
Main Line Bridge Component Renewals	15 - 19	Design	\$47,800,000	0	.00	■	1.00	■	0	■	G
<b>MNR - Metro-North Railroad Program</b>											
Grand Central Trainshed and Park Avenue Tunnel Structure Rehabilitation	10 - 14	Construction	\$23,968,023	100	.31	■	.96	■	-2	▼	G
Grand Central Terminal Leaks Remediation	10 - 14	Construction	\$18,252,322	68	1.21	▲	.97	■	6	▲	R
Grand Central Terminal Elevator Rehabilitation - Phase 4	10 - 14	Construction	\$9,181,787	79	1.02	▲	.95	■	1	▲	Y
Grand Central Terminal Utility System Improvements	10 - 14	Construction	\$31,575,414	36	.00	■	.94	■	6	▲	R
Station Building Improvements and Net Lease Efforts at Select Locations	10 - 14	Construction	\$8,358,413	39	.00	▼	.96	■	0	■	G
Mainline/High Speed Turnout Replacement	10 - 14	Construction	\$58,804,193	65	.00	■	.95	■	0	■	G
Drainage and Undercutting Improvements Along the Right-of-Way	10 - 14	Construction	\$9,999,312	75	-1.11	▼	.97	▼	10	▲	G
Upgrade West of Hudson Signal System	10 - 14	Construction	\$64,418,723	26	.00	■	.95	■	0	■	G
Replace and Upgrade Substation Bridge 23	10 - 14	Construction	\$41,496,040	83	.00	■	.99	■	2	▲	Y
Harlem and Hudson Line Power Improvements	10 - 14	Construction	\$41,772,282	49	7.07	▼	1.23	■	0	■	Y
Customer Communication/Connectivity Improvements to provide Real-time Information at East of Hudson Stations	10 - 14	Design	\$36,567,846	75	.00	■	.91	■	0	■	G

**4th Quarter 2016 Traffic Light Report  
Projects in Design and Construction**

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Description	Capital Plan	Phase	Total Project EAC	% Phase Complete	Contingency Index	Cont. Trend	Cost Index	Cost Trend	Schedule Variance (Months)	Sched. Trend	Traffic Light
<b>MNR - Metro-North Railroad Program</b>											
Repair/Replacement of Undergrade Bridges	10 - 14	Design	\$23,585,567	80	.00	■	.94	■	0	■	G
GCT Fire Protection	15 - 19	Construction	\$11,445,386	33	.00	■	1.00	■	6	▲	R
Cyclical Track Program	15 - 19	Construction	\$23,600,000	0	.00	■	1.00	■	0	■	G
Rock Slope Remediation	15 - 19	Construction	\$19,715,906	0	.00	■	1.00	■	0	■	G
Turnouts - Mainline/High Speed **	15 - 19	Construction	\$51,473,594	14	.00	■	1.00	■	13	▲	G
GCT Turnouts/Switch Renewal	15 - 19	Construction	\$24,446,136	40	.00	■	.98	■	-24	▼	G
Systemwide Drainage	15 - 19	Construction	\$9,867,408	75	.00	▼	.98	■	0	■	G
Purchase MoW Equipment	15 - 19	Construction	\$22,000,000	0	.00	■	1.00	■	0	■	G
Replace Timbers - Undergrade Bridges	15 - 19	Construction	\$5,000,000	34	.00	■	1.00	■	-20	▼	G
<b>B&amp;T - Bridges and Tunnels Program</b>											
Rehabilitation of tunnel walls Roadway drainage and fire line repair at Brooklyn-Battery Tunnel	10 - 14	Construction	\$63,039,345	43	.19	■	.96	■	-15	▼	G
This project will construct miscellaneous structural steel repairs at various locations on the Marine Parkway Bridge.	10 - 14	Construction	\$29,239,709	25	.00	■	1.04	■	0	■	G
Structural Rehabilitation of the Entrance and Exit Plazas - Queens Midtown Tunnel	10 - 14	Construction	\$15,905,009	32	.00	■	.96	■	0	■	G
Rehabilitation of Tunnel Walls, Ceiling Repair and Leak Control - Queens Midtown Tunnel	10 - 14	Construction	\$57,072,249	32	2.21	▼	.90	■	0	■	G
Miscellaneous steel and concrete rehabilitation - Manhattan approach ramps of the Robert F Kennedy Bridge	10 - 14	Construction	\$107,405,676	59	.33	▲	.95	■	0	■	G
Steel repairs, concrete rehabilitation and repair/rehabilitation of drainage systems - Verrazano-Narrows Bridge	10 - 14	Construction	\$11,742,847	90	-1.40	▼	.86	■	0	■	G
Replacement of Brooklyn Plaza structural slab - Brooklyn-Battery Tunnel	10 - 14	Construction	\$18,176,720	7	.00	■	.97	■	-15	▼	G
Replacement of the Upper and Lower Level Toll Plaza and Southbound Approach - Henry Hudson Bridge	10 - 14	Construction	\$50,295,217	95	-.38	▼	1.00	■	0	■	Y





4th Quarter 2016 Traffic Light Report  
Projects in Design and Construction

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Description	Capital Plan	Phase	Total Project EAC	% Phase Complete	Contingency Index	Cont. Trend	Cost Index	Cost Trend	Schedule Variance (Months)	Sched. Trend	Traffic Light
<b>B&amp;T - Bridges and Tunnels Program</b>											
Interim Deck Repairs - Manhattan Toll Plaza Deck - Robert F Kennedy Bridge	10 - 14	Construction	\$45,532,688	71	1.01	▼	.97	■	0	■	Y
Rehabilitation of the Programmable Logic Controller and electrical and mechanical systems of the Marine Parkway Bridge Lift Span	10 - 14	Construction	\$9,912,529	21	.00	■	.97	■	0	■	G
Rehabilitation of the Programmable Logic Controller and electrical and mechanical systems of the Marine Parkway Bridge Lift Span	10 - 14	Construction	\$37,142,191	25	1.66	▼	.95	■	0	■	G
Tunnel Ventilation Building Electrical Upgrade Replace electrical switchgear and fan motor control Equipment - Queens Midtown Tunnel	10 - 14	Construction	\$55,136,973	67	.48	■	.98	■	0	■	G
Zone and Spot Paint Rockaway Point Boulevard Bridge, Jacob Riis Pedestrian Bridge, and Marine Parkway Bridge	10 - 14	Construction	\$26,271,467	25	.00	■	.95	■	0	■	G
Paint steel members, toll plaza deck and approach ramps at Robert F Kennedy Bridge	10 - 14	Construction	\$24,109,957	27	1.00	▼	.96	■	0	■	G
Paint Brooklyn and Staten Island lower level ramps at Verrazano Narrows Bridge	10 - 14	Construction	\$15,944,641	90	.26	■	.93	■	0	■	G
Paint - Upper Level Superstructure - Verrazano-Narrows Bridge	10 - 14	Construction	\$31,440,627	89	.01	■	.95	■	0	■	G
Verrazano-Narrows Bridge main cable testing	10 - 14	Design	\$5,150,074	58	.00	■	.96	■	0	■	G
Phase A of the suspended span deck replacement - Throgs Neck Bridge - Utility relocation and prototype construction	10 - 14	Design	\$21,958,167	78	.00	■	.99	■	0	■	Y
Miscellaneous Structural Rehabilitation: Steel repairs and Removal of Tuned Mass Damper - Bronx-Whitestone Bridge	15 - 19	Construction	\$27,529,067	36	.00	■	.97	■	0	■	G
Monitoring, Inspection and Testing of the Bronx-Whitestone Bridge's Main Cable and Cable Wires	15 - 19	Construction	\$15,635,143	35	.00	■	.97	■	0	■	G
Installation of Rotating Prism Signs (RPS) at the Bronx-Whitestone, Throgs Neck and Verrazano-Narrows Bridges	15 - 19	Construction	\$13,071,773	2	.00	■	.96	■	0	■	G

Master Page # 97 of 165 - Capital Program Oversight Committee Meeting 4/24/2017

**4th Quarter 2016 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

Description	Capital Plan	Phase	Total Project EAC	% Phase Complete	Contingency Index	Cont. Trend	Cost Index	Cost Trend	Schedule Variance (Months)	Sched. Trend	Traffic Light
<b>B&amp;T - Bridges and Tunnels Program</b>											
Replacement and Upgrade of Existing Toll Systems and Exploration of Future Tolling Technologies and Systems	15 - 19	Construction	\$62,572,917	0	.00	■	.95	▼	0	■	G
Construction of an Anchorage Dehumidification System - Throgs Neck Bridge	15 - 19	Construction	\$44,986,006	6	.00	■	1.03	■	0	■	G
Painting of the Tower Interior Base Cells and Struts - Bronx-Whitestone Bridge	15 - 19	Construction	\$31,596,972	35	.00	■	.95	■	0	■	G
Painting of the Anchorages Interior - Throgs Neck Bridge	15 - 19	Construction	\$7,844,820	6	.00	■	.95	■	0	■	G
Design and construction for the rehabilitation of the exterior and interior of the Anchorages at the Verrazano-Narrows Bridge	15 - 19	Design	\$48,868,216	65	-.83	▼	.99	■	0	■	G
<b>MTA Bus Program</b>											
Elec Upgrd/Emer Gens 6 Depots	05 - 09	Construction	\$14,159,861	100	.12	■	.97	■	-2	▼	G
New Bus Command Center Building	10 - 14	Construction	\$17,119,402	30	7.65	▲	1.00	■	5	▲	R
Replacement of Bus Radio System	10 - 14	Construction	\$27,920,675	2	.02	■	1.00	■	0	■	G
Replacement of Bus Radio System	15 - 19	Construction	\$34,500,000	0	.00	■	1.00	■	0	■	G

<b>MTA Agency: New York City Transit</b>	<b>Status as of December 31, 2016</b>
<b>Project Name: Furnish Public Address / Customer Information Screens - 89 Stations</b>	<b>Current Budget: \$8.4M</b>
	<b>Project EAC: \$8.4M</b>
	<b>Substantial Completion Date at Award: Dec 2016</b>
<b>Project No: T5041426</b>	<b>Current Substantial Completion Date: Aug 2017</b>
<b>Project Phase: Construction</b>	<b>Phase Complete: 63%</b>

**Project Description**

This project involves the purchase of materials for the Public Address (PA) and Customer Information Screen (CIS) system for 89 stations that lack a public address system. The installation of the materials is being executed under a separate project.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule**

**Schedule:** During the Fourth Quarter 2016, the forecasted Substantial Completion date slipped eight months, from December 2016 to August 2017, due to manufacturer’s product deficiencies in the maintenance firmware. Production and delivery was on hold until resolution was provided and approved by NYCT.

**What is Being Done**

**Schedule:** The product deficiencies have been corrected and the manufacturer will resume delivery of the signs. Remaining deliveries are scheduled as follows: Group 12- April 2017 (54 units), Group 13- May 2017 (34 units), Group 14- July 2017 (78 units), and Group 15- Aug 2017 (20 units).

**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.

<b>MTA Agency: New York City Transit</b>	<b>Status as of December 31, 2016</b>
<b>Project Name: Station Communication Rooms HVAC: Phase 1</b>	<b>Current Budget: \$45.1M</b>
	<b>Project EAC: \$46.0M</b>
	<b>Substantial Completion Date at Award: Dec 2015</b>
<b>Project No: T5080616</b>	<b>Current Substantial Completion Date: Mar 2017</b>
<b>Project Phase: Construction</b>	<b>Phase Complete: 89%</b>

<b>Project Description</b>	
<p>This project includes furnishing and installing Heating, Ventilation, and Air Conditioning (HVAC) equipment in various communications rooms in the Boroughs of Brooklyn, Queens, Manhattan and the Bronx. At certain locations, additional space is required to house the HVAC equipment; therefore, separate mechanical equipment rooms will be constructed. At the completion of this project, sensitive communication equipment within these communication rooms will not shut down in periods of extreme hot weather conditions.</p>	
<b>Problem Since Last Quarterly Report</b>	
<b>Index Trigger(s): Schedule</b>	
<p><b>Schedule:</b> During the Fourth Quarter 2016, the forecasted Substantial Completion date for the active project under contract C43038 (installation of HVAC at 19 Locations) slipped by three months, from December 2016 to March 2017, due to additional work needed to repair corroded steel beams which were uncovered during work in the HVAC Mechanical Room located at Wall Street.</p>	
<b>What is Being Done</b>	
<p><b>Schedule:</b> The contractor is working on weekends and extended shifts to mitigate the impact to schedule.</p>	
<b>IEC Comment</b>	
<p><b>Budget and Schedule Performance:</b> The IEC substantially agrees with the material presented in this report, including the stated problems and actions taken by the Agency.</p>	
<p><b>All Agency Contractor Evaluation:</b> The overall Contractor/Consultant Performance rating for the current All-Agency Contractor Evaluation (ACE) report for this project is consistent with the IEC's observation of project performance during this reporting period.</p>	

<b>MTA Agency: New York City Transit</b>	<b>Status as of December 31, 2016</b>
<b>Project Name: Automated Fare Collection Replacement, Phase 2: Electronic Boards</b>	<b>Current Budget: \$30.0M</b>
	<b>Project EAC: \$30.0M</b>
	<b>Substantial Completion Date at Award: Jun 2016</b>
<b>Project No: T6040401</b>	<b>Current Substantial Completion Date: Jan 2018</b>
<b>Project Phase: Construction</b>	<b>Phase Complete: 57%</b>

<b>Project Description</b>
<p>This project will replace the obsolete main electronic components of selected parts of the existing fare collection equipment system-wide. This work is being done in coordination with the New Fare Payment System project to preserve functionality in the existing equipment during a transition period.</p>
<b>Problem Since Last Quarterly Report</b>
<b>Index Trigger(s): Schedule</b>
<p><b>Schedule:</b> During the Fourth Quarter 2016, the forecasted Substantial Completion slipped 12 months, from January 2017 to January 2018, mainly due to the extension of the life of the MetroCard system until 2022. As a result, Subways Electronic Maintenance Division (EMD) required additional time to reassess the various subsystems and prepare a new State of Good Repair effort to preserve the existing equipment during the new transition period.</p>
<b>What is Being Done</b>
<p><b>Schedule:</b> Subways EMD is planning for another round of State of Good Repair investments that would extend the life of the existing subsystems beyond 2017 initially to 2022.</p>
<b>IEC Comment</b>
<p><b>Budget and Schedule Performance:</b> The IEC substantially agrees with the material presented in this report, including the stated problems and the actions taken by the Agency.</p>
<p><b>All Agency Contractor Evaluation:</b> An Agency ACE evaluation is not required for this project.</p>

<b>MTA Agency: New York City Transit</b>	<b>Status as of December 31, 2016</b>
<b>Project Name: Replace 11 Hydraulic Elevators</b>	<b>Current Budget: \$26.2M</b>
	<b>Project EAC: \$26.2M</b>
	<b>Substantial Completion Date at Award: Jul 2016</b>
<b>Project No: T6040704</b>	<b>Current Substantial Completion Date: Feb 2017</b>
<b>Project Phase: Construction</b>	<b>Phase Complete: 90%</b>

**Project Description**

This project will replace 11 hydraulic elevators system-wide to maintain a state of good repair, including four elevators located in the Bronx, two elevators in Manhattan and five elevators in Queens.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule**

**Schedule:** During the Fourth Quarter 2016, the forecasted Substantial Completion date slipped three months, from November 2016 to February 2017, due to reallocation of resources to address higher priority projects.

**What is Being Done**

**Schedule:** Subsequent to the reporting quarter, Substantial Completion was achieved on February 28, 2017.

**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.

<b>MTA Agency: New York City Transit</b>	<b>Status as of December 31, 2016</b>
<b>Project Name: Station Renewal and ADA Accessibility at Ozone Park Lefferts Blvd Station - Liberty Line</b>	<b>Current Budget: \$7.4M &amp; \$21.6M</b>
	<b>Project EAC: \$7.4M &amp; \$21.6M</b>
	<b>Substantial Completion Date at Award: Apr 2016</b>
<b>Project No: T6041232 &amp; T6041312</b>	<b>Current Substantial Completion Date: Apr 2017</b>
<b>Project Phase: Construction</b>	<b>Phase Complete: 74%</b>

<b>Project Description</b>
<p>The renewal project will eliminate all deficient conditions rated 3 or worse at this station as rated by the Station Condition Survey at the Ozone Park-Lefferts Blvd Station on the IND Liberty Line in Queens. Work includes repair or replacement of street stairs, mezzanine to platform stairs, mezzanine floors, doors and windows, interior and exterior walls, and canopies as required. The station will also be painted. The ADA project will provide full accessibility to the station, which has been identified as an ADA Key Station.</p>
<b>Problem Since Last Quarterly Report</b>
<b>Index Trigger(s): Schedule</b>
<p><b>Schedule:</b> During the Fourth Quarter 2016, the forecasted Substantial Completion date slipped four months, from December 2016 to April 2017, due to design modification for the platform canopy roof gutter support.</p>
<b>What is Being Done</b>
<p><b>Schedule:</b> The design was completed by in-house and the contractor's request for an Extension of Time is currently under evaluation.</p>
<b>IEC Comment</b>
<p><b>Budget and Schedule Performance:</b> The IEC substantially agrees with the material presented in this report, including the stated problems and actions taken by the Agency.</p>
<p><b>All Agency Contractor Evaluation:</b> The Overall Contractor/Consultant Performance rating for the current All-Agency Contractor Evaluation (ACE) report for this project is consistent with the IEC's observation of project performance during this reporting period.</p>

<b>MTA Agency: New York City Transit</b>	<b>Status as of December 31, 2016</b>
<b>Project Name: Station Component Repair Work: 2 Stations on the Canarsie Line</b>	<b>Current Budget: \$16.4M</b>
	<b>Project EAC: \$21.8M</b>
	<b>Substantial Completion Date at Award: Sep 2016</b>
<b>Project No: T60412C3</b>	<b>Current Substantial Completion Date: Oct 2016</b>
<b>Project Phase: Construction</b>	<b>Phase Complete: 100%</b>

<b>Project Description</b>
<p>The project calls for Component Repair work at two stations on the Canarsie Line (BMT) at Wilson Avenue and Atlantic Avenue. The project was originally planned to address five stations, however; three locations were dropped from this project due to the difficulty in obtaining General Orders (GO's). Work at Wilson Avenue includes the repair of platform edges; replacement of the tactile warning strip with a photo luminescent tactile warning strip on both platforms; and the repair of corroded columns. At the station house, work includes replacement of the front facade, construction of a new ramp, installation of new tiles, repair of spalled/damaged ceiling, and waterproofing the roof. At Atlantic Avenue, the work includes the repair/replacement of corroded canopy columns, roof and beams.</p>
<b>Problem Since Last Quarterly Report</b>
<b>Index Trigger(s): Cost</b>
<p><b>Cost:</b> During the Fourth Quarter 2016, the Estimate at Completion (EAC) of \$21.8M exceeded the Current Budget of \$16.4M due to additional work necessary to address the unanticipated extent of corrosion to the canopy columns, roof, and beams.</p>
<b>What is Being Done</b>
<p><b>Cost:</b> A budget modification is in circulation to address the funding shortfall.</p>
<b>IEC Comment</b>
<p><b>Budget and Schedule Performance:</b> The IEC substantially agrees with the material presented in this report, including the stated problems and the actions taken by the Agency.</p>
<p><b>All Agency Contractor Evaluation:</b> The overall Contractor/Consultant Performance rating for the current All-Agency Contractor Evaluation (ACE) report for this project is consistent with the IEC's observation of project performance during this reporting period.</p>



<b>MTA Agency: New York City Transit</b>	<b>Status as of December 31, 2016</b>
<b>Project Name: ADA Elevators at 23<sup>rd</sup> Street Station, Lexington Ave. Line (IRT)</b>	<b>Current Budget: \$17.6M</b>
	<b>Project EAC: \$18.5M</b>
	<b>Substantial Completion Date at Award: Apr 2016</b>
<b>Project No: T6041310</b>	<b>Current Substantial Completion Date: Dec 2016</b>
<b>Project Phase: Construction</b>	<b>Phase Complete: 100%</b>

**Project Description**

This project will provide full ADA (Americans with Disabilities Act) accessibility at the 23<sup>rd</sup> Street Station on the Lexington Avenue Line (IRT).

The project's scope of work includes the incorporation of all the station's elements to provide full ADA accessibility at the 23<sup>rd</sup> Street Station. This includes the installation of two ADA-compliant elevators, an accessible travel route and modifications of the platforms to reduce gaps. In addition, the modification of gates, agent booth windows and other ADA enhancements will be undertaken, as appropriate.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule**

Schedule: During the Fourth Quarter 2016, the forecasted Substantial Completion date was delayed by three months, from September 2016 to December 2016, due to the following additional work:

1. Troubleshooting and performance of various tests to the contractual IP based intercoms, in order to place the new CCTV/Intercom System in service.
2. Installation of an Analog Intercom System, in order to replace the inoperable contractually installed IP based intercom system.

**What is Being Done**

**Schedule:** Project achieved Substantial Completion on December 30, 2016. Subsequent to the reporting quarter, the Estimate at Completion was increased to \$18.5 million and a budget modification was circulated for approval to address the funding shortfall for the added scope mentioned above.

**IEC Comment**

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

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

<b>MTA Agency: New York City Transit</b>	<b>Status as of December 31, 2016</b>
<b>Project Name: 2015 Mainline Track Replacement on the Broadway-7<sup>th</sup> Avenue Line</b>	<b>Current Budget: \$14.4M</b>
	<b>Project EAC: \$14.4M</b>
	<b>Substantial Completion Date at Award: Jul 2016</b>
<b>Project No: T60502A6</b>	<b>Current Substantial Completion Date: Apr 2017</b>
<b>Project Phase: Construction</b>	<b>Phase Complete: 87%</b>

**Project Description**

This Track Reconstruction project includes the reconstruction of Mainline Track Panels, encompassing 3,306 Track Feet (85 Type III Panels) and the reconstruction of 424 Track Feet of Type II Ekki embedded Hilti in Mortar on the Broadway-7<sup>th</sup> Avenue Line. Locations were determined based on the latest track condition survey. Work includes the replacement of track and associated equipment and materials.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule**

**Schedule:** During the Fourth Quarter 2016, the forecasted Substantial Completion date slipped five months, from November 2016 to April 2017, as only three Type III panels were installed in the third weekend of November 2016, due to inclement weather. The remaining seven panels at 225<sup>th</sup> Street Station will be installed in February 2017, at the earliest, due to Track Access.

**What is Being Done**

**Schedule:** The remaining seven panels at 225<sup>th</sup> Street Station were installed in February 2017 and the Substantial Completion Date for this project will be April 2017. This will have no impact on the overall Substantial Completion Date of December 31, 2017 for the 2015 – 2016 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.

<b>MTA Agency: New York City Transit</b>	<b>Status as of December 31, 2016</b>
<b>Project Name: Replacement of Tunnel Lighting – from 36<sup>th</sup> Street to Jackson-Roosevelt on the Queens Boulevard Line</b>	<b>Current Budget: \$52.1M</b>
	<b>Project EAC: \$52.2M</b>
	<b>Substantial Completion Date at Award: Jun 2017</b>
<b>Project No: T6060203</b>	<b>Current Substantial Completion Date: Jun 2018</b>
<b>Project Phase: Construction</b>	<b>Phase Complete: 40%</b>

**Project Description**

This project will replace tunnel lighting in the tunnel segment from 36<sup>th</sup> Street Station to Roosevelt Avenue Station on the Queens Boulevard Line in Queens.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule**

**Schedule:** During the Fourth Quarter 2016, the forecasted Substantial Completion date slipped 12 months, from June 2017 to June 2018, due to the lack of availability of General Orders (GOs) and work trains.

**What is Being Done**

**Schedule:** Piggybacking opportunities for GOs, extending the GO limits, and sharing of work trains will be leveraged, whenever possible, to mitigate impacts to the 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:** An ACE Agency evaluation is not required for this project.

<b>MTA Agency: New York City Transit</b>	<b>Status as of December 31, 2016</b>
<b>Project Name: New Vent Plant at 46<sup>th</sup> St - Queens Boulevard Line</b>	<b>Current Budget: \$82.3M</b>
	<b>Project EAC: \$82.3M</b>
	<b>Substantial Completion Date at Award: Oct 2016</b>
<b>Project No: T6060304</b>	<b>Current Substantial Completion Date: Mar 2018</b>
<b>Project Phase: Construction</b>	<b>Phase Complete: 74%</b>

<b>Project Description</b>
<p>This project is for the construction of a new vent plant on the IND Queens Boulevard Line at 46th Street and Northern Boulevard in the Borough of Queens. The vent plant construction includes a new underground vent plant structure, plenum, vent bays, flues and the furnishing and installation of mechanical equipment. The construction of the new structure also involves major site excavation and underground utilities work.</p>
<b>Problem Since Last Quarterly Report</b>
<b>Index Trigger(s): Schedule</b>
<p><b>Schedule:</b> During the Fourth Quarter 2016, the forecasted Substantial Completion date slipped by five months, October 2017 to March 2018, due to a number of claims by the contractor that have been presented.</p>
<b>What is Being Done</b>
<p><b>Schedule:</b> The NYCT legal department is reviewing the merits of the contractor claims. Depending on the outcome of this review, there may be additional impacts to project.</p>
<b>IEC Comment</b>
<p><b>Budget and Schedule Performance:</b> The IEC substantially agrees with the material presented in this report, including the stated problems and actions taken by the Agency.</p>
<p><b>All Agency Contractor Evaluation:</b> The overall Contractor/Consultant Performance rating for the current All-Agency Contractor Evaluation (ACE) report for this project is consistent with the IEC's observation of project performance during this reporting period.</p>

<b>MTA Agency: New York City Transit</b>	<b>Status as of December 31, 2016</b>
<b>Project Name: Rehabilitation of Pumps at 2 Locations - Manhattan</b>	<b>Current Budget: \$13.3M</b>
	<b>Project EAC: \$13.3M</b>
	<b>Substantial Completion Date at Award: Jul 2017</b>
<b>Project No: T6060404</b>	<b>Current Substantial Completion Date: Oct 2017</b>
<b>Project Phase: Construction</b>	<b>Phase Complete: 29%</b>

<b>Project Description</b>
<p>This pump room project includes complete rehabilitation of pump room #2109 at 13<sup>th</sup> Street &amp; 6<sup>th</sup> Avenue on the 6<sup>th</sup> Avenue Line and electrical work at pump room #3208 at 108<sup>th</sup> Street on the Lexington Avenue Line in Manhattan.</p>
<b>Problem Since Last Quarterly Report</b>
<b>Index Trigger(s): Schedule</b>
<p><b>Schedule:</b> During the Fourth Quarter 2016, the forecasted Substantial Completion date slipped three months, from July 2017 to October 2017, due to the difficulty in obtaining General Orders (GOs) to complete the remainder of track drainage cleaning and liner work.</p>
<b>What is Being Done</b>
<p><b>Schedule:</b> Piggybacking on GOs in the vicinity of project work will be utilized, whenever possible.</p>
<b>IEC Comment</b>
<p><b>Budget and Schedule Performance:</b> The IEC substantially agrees with the material presented in this report, including the stated problems and actions taken by the Agency.</p>
<p><b>All Agency Contractor Evaluation:</b> The Overall Contractor/Consultant Performance rating for the current All-Agency Contractor Evaluation (ACE) report for this project is consistent with the IEC's observation of project performance during this reporting period.</p>

<b>MTA Agency: New York City Transit</b>	<b>Status as of December 31, 2016</b>
<b>Project Name: Demolition of Abandoned Structures – Phase 1</b>	<b>Current Budget: \$15.2M</b>
	<b>Project EAC: \$15.1M</b>
	<b>Substantial Completion Date at Award: Dec 2014</b>
<b>Project No: T6070306</b>	<b>Current Substantial Completion Date: Dec 2017</b>
<b>Project Phase: Construction</b>	<b>Phase Complete: 45%</b>

<b>Project Description</b>
<p>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 and the removal of asbestos, lead based paint, pigeon guano, Polychlorinated Biphenyl (PCBs), mercury and contaminated soil. The work is being done by NYCT's Environmental Engineering Division Indefinite Quantity (IQ) Hazardous Remediation Contractors. Eighteen structures have been completed to date and the remaining 32 locations are to be completed under this contract.</p>
<b>Problem Since Last Quarterly Report</b>
<b>Index Trigger(s): Schedule</b>
<p><b>Schedule:</b> During the Fourth Quarter 2016, the forecasted Substantial Completion date slipped 12 months, from December 2016 to December 2017, due to the inability to secure hazardous material remediation contractors.</p>
<b>What is Being Done</b>
<p><b>Schedule:</b> New contracts for hazardous material remediation have been awarded and work orders are being processed. Work will commence shortly.</p>
<b>IEC Comment</b>
<p><b>Budget and Schedule Performance:</b> The IEC substantially agrees with the material presented in this report, including the stated problem and the action taken by the Agency.</p>
<p><b>All Agency Contractor Evaluation:</b> The Overall Contractor/Consultant Performance rating for the current All-Agency Contractor Evaluation (ACE) report for this project is consistent with the IEC's observation of project performance during this reporting period.</p>

<b>MTA Agency: New York City Transit</b>	<b>Status as of December 31, 2016</b>
<b>Project Name: Two Interlockings: Union Turnpike &amp; 71<sup>st</sup> Avenue, Queens Blvd Line</b>	<b>Current Budget: \$297.8M</b>
	<b>Project EAC: \$297.8M</b>
	<b>Original Substantial Completion Date: Apr 2017</b>
<b>Project No: T6080310</b>	<b>Current Substantial Completion Date: May 2018</b>
<b>Project Phase: Construction</b>	<b>Phase Complete 76%</b>

<b>Project Description</b>
<p>This project will modernize and improve the reliability of the Union Turnpike and 71<sup>st</sup> Avenue Interlockings located on the IND Queens Boulevard Line (QBL) in the borough of Queens. Work will include replacement with a new conventional relay-based interlocking and the construction of new relay rooms to house all associated equipment. This project is necessary for the implementation of Communications Based Train Control (CBTC).</p>
<b>Problem Since Last Quarterly Report</b>
<b>Index Trigger(s): Contingency</b>
<p><b>Contingency:</b> During the Fourth Quarter 2016, the rate of contingency expenditures exceeded the overall percent complete, causing a contingency index of 1.1 due to multiple Additional Work Orders (AWO's), including:</p> <ol style="list-style-type: none"> <li>1. AWO#43* \$300,620 - Changes to Fiber Optic (Design Error/Omission)</li> <li>2. AWO#92 \$68,820 - Compensation for Lost Time</li> <li>3. AWO#93 \$4,335 - Procurement of Z-Plates (Field Condition)</li> <li>4. AWO#95 \$12,500 - Circuit Breakers in EDRs (Field Condition)</li> </ol> <p>* AWO#43 was issued in February 2016 but was not approved until the current reporting quarter.</p>
<b>What is Being Done</b>
<p><b>Contingency:</b> A contingency analysis is being conducted to evaluate any additional potential needs.</p> <p><b>Schedule:</b> Subsequent to the reporting quarter, the forecasted Substantial Completion date slipped three months, from February 2018 to May 2018, due to:</p> <ol style="list-style-type: none"> <li>1. Reduction of Bus General Orders (GOs) caused an increase in the total number of GOs required to complete work to place the signal systems in service, as well as the completion of ancillary equipment installation.</li> <li>2. Shortening of limits for certain GOs during the placement of Union Turnpike In-Service will prevent the contractor from working at Continental Avenue simultaneously.</li> </ol>
<b>IEC Comment</b>
<p><b>Budget and Schedule Performance:</b> The IEC substantially agrees with the material presented in this report, including the stated problems and actions taken by the Agency.</p>
<p><b>All Agency Contractor Evaluation:</b> The Overall Contractor/Consultant Performance rating for the current All-Agency Contractor Evaluation (ACE) report for this project is consistent with the IEC's observation of project performance during this reporting period.</p>

<b>MTA Agency: New York City Transit</b>	<b>Status as of December 31, 2016</b>
<b>Project Name: Rapid Transit Operations (RTO) Portable Radio Unit Replacement</b>	<b>Current Budget: \$6.7M</b>
	<b>Project EAC: \$6.7M</b>
	<b>Substantial Completion Date at Award: Mar 2011</b>
<b>Project No: T6080606</b>	<b>Current Substantial Completion Date: Mar 2017</b>
<b>Project Phase: Construction</b>	<b>Phase Complete: 60%</b>

<b>Project Description</b>	
<p>This project will replace approximately 8000 portable radios with accessories and ancillary equipment system- wide for use with the NYCT subway radio system. It will provide identification of the radio operator and display his/her name on a display at the Rail Control Center (RCC) dispatcher’s desk by decoding the Automatic Number Identification feature. To accomplish this, design effort is needed to modify both the hardware interface and the software decoding system.</p> <p>In 2012, the project was expanded to include the reprogramming of all Rapid Transit Operations (RTO) radios to comply with the FCC mandate and also to provide the new radios with the capability to operate in the wide band mode. NYCT is in the process of reprogramming the nearly 9000 RTO radios to comply with the Federal Communications Commission (FCC) mandate and operate in the wide band mode, as permitted by FCC waiver, until the installation is complete.</p>	
<b>Problem Since Last Quarterly Report</b>	
<b>Index Trigger(s): Schedule</b>	
<p><b>Schedule:</b> During the Fourth Quarter 2016, the forecasted Substantial Completion date slipped three months, from December 2016 to March 2017, due to reallocation of resources to address high priority projects</p>	
<b>What is Being Done</b>	
<p><b>Schedule:</b> Manpower has been allocated to complete the remaining work. Purchase of remaining equipment and integration at the Bus Command Center (BCC) and RCC is currently underway.</p>	
<b>IEC Comment</b>	
<p><b>Budget and Schedule Performance:</b> The IEC substantially agrees with the material presented in this report, including the stated problems and actions taken by the Agency.</p>	
<p><b>All Agency Contractor Evaluation:</b> An Agency ACE evaluation is not required for this project.</p>	



<b>MTA Agency: New York City Transit</b>	<b>Status as of December 31, 2016</b>
<b>Project Name: Passenger Station Local Area Network at 30 Stations</b>	<b>Current Budget: \$26.5M</b>
	<b>Project EAC: \$26.5M</b>
	<b>Substantial Completion Date at Award: Feb 2016</b>
<b>Project No: T6080621</b>	<b>Current Substantial Completion Date: Jun 2017</b>
<b>Project Phase: Construction</b>	<b>Phase Complete: 95%</b>

<b>Project Description</b>
<p>This project will install a highly reliable Ethernet Local Area Network throughout New York City Transit (NYCT) passenger stations infrastructure with strategically located "Access Points", in order to connect to NYCT's system wide network. This network will provide a communications infrastructure to support a multitude of technology initiatives that will improve security, fare collection, customer communications and service delivery.</p>
<b>Problem Since Last Quarterly Report</b>
<b>Index Trigger(s): Schedule</b>
<p><b>Schedule:</b> During the Fourth Quarter 2016, the forecasted Substantial Completion date slipped six months, from December 2016 to June 2017, due to delay in the completion of communication room work, field acceptance tests and limited in-house resources.</p>
<b>What is Being Done</b>
<p><b>Schedule:</b> Pending work has been rescheduled and communication room work was accelerated. Subsequent to the reporting quarter, communication room work has been completed.</p>
<b>IEC Comment</b>
<p><b>Budget and Schedule Performance:</b> The IEC substantially agrees with the material presented in this report, including the stated problems and the actions taken by the Agency.</p>
<p><b>All Agency Contractor Evaluation:</b> The Overall Contractor/Consultant Performance rating for the current All-Agency Contractor Evaluation (ACE) report for this project is consistent with the IEC's observation of project performance during this reporting period.</p>

<b>MTA Agency: New York City Transit</b>	<b>Status as of December 31, 2016</b>
<b>Project Name: Construction of New Bus Command Facility</b>	<b>Current Budget: \$52.0M</b>
	<b>Project EAC: \$52.0M</b>
	<b>Substantial Completion Date at Award: Jun 2017</b>
<b>Project No: T6120429</b>	<b>Current Substantial Completion Date: Nov 2017</b>
<b>Project Phase: Construction</b>	<b>Phase Complete: 30%</b>

<b>Project Description</b>
The project involves the design and construction of a new unified regional Bus Command Center for New York City Transit (NYCT) Department of Buses and the Metropolitan Transit Authority (MTA) Bus Company in Brooklyn.
<b>Problem Since Last Quarterly Report</b>
<b>Index Trigger(s): Schedule</b>
<b>Schedule:</b> During the Fourth Quarter 2016, the forecasted Substantial Completion date slipped five months, from June 2017 to November 2017, due to the bankruptcy of the original steel subcontractor and the necessity of finding a replacement. This delay is concurrent with another delay caused by a redesign of the exterior precast concrete panels. Both issues have negatively impacted the Substantial Completion date.
<b>What is Being Done</b>
<b>Schedule:</b> Resequencing and reduction in duration of activities is being undertaken, when possible, to recover/mitigate the delay.
<b>IEC Comment</b>
<b>Budget and Schedule Performance:</b> The IEC substantially agrees with the material presented in this report, including the stated problems and actions taken by the Agency.
<b>All Agency Contractor Evaluation:</b> 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.

<b>MTA Agency: New York City Transit</b>	<b>Status as of December 31, 2016</b>
<b>Project Name: NYCT-Wide Storage Area Network/Disaster Recovery</b>	<b>Current Budget: \$20.4M</b>
	<b>Project EAC: \$22.9M</b>
	<b>Substantial Completion Date at Award: Mar 2015</b>
<b>Project No: T6160402</b>	<b>Current Substantial Completion Date: Aug 2017</b>
<b>Project Phase: Construction</b>	<b>Phase Complete: 81%</b>

**Project Description**

This project will install a Storage Area Network (SAN) and other related components at New York City Transit (NYCT) facilities with data centers or other major computing resources. The systems will provide storage, backup services and in-house disaster recovery for critical computing systems.

Contract D37478 will replace deficient server hardware at the Rail Control and Backup Control Centers. The Rail Control Center (RCC) has 52 HP servers and the Backup Control Center (BCC) has over 25 servers that provide limited backup to the RCC. By purchasing the new hardware and achieving virtualization technology, the number of physical servers can be reduced from over 75 to 20. Rail operations rely on this hardware.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule**

**Schedule:** During the Fourth Quarter 2016, the forecasted Substantial Completion date for contract D37478 slipped eight months, from December 2016 to August 2017. Due to the blackout that occurred on July 13, 2016, there is a moratorium on any power related work in the RCC at this time.

**What is Being Done**

**Schedule:** NYCT is looking into running a new power feed within the RCC building. Once this issue is resolved, equipment will be installed at the RCC and then followed by installation of equipment at the BCC.

**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.

<b>MTA Agency: New York City Transit</b>	<b>Status as of December 31, 2016</b>
<b>Project Name: Rehabilitate Employee Facility at 207<sup>th</sup> Street/ 8<sup>th</sup> Avenue Station</b>	<b>Current Budget: \$6.7M</b>
	<b>Project EAC: \$6.7M</b>
	<b>Substantial Completion Date at Award: Jul 2013</b>
<b>Project No: T6160713</b>	<b>Current Substantial Completion Date: Jun 2017</b>
<b>Project Phase: Construction</b>	<b>Phase Complete: 98%</b>

<b>Project Description</b>
<p>This project involves the construction of a new employee facility, and the rehabilitation of existing employee facilities, on the mezzanine level and platform level of the 207<sup>th</sup> Street Station, 8<sup>th</sup> Avenue Line. The total area of rehabilitation and reconstruction is approximately 14,000 sq. ft. The project will provide offices, male/female locker rooms and toilets, workshop, storage rooms, wash-up areas, mechanical room, Electric Panel Room (EPR), heating ventilation, electrical system, air conditioning, lighting, plumbing, flooring and communication systems. The facilities from six operating divisions of NYCT, including Stations, Car Equipment, Track, Structures and Facilities, Rapid Transit Operations and Signals, will be rehabilitated.</p>
<b>Problem Since Last Quarterly Report</b>
<b>Index Trigger(s): Schedule</b>
<p><b>Schedule:</b> During the Fourth Quarter 2016, the forecasted Substantial Completion date slipped six months, from December 2016 to June 2017, due to additional work required by the Office of Code Compliance. The added scope is to address areas outside of the Employee Facilities. This scope and any ancillary work would have to be approved and funded by Department of Subways. However, the Department of Subways may, instead, request a waiver from the Office of System Safety and the Office of Code Compliance.</p>
<b>What is Being Done</b>
<p><b>Schedule:</b> The additional scope is currently under review by Department of Subways. When the scope is approved and funded, the contract can be completed.</p>
<b>IEC Comment</b>
<p><b>Budget and Schedule Performance:</b> The IEC substantially agrees with the material presented in this report, including the stated problems and actions taken by the Agency.</p>
<p><b>All Agency Contractor Evaluation:</b> An Agency ACE evaluation is not required for this project.</p>

<b>MTA Agency: New York City Transit</b>	<b>Status as of December 31, 2016</b>
<b>Project Name: Repairs at Livingston Plaza</b>	<b>Current Budget: \$27.3M</b>
	<b>Project EAC: \$27.3M</b>
	<b>Substantial Completion Date at Award: Jul 2017</b>
<b>Project No: T6160717</b>	<b>Current Substantial Completion Date: Sep 2018</b>
<b>Project Phase: Construction</b>	<b>Phase Complete: 46%</b>

<b>Project Description</b>	
<p>The project involves elevator, roof and façade work at 130 Livingston Plaza. This project was awarded in conjunction with projects which address the installation of security bollards, the restoration of foundation and sidewalks, and the replacement of existing planters and soil at the employee facility located at 130 Livingston Street in Brooklyn (project T6160707) and the relocation of the World War II Memorial from 370 Jay Street (project N6110102).</p>	
<b>Problem Since Last Quarterly Report</b>	
<b>Index Trigger(s): Schedule</b>	
<p><b>Schedule:</b> During the Fourth Quarter of 2016, the forecasted Substantial Completion date was delayed by 12 months, from September 2017 to September 2018, due to remedial work associated with façade damage which is believed to have been caused by the contractor during the performance of the façade repair work. In addition the project delay has been further impacted by the contractor's pending default.</p>	
<b>What is Being Done</b>	
<p><b>Schedule:</b> A default hearing is planned for mid-March 2017. Additional impact to the schedule to be determined.</p>	
<b>IEC Comment</b>	
<p><b>Budget and Schedule Performance:</b> The IEC substantially agrees with the material presented in this report, including the actions taken by the Agency.</p>	
<p><b>All Agency Contractor Evaluation:</b> The Overall Contractor/Consultant Performance rating for the current All-Agency Contractor Evaluation (ACE) report for this project is consistent with the IEC's observation of project performance during this reporting period.</p>	

<b>MTA Agency: New York City Transit</b>	<b>Status as of December 31, 2016</b>
<b>Project Name: Facility Roof Repair and Replacement Phase 4</b>	<b>Current Budget: \$16.4M</b>
	<b>Project EAC: \$16.4M</b>
	<b>Substantial Completion Date at Award: Feb 2013</b>
<b>Project No: T6160719</b>	<b>Current Substantial Completion Date: Apr 2018</b>
<b>Project Phase: Construction</b>	<b>Phase Complete: 47%</b>

**Project Description**

The project involves the repair and replacement of facility roofs throughout the system. The work to be done in Phase 4 includes six locations that will have their roofs repaired and replaced to current Authority standards, guidelines and applicable codes. These locations include: Prospect Park Station, Avenue T Substation, Broadway/Cornelia Street Substation, Broadway/West 143<sup>rd</sup> Street Substation and the Flatbush/Empire Boulevard Substation.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule**

**Schedule:** During the Fourth Quarter 2016, the forecasted Substantial Completion slipped six months, from October 2017 to April 2018, due to the time needed for approval of a budget modification that will address the pending Additional Work Orders (AWOs) which include the following:

1. Additional lead paint disturbances at Prospect Park Relay Room;
2. Additional lead paint disturbances at Prospect Park Flagging Crew Quarters;
3. Reconstruction of Portico #2 east bound at New Dorp Station SIR);
4. Increase of parapet height at prospect park flagging quarters and
5. Additional upper roof railings on the south side for fall protection because of low parapet wall.

**What is Being Done**

**Schedule:** A budget modification is currently under review. Once the budget modification has been approved the Construction Manager’s office will negotiate the additional work with the contractor.

**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.

<b>MTA Agency: New York City Transit</b>	<b>Status as of December 31, 2016</b>
<b>Project Name: ADA Accessibility at 57 St – 7th Avenue Station – Phase 2</b>	<b>Current Budget: \$5.2M</b>
	<b>Project EAC: \$5.2M</b>
	<b>Original Design Completion Date: Sept 2011</b>
<b>Project No: T6041311</b>	<b>Current Design Completion Date: Mar 2017</b>
<b>Project Phase: Design</b>	<b>Phase Complete: 85%</b>

**Project Description**

This project completes the ADA Accessibility at the 57<sup>th</sup> Street, Broadway Line Station. The street to mezzanine elevator (Phase 1) is in service and was completed under a separate project. This project (Phase 2) provides two (2) mezzanine-to-platform elevators at the north mezzanine of the 57<sup>th</sup> Street Station. In order to provide the necessary elevator work, the north mezzanine will be expanded along with the relocation of associated utilities under 7<sup>th</sup> Avenue between 56<sup>th</sup> and 57<sup>th</sup> Streets

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule**

**Schedule:** During the Fourth Quarter 2016, the forecasted Design Completion date slipped three months, from December 2016 to March 2017, due to pending approvals of the Design from Con Edison, the Department of Environmental Protection (DEP) and Empire City Subway (ECS).

**What is Being Done**

**Schedule:** NYCT will follow up with utility companies to obtain approvals necessary for the street work design.

**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.

<b>MTA Agency: New York City Transit</b>	<b>Status as of December 31, 2016</b>
<b>Project Name: 2015 Mainline Track Replacement – Flushing Line</b>	<b>Current Budget: \$15.9M</b>
	<b>Project EAC: \$32.1M</b>
	<b>Substantial Completion Date at Award: Mar 2017</b>
<b>Project No: T7050220</b>	<b>Current Substantial Completion Date: May 2017</b>
<b>Project Phase: Construction</b>	<b>Phase Complete: 95%</b>

<b>Project Description</b>	
<p>This Track Reconstruction project includes replacement of mainline track components on the Flushing Line, including 150 Type III panels and 1,738 Track Feet of selected component repair. The Mainline Track Program replaces deficient track components along the revenue service right-of-way. Locations addressed are determined by asset condition rating and scope typically includes the replacement of track components and associated equipment/materials, such as signals, contact rails, running rails, and ballast.</p>	
<b>Problem Since Last Quarterly Report</b>	
<b>Index Trigger(s): Cost</b>	
<p><b>Cost:</b> During the Fourth Quarter 2016, the Estimate at Completion (EAC) was reported as \$32.1 million compared to a current budget of \$15.9 million due to accrual of temporary charges for 2016 work to this contract, which began as a result of delayed approval of the 2015-2019 Capital Program.</p>	
<b>What is Being Done</b>	
<p><b>Cost:</b> Subsequent to the reporting quarter, the Estimate at Completion was adjusted to reflect only the work associated with the 2015 portion of this project. The previous EAC included a partial estimate for work associated the 2016 portion of this project.</p> <p>Reconciliation is currently underway and when the process is completed, this contract will be considered Substantially Complete.</p>	
<b>IEC Comment</b>	
<p><b>Budget and Schedule Performance:</b> The IEC substantially agrees with the material presented in this report, including the stated problems and actions taken by the Agency.</p>	
<p><b>All Agency Contractor Evaluation:</b> An Agency ACE evaluation is not required for this project.</p>	



<b>MTA Agency: New York City Transit</b>	<b>Status as of December 31, 2016</b>
<b>Project Name: Modification to Signal Control Lines, Phase 6 (Parts 1 and 2)</b>	<b>Current Budget: \$33.0M</b>
	<b>Project EAC: \$33.0M</b>
	<b>Substantial Completion Date at Award: Dec 2017</b>
<b>Project No: T7080319</b>	<b>Current Substantial Completion Date: Jun 2018</b>
<b>Project Phase: Construction</b>	<b>Phase Complete: 30%</b>

**Project Description**

This two part project involves the modification to existing signal system components, including, but not limited to, the installation of grade times and station timers, changing of the speed signs, modification of signal control lines and installation of new signal locations, as well as, the modification of Automatic Train Supervision (ATS) program functionality to bring the signal system toward safety compliance. Part One of this project is in construction (\$15.2M), with part two of the project forecasted for award in March 2018 (\$17.8M).

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule**

**Schedule:** During the Fourth Quarter 2016, the forecasted Substantial Completion date for Part One slipped six months, from December 2017 to June 2018, due to the unavailability of track access and the lead time in receiving material. In addition, the forecast construction start and completion dates for Part Two have also slipped six months.

**What is Being Done**

**Schedule:** Work is progressing and opportunities are being sought to expedite work and to mitigate any further impact to the 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:** An Agency ACE evaluation is not required for this project.

<b>MTA Agency: New York City Transit</b>	<b>Status as of December 31, 2016</b>
<b>Project Name: Help Point Installation System Wide (48 Locations)</b>	<b>Current Budget: \$22.1M</b>
	<b>Project EAC: \$29.9M</b>
	<b>Substantial Completion Date at Award: Dec 2017</b>
<b>Project No: T7080620</b>	<b>Current Substantial Completion Date: Dec 2017</b>
<b>Project Phase: Construction</b>	<b>Phase Complete: 20%</b>

<b>Project Description</b>	
<p>This project is for the installation of Help Point (HP) kiosks at NYCT stations system-wide. Help Points will replace the Customer Assistance Intercoms and provide a reliable, easy to use communication link for customers to be used for information or in case of an emergency. The contract for the Purchase of 300 Access Node Units has been closed out (A37655) and the contract to install Help Points at 23 stations in Manhattan and Brooklyn is currently in construction (A37678). Additional contract work will include the installation at 25 stations by in-house forces.</p>	
<b>Problem Since Last Quarterly Report</b>	
<b>Index Trigger(s): Cost</b>	
<p><b>Cost:</b> During the Fourth Quarter 2016, the Estimate at Completion (EAC) of \$29.9 million exceeded the Current Budget of \$22.1 million due to the following reasons:</p> <ol style="list-style-type: none"> <li>1. Transfer of additional locations originally planned for inclusion under different projects.</li> <li>2. Added scope required to implement passenger station local area network system infrastructure to support Help Point installation at a number of stations.</li> </ol>	
<b>What is Being Done</b>	
<p><b>Cost:</b> The funding shortfall will be addressed by a future budget action.</p>	
<b>IEC Comment</b>	
<p><b>Budget and Schedule Performance:</b> The IEC substantially agrees with the material presented in this report, including the stated problems and actions taken by the Agency.</p>	
<p><b>All Agency Contractor Evaluation:</b> The overall Contractor/Consultant Performance rating for the current All-Agency Contractor Evaluation (ACE) report for this project is consistent with the IEC's observation of project performance during this reporting period.</p>	

<b>MTA Agency: New York City Transit</b>	<b>Status as of December 31, 2016</b>
<b>Project Name: Help Point Installation System Wide (39 Locations)</b>	<b>Current Budget: \$22.5M</b>
	<b>Project EAC: \$22.5M</b>
	<b>Substantial Completion Date at Award: Dec 2016</b>
<b>Project No: T7080632</b>	<b>Current Substantial Completion Date: Mar 2017</b>
<b>Project Phase: Construction</b>	<b>Phase Complete: 85%</b>

**Project Description**

This project involves the installation of Help Point (HP) kiosks at NYCT stations in Brooklyn and Queens. Help Points are replacing the Customer Assistance Intercoms and provide a reliable, easy to use communication link for customers to be used for information or in case of an emergency.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule**

**Schedule:** During the Fourth Quarter 2016, the forecasted Substantial Completion date slipped three months, from December 2016 to March 2017, due to reallocation of resources to address high priority projects.

**What is Being Done**

**Schedule:** Manpower has been allocated to complete remaining work. Contract is forecasted for completion by March 31, 2017.

**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.

<b>MTA Agency: New York City Transit</b>	<b>Status as of December 31, 2016</b>
<b>Project Name: Jay Street Escalator Realignment</b>	<b>Current Budget: \$15.0M</b>
	<b>Project EAC: \$15.0M</b>
	<b>Original Design Completion Date: Oct 2016</b>
<b>Project No: T7040710</b>	<b>Current Design Completion Date: Apr 2017</b>
<b>Project Phase: Design</b>	<b>Phase Complete: 50%</b>

**Project Description**

This project will reconfigure the stairs and escalators that connect 370 Jay Street to the Jay Street station in Brooklyn to improve the safety and efficiency of station access.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule**

**Schedule:** During the Fourth Quarter 2016, the forecasted Design Completion date slipped five months, from October 2016 to March 2017, due to a delay in the completion of the final drawings.

**What is Being Done**

**Schedule:** Subsequent to the reporting quarter, design completion slipped an additional month to April 2017 due to a delay in the completion of the final drawings. To mitigate any additional delays, NYCT will expedite the review of the final drawings.

**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.

<b>MTA Agency: New York City Transit</b>	<b>Status as of December 31, 2016</b>
<b>Project Name: Station Renewal of Borough Hall Station on the Lexington Avenue Line</b>	<b>Current Budget: \$43.4M</b>
	<b>Project EAC: \$36.5M</b>
	<b>Original Design Completion Date: Jul 2015</b>
<b>Project No: T7041201</b>	<b>Current Design Completion Date: Jun 2017</b>
<b>Project Phase: Design</b>	<b>Phase Complete: 60%</b>

**Project Description**

This station renewal project will eliminate all deficient conditions at Borough Hall Station on the IRT Lexington Avenue Line in Brooklyn, as determined by NYCT’s Station Condition Survey. Work includes repair of structural deficiencies and improvements to architectural treatments, with a focus on remediation of water leaks. Excavation for waterproofing repairs requires traffic diversion and the relocation of bus stops that serve multiple routes and the replacement of undermined utilities.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule**

**Schedule:** During the Fourth Quarter 2016, the forecasted Design Completion date slipped five months, from January 2017 to June 2017, due to applying for a permit needed for the closure of a single lane street in order to perform test pits on Joralemon Street. This closure is required to complete water remediation work. Additionally, the Department of Transportation (DOT) has requested a traffic study and NYCT is in the process of hiring a consultant to produce this deliverable. The lane closure and test pit work was not anticipated during the design phase.

**What is Being Done**

**Schedule:** Subsequent to the reporting quarter, a permit was obtained from the DOT for the single lane street closure to perform the necessary test pits. The test pit work started March 3, 2017.

**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.

<b>MTA Agency: New York City Transit</b>	<b>Status as of December 31, 2016</b>
<b>Project Name: Renewal and ADA Accessibility at Astoria Boulevard Station on the Astoria Line</b>	<b>Current Budget: \$18.02M &amp; \$34.97M</b>
	<b>Project EAC: \$18.02M &amp; \$34.97M</b>
	<b>Original Design Completion Date: Apr 2017</b>
<b>Project No: T7041204 &amp; T7041302</b>	<b>Current Design Completion Date: Aug 2018</b>
<b>Project Phase: Design</b>	<b>Phase Complete: 40%</b>

<b>Project Description</b>
<p>These projects will address the renewal and ADA Accessibility at Astoria-Ditmars Boulevard Station on the Astoria Line in Queens. The scope of work will include: the repair or replacement of deficient components such as: mezzanine to platform stairs, mezzanine floors, doors, windows, and interior and exterior walls; modification of boarding area to comply with ADA standards; repair of canopies, as required; and station painting.</p>
<b>Problem Since Last Quarterly Report</b>
<b>Index Trigger(s): Schedule</b>
<p><b>Schedule:</b> During the Fourth Quarter 2016, the forecasted Design Completion date slipped five months, from May 2017 to August 2018, due to a design revision that will raise the height of the existing mezzanine floor, providing greater clearance and reducing the probability of trucks hitting the mezzanine.</p>
<b>What is Being Done</b>
<p><b>Schedule:</b> The design revision was approved at the Preliminary Engineering sign-off. Changes are being incorporated into the final design. The cost impact to the project from the increase of the mezzanine height above street level, including related foundation and structural work, and other proposed changes are currently being assessed and will be addressed by a future budget action.</p>
<b>IEC Comment</b>
<p><b>Budget and Schedule Performance:</b> The IEC substantially agrees with the material presented in this report, including the stated problems and actions taken by the Agency.</p>
<p><b>All Agency Contractor Evaluation:</b> An Agency ACE evaluation is not required for this project.</p>

<b>MTA Agency: New York City Transit</b>	<b>Status as of December 31, 2016</b>
<b>Project Name: ADA Accessibility at Gun Hill Road Station on the Dyre Ave Line</b>	<b>Current Budget: \$41.5M</b>
	<b>Project EAC: \$42.0M</b>
	<b>Original Design Completion Date: Aug 2015</b>
<b>Project No: T7041305</b>	<b>Current Design Completion Date: Apr 2017</b>
<b>Project Phase: Design</b>	<b>Phase Complete: 90%</b>

<b>Project Description</b>
<p>This project will address ADA Accessibility at the Gun Hill Road Station on the Dyre Avenue Line in the Bronx. Work will include: installation of two hydraulic elevators and associated components; modification to the existing platform components, including columns, girders, boarding areas and stairs, as necessary; and modification of the existing mezzanine, including the fare collection area, agent booth, and station rooms.</p>
<b>Problem Since Last Quarterly Report</b>
<b>Index Trigger(s): Schedule</b>
<p><b>Schedule:</b> During the Fourth Quarter 2016, the forecasted Design Completion date slipped three months, from November 2016 to February 2017, due to the additional coordination required with MTA Real Estate to resolve pending issues with retail space.</p>
<b>What is Being Done</b>
<p><b>Schedule:</b> Coordination is currently underway and the design package will be revised accordingly. Subsequent to the reporting quarter, Design Completion slipped an additional two months to April 2017 in order to incorporate user comments and complete the Final Design Bid Estimates.</p>
<b>IEC Comment</b>
<p><b>Budget and Schedule Performance:</b> The IEC substantially agrees with the material presented in this report, including the stated problems and actions taken by the Agency.</p>
<p><b>All Agency Contractor Evaluation:</b> An Agency ACE evaluation is not required for this project.</p>

<b>MTA Agency: New York City Transit</b>	<b>Status as of December 31, 2016</b>
<b>Project Name: Access Improvements: Grand Central, Phase 2</b>	<b>Current Budget: \$75.0M</b>
	<b>Project EAC: \$78.5M</b>
	<b>Original Design Completion Date: Jan 2017</b>
<b>Project No: T7041402</b>	<b>Current Design Completion Date: Apr 2017</b>
<b>Project Phase: Design</b>	<b>Phase Complete: 60%</b>

<b>Project Description</b>	
<p>This project will involve modifications to the Grand Central-42<sup>nd</sup> Street subway station to improve pedestrian access and mitigate congestion. The scope includes architectural finishes throughout the mezzanine, relocation of the Rail Control Operations office by the 42<sup>nd</sup> Street Shuttle passageway to provide space for a new fare control area, and reconfiguration of back of house space.</p>	
<b>Problem Since Last Quarterly Report</b>	
<b>Index Trigger(s): Schedule</b>	
<p><b>Schedule:</b> During the Fourth Quarter 2016, the forecasted Design Completion date slipped three months, from January 2017 to April 2017, due to delays in the finalization of construction documents and a review of mezzanine finishes.</p>	
<b>What is Being Done</b>	
<p><b>Schedule:</b> Completion of final design documents is underway and Design Completion is forecast for April 2017. Substantial Completion of Construction remains on schedule for October 2020.</p>	
<b>IEC Comment</b>	
<p><b>Budget and Schedule Performance:</b> The IEC substantially agrees with the material presented in this report, including the stated problems and actions taken by the Agency.</p>	
<p><b>All Agency Contractor Evaluation:</b> An Agency ACE evaluation is not required for this project.</p>	





<b>MTA Agency: New York City Transit</b>	<b>Status as of December 31, 2016</b>
<b>Project Name: Station Entrance and Structural Work at 8 Avenue on the Sea Beach Line</b>	<b>Current Budget: \$15.0M</b>
	<b>Project EAC: \$14.2M</b>
	<b>Original Design Completion Date: Dec 2016</b>
<b>Project No: T7041403</b>	<b>Current Design Completion Date: Jun 2017</b>
<b>Project Phase: Design</b>	<b>Phase Complete: 90%</b>

**Project Description**

This project will rehabilitate and reopen the 7<sup>th</sup> Avenue control house and mezzanine area at 8<sup>th</sup> Avenue Station on the Sea Beach Line in Brooklyn.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule**

**Schedule:** During the Fourth Quarter 2016, the forecasted Design Completion date slipped three months, from December 2016 to March 2017, due to the reallocation of In-House Engineering services to address high priority projects necessitated by the delayed approval of 2015-2019 Capital Plan.

**What is Being Done**

**Schedule:** Subsequent to the reporting quarter, Design Completion slipped an additional three months from March to June 2017. Engineering staff will be reallocated to this project and they are working towards mitigating the impact to the 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:** An Agency ACE evaluation is not required for this project.

<b>MTA Agency: New York City Transit</b>	<b>Status as of December 31, 2016</b>
<b>Project Name: Overcoat Painting and Steel Repair at East New York Leads and Loops</b>	<b>Current Budget: \$27.9M</b>
	<b>Project EAC: \$27.9M</b>
	<b>Original Design Completion Date: Mar 2017</b>
<b>Project No: T7070315</b>	<b>Current Design Completion Date: Jul 2017</b>
<b>Project Phase: Design</b>	<b>Phase Complete: 60%</b>

**Project Description**

This project will involve overcoat painting and priority steel repairs at East New York Leads and Loops on the Jamaica and Canarsie Lines in Brooklyn.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule**

**Schedule:** During the Fourth Quarter 2016, the forecasted Design Completion slipped four months, from March 2017 to July 2017, due to the reallocation of Agency resources to address high priority structural steel repair and overcoat painting projects.

**What is Being Done**

**Schedule:** Design completion is forecasted for July 2017 and construction award is forecasted for February 28, 2018.

**IEC Comment**

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

<b>MTA Agency: New York City Transit</b>	<b>Status as of December 31, 2016</b>
<b>Project Name: Rehabilitation of Ducts at Stanton Substation</b>	<b>Current Budget: \$14.1M</b>
	<b>Project EAC: \$12.4M</b>
	<b>Original Design Completion Date: Feb 2017</b>
<b>Project No: T7090411</b>	<b>Current Design Completion Date: Oct 2017</b>
<b>Project Phase: Design</b>	<b>Phase Complete: 30%</b>

**Project Description**

This project will replace the existing ducts and positive cables between the Stanton Street Substation and the Bowery circuit breaker house (CBH) , located in the Borough of Manhattan. Currently, six out of the eight positive cables are faulted, due to the collapse of the duct bank.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule**

**Schedule:** During the Fourth Quarter 2016, the forecasted Design Completion date slipped eight months, from February 2017 to October 2017, due to the need to conduct an alternatives analysis to determine the feasibility of running cables and conduits inside the tunnel, in lieu of installing ducts in the streets.

**What is Being Done**

**Schedule:** Surveys were completed on January 27, 2017. It was determined that running cables and conduits inside the tunnel is a viable option. An alternate cost proposal is being requested. Currently, there is no change to the October 31, 2017 final Design Completion 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:** An Agency ACE evaluation is not required for this project.

<b>MTA Agency: New York City Transit</b>	<b>Status as of December 31, 2016</b>
<b>Project Name: Heavy Shop Equipment Purchase &amp; Replacement 2015-2019</b>	<b>Current Budget: \$10.0M</b>
	<b>Project EAC: \$10.0M</b>
	<b>Original Design Completion Date: Dec 2016</b>
<b>Project No: T7100409</b>	<b>Current Design Completion Date: Jun 2017</b>
<b>Project Phase: Design</b>	<b>Phase Complete: 48%</b>

**Project Description**

This project will replace shop equipment that has reached the end of their useful lives and purchase a new truck washer, bridge crane and parts wash tanks to improve the efficiency of current Department of Car Equipment (DCE) operations.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule**

**Schedule:** During the Fourth Quarter 2016, the forecasted Design Completion date slipped six months, from December 2016 to June 2017, due to reprioritization of scope to address the constrained budget.

**What is Being Done**

**Schedule:** Once heavy shop equipment purchases have been reprioritized and the scope is revised accordingly, the acceptance of submitted Authorizations to Advertise will be expedited.

**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.

<b>MTA Agency: New York City Transit</b>	<b>Status as of December 31, 2016</b>
<b>Project Name: Elevator Upgrades at 5 Depots</b>	<b>Current Budget: \$16.1M</b>
	<b>Project EAC: \$16.0M</b>
	<b>Original Design Completion Date : Feb 2017</b>
<b>Project No: T7120408</b>	<b>Current Design Completion Date: May 2017</b>
<b>Project Phase: Design</b>	<b>Phase Complete: 90%</b>

**Project Description**

This project formerly included the replacement of elevator cabs and equipment in the existing Elevator Machine Rooms at Jackie Gleason (Brooklyn), Gun Hill (Bronx), Manhattanville (Manhattan), Casey Stengel (Queens) and East New York (Brooklyn) Bus Depots. The project scope has subsequently been revised as noted in this variance report.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule**

**Schedule:** During the Fourth Quarter 2016, the forecasted Design Completion date slipped three months, from February 2017 to May 2017, due to revision of scope of work from seven elevators at five locations to two elevators at one location and related repackaging of the design documents.

**What is Being Done**

**Schedule:** Subsequent to the reporting quarter, the scope of work has been revised back to the original scope of seven elevators at five locations. The project is now in the Final Design Phase and the contract documents are being prepared for final packaging and preparation for advertisement. No additional delays to award are anticipated.

**IEC Comment**

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

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

<b>MTA Agency: New York City Transit</b>	<b>Status as of December 31, 2016</b>
<b>Project Name: Improvements to Electrical and Mechanical Systems at Livingston Plaza</b>	<b>Current Budget: \$56.0M</b>
	<b>Project EAC: \$56.0M</b>
	<b>Original Design Completion Date: Sep 2016</b>
<b>Project No: T7160714</b>	<b>Current Design Completion Date: Jul 2017</b>
<b>Project Phase: Design</b>	<b>Phase Complete: 83%</b>

<b>Project Description</b>	
<p>The project involves the improvement of electrical and mechanical infrastructure systems within 130 Livingston Plaza. This project will also include the installation of an additional emergency generator system.</p>	
<b>Problem Since Last Quarterly Report</b>	
<b>Index Trigger(s): Schedule</b>	
<p><b>Schedule:</b> During the Fourth Quarter of 2016, the forecasted Design Completion date slipped six months, from January 2017 to July 2017, due to a scope revision to include redundant riser design at critical centers within Livingston Plaza to allow for maintenance flexibility.</p>	
<b>What is Being Done</b>	
<p><b>Schedule:</b> Final design and negotiation of the task order will be expedited to mitigate impact to the schedule. No cost impact is anticipated due to this scope revision.</p>	
<b>IEC Comment</b>	
<p><b>Budget and Schedule Performance:</b> The IEC substantially agrees with the material presented in this report, including the actions taken by the Agency.</p>	
<p><b>All Agency Contractor Evaluation:</b> An Agency ACE evaluation is not required for this project.</p>	

<b>MTA Agency: Long Island Rail Road</b>	<b>Status as of December 31, 2016</b>
<b>Project Name: Hicksville Station Improvements</b>	<b>Current Budget: \$70.6M</b>
	<b>Project EAC: \$69.2M</b>
	<b>Substantial Completion Date at Award: Apr 2018</b>
<b>Project No: L50304TR</b>	<b>Current Substantial Completion Date: Aug 2018</b>
<b>Project Phase: Construction</b>	<b>Phase Complete: 3%</b>

**Project Description**

The project involves the rehabilitation and improvement of the facilities at Hicksville Station including the replacement of platform slabs, replacement of canopy structure, construction of two new elevators, replacement of existing stairs and escalators, new waiting rooms, the installation of an additional stairway for each platform, upgraded lighting and security systems. The station is located on a viaduct and includes two 14-car elevated center platforms and a manned ticket office at street level.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule**

**Schedule:** During the Fourth Quarter 2016, the project’s Substantial Completion date slipped four months from April 2018 to August 2018. This slip is due to the delay of Notice to Proceed, the addition of specifying Cross-linked polyethylene piping (PEX) during the design of the Radiant Heat Option to the base scope of work, and the design of full Cast-In-Place concrete construction instead of a hybrid system.

**What is Being Done**

**Schedule:** The contractor is resequencing scheduled work to reduce schedule slippage due to these delays. The contractor anticipates schedule gains from an alternate demolition and formwork shoring plan for platform slab work. The revised plan allows the contractor to work under the platform between platform slab demolition commencement and completion as opposed to incurring downtime until the platform slab was completed and the shoring removed.

**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.

<b>MTA Agency: Long Island Rail Road</b>	<b>Status as of December 31, 2016</b>
<b>Project Name: Centralized Train Control</b>	<b>Current Budget: \$12.9M</b>
	<b>Project EAC: \$17.9M</b>
	<b>Substantial Completion Date at Award: Jun 2015</b>
<b>Project No: L60502LF</b>	<b>Current Substantial Completion Date: May 2018</b>
<b>Project Phase: Construction</b>	<b>Phase Complete: 57%</b>

**Project Description**

The scope of this project is to centralize control of all LIRR train movement to a full Centralized Train Control (CTC) system within the Jamaica Central Control (JCC) building. Work includes the initial architectural fit-out of the CTC facility with furnishing and installation of:

- Flooring, ceiling, electrical, security, communication, and fire suppression systems.
- HVAC System and connection to Building Management System.
- Floor covering, interior finishes, walls, doors, and windows.
- New staircase.
- Acoustic treatments.
- Console furniture.

**Problem Since Last Quarterly Report**

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

**Schedule:** During the Fourth Quarter 2016, the forecast Substantial Completion date slipped 12 months, extending the schedule from May 2017 to May 2018, based upon current submissions of the redesigned enhancement of the CTC layout and pending construction activities at the JCC building.

**Cost:** Due to operational enhancements of the JCC 6<sup>th</sup> Floor Theatre, additional costs are anticipated for the reconfiguration of the space. Enhancements to the original layout include:

1. Relocation of the Incident Command Center from the 6<sup>th</sup> to 7<sup>th</sup> Floor
2. Relocation of Maintenance of Equipment
3. Incorporation of the Signal Desk and Power Director into the Theatre
4. Purchase and installation of the Video Display Wall in the main Theatre

**What is Being Done**

**Schedule:** The Jamaica Central Control redesign contract was awarded in the Fourth Quarter of 2016. A Conceptual Design Report (CDR) was submitted by the design consultant to LIRR in December 2016. The revised CDR is pending LIRR approval.

**Cost:** The increase in project costs will be mitigated by utilizing to the best extent possible existing equipment, cables, furniture and utilities.

**IEC Comment**

**Budget and Schedule Performance:** The IEC substantially agrees with the material presented in this report, including the stated problem and the action 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.



<b>MTA Agency: Long Island Rail Road</b>	<b>Status as of December 31, 2016</b>
<b>Project Name: Employee Facilities Renewal</b>	<b>Current Budget: \$10.47M</b>
	<b>Project EAC: \$10.46M</b>
	<b>Substantial Completion Date at Award: Jun 2016</b>
<b>Project No: L60604YT</b>	<b>Current Substantial Completion Date: Apr 2017</b>
<b>Project Phase: Construction</b>	<b>Phase Complete: 87%</b>

<b>Project Description</b>	
<p>This project covers the rehabilitation of Long Island Railroad’s (LIRR) employee facilities at the Jamaica Corporate Building, Morris Park Building, Richmond Hill Sheridan Shop, and others. The scope of work consists of roofing replacement, HVAC unit replacement, paving, curbs, signage, striping, façade repairs, replacement of existing fire alarm system, and various structural rehabilitation.</p>	
<b>Problem Since Last Quarterly Report</b>	
<b>Index Trigger(s): Schedule</b>	
<p><b>Schedule:</b> During the Fourth Quarter 2016, the forecasted Substantial Completion date slipped three months, from April 2017 to July 2017, due to unforeseen site conditions. When LIRR labor forces removed the wall to wall shelving in the basement of the Morris Park Communications Building, the condition of the walls were found to be in poor condition with structural failures. In addition, after the scaffold erection was complete the exterior façade was inspected and areas in need of concrete repair were identified.</p> <p>The contractor requested that the Substantial Completion date be extended to July 2017 due to long lead times for fabrication of the metal stairs and handicap ramp and site work that requires warmer weather.</p>	
<b>What is Being Done</b>	
<p><b>Schedule:</b> Upon completion of negotiations for Change Order (CO) #2 and CO #3 (structural repairs) it was determined that the metal stairs and handicap ramp has to be de-scoped from the project and a credit issued by the Contractor. Since this de-scope the Substantial Completion date was rolled back to April 2017. The Contractor is authorized to proceed with CO#2 and CO#3 for the basement structural repairs at Morris Park.</p>	
<b>IEC Comment</b>	
<p><b>Budget and Schedule Performance:</b> The IEC substantially agrees with the material presented in this report, including the stated problems and actions taken by the Agency.</p>	
<p><b>All Agency Contractor Evaluation:</b> The overall Contractor/Consultant Performance rating for the current All-Agency Contractor Evaluation (ACE) report for this project is consistent with the IEC’s observation of project performance during this reporting period.</p>	

<b>MTA Agency: Long Island Rail Road</b>	<b>Status as of December 31, 2016</b>
<b>Project Name: Richmond Hill Substation Replacement</b>	<b>Current Budget: \$12.02M</b>
	<b>Project EAC: \$12.02M</b>
	<b>Original Design Completion Date: May 2018</b>
<b>Project No: L60701AR</b>	<b>Current Design Completion Date: Dec 2018</b>
<b>Project Phase: Design</b>	<b>Phase Complete: 3%</b>

**Project Description**

The scope for the replacement of Richmond Hill Substation includes demolition of the existing substation and construction of a new substation in its footprint. The new substation will be pre-fabricated modular substation buildings which will house pre-installed AC switchgear, rectifiers, DC switchgear, control cabinets, and associated equipment. The new transformers will be installed outside the modular buildings. All other substation components including; [high tension feeders, DC cables, control cables, Supervisory Control and Data Acquisition (SCADA) system, fiber optic cables for the Programmable Logic Controller (PLC), fire alarm system, and associated equipment], support of signal, flagging service and third rail, will be provided as necessary.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule**

**Schedule:** During the Fourth Quarter 2016, the Substantial Completion date for this project slipped seven months from May 2018 to December 2018. This schedule slip is due to the failure of the transformer at Woodhaven Substation which requires replacement. Until the transformer replacement is complete, Richmond Hill Substation will have to remain in use.

**What is Being Done**

**Schedule:** A new transformer procurement is in process, and will be installed and validated when received

**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.

<b>MTA Agency: Long Island Rail Road</b>	<b>Status as of December 31, 2016</b>
<b>Project Name: Penn Station Substation Replacement</b>	<b>Current Budget: \$22.1M</b>
	<b>Project EAC: \$22.1M</b>
	<b>Substantial Completion Date at Award: Dec 2016</b>
<b>Project No: L60701AS</b>	<b>Current Substantial Completion Date: Mar 2017</b>
<b>Project Phase: Design</b>	<b>Phase Complete: 50%</b>

**Project Description**

The project will provide a new, fully operational AC-DC Traction Power Substation to replace the existing LIRR Penn Station Traction Power Substation (E01). The Railroad intends to procure design and construction services for this project utilizing the Design-Build (DB) method of construction to accelerate the installation and subsequent operation of this new substation facility. The demolition and removal of the existing substation and its associated equipment will be sequenced such that one of the two line feeds will be maintained at all times, providing power to the two substation line-ups while the other line-up is replaced, integrated with the existing equipment, inspected, tested, coordinated with Con Ed and placed into service. The project objective will be accomplished after the new equipment is placed in satisfactory working operation for a period of not less than sixty (60) consecutive calendar days.

**Problem Since Last Quarterly Report**

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

**Contingency:** The high contingency index during the Fourth Quarter 2016 was caused by Change Request (CR-01) issued April 22, 2016 which required the use of 93% of the contingency. The Change Order was due to the restrictions and potential long-term interruption to customer accommodation identified in the draft preliminary report for the five originally proposed alternatives, making the consideration of a sixth alternative (C-Yard) a viable and necessary alternative for consideration.

**Schedule:** During the Fourth Quarter 2016, the Substantial Completion date for this project slipped three months from December 2016 to March 2017. An Amtrak mid-project implemented 'Permit To Enter' requirement ceased all field activities while Amtrak reviews and approves the Design Consultant entering the property to perform field investigations and associated design work. The Consultant had previously been performing this work with Amtrak field support but could not complete all work due to the Amtrak newly implemented Permit To Enter requirement.

**What is Being Done**

**Contingency:** We are currently in the final revision of the Drawings and Technical Specifications for the Preliminary Design. The remaining funds are sufficient to fund the bid assistance and incorporation of comments into the final documents.

**Schedule:** LIRR is scheduling a meeting with Amtrak to resolve the delay in the approval of the Amtrak newly implemented Permit To Enter requirement. Reference drawings from other projects and historical records were obtained by LIRR and the Design Consultant to propose a resolution for Amtrak review and approval without field visits by the Consultant. Subsequent to the reporting period, LIRR has submitted a proposed design package focusing on the questionable area for Amtrak. Subsequent to the reporting period, comments have been exchanged regarding the submitted package and a meeting occurred on March 27, 2017.

**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.

<b>MTA Agency: Metro-North Railroad</b>	<b>Status as of December 31, 2016</b>
<b>Project Name: Grand Central Terminal Leaks Remediation</b>	<b>Current Budget: \$31.7M</b>
	<b>Project EAC: \$31.7M</b>
	<b>Substantial Completion Date at Award: Dec 2016</b>
<b>Project No: M6020105</b>	<b>Current Substantial Completion Date: Jun 2017</b>
<b>Project Phase: Construction</b>	<b>Phase Complete: 82%</b>

<b>Project Description</b>
<p>The Grand Central Terminal (GCT) Leaks Remediation project will reduce water leakage and infiltration from surrounding buildings, streets and sidewalks into the GCT complex. Work generally includes the Park Avenue overhead roadway and the Vanderbilt Avenue expansion joint replacement, as well as localized roadway reconstruction and replacement of the underlying waterproofing.</p>
<b>Problem Since Last Quarterly Report</b>
<b>Index Trigger(s): Schedule &amp; Contingency</b>
<p><b>Schedule:</b> During the Fourth Quarter of 2016 the forecasted Substantial Completion date slipped six months from December 2016 to June 2017. The schedule slip was due in part to additional work and associated delays that resulted from unforeseen conditions highlighted below:</p> <ul style="list-style-type: none"> <li>• Discovery of additional structural steel deterioration during demolition of the existing structure at the Park Avenue 45<sup>th</sup> St. overhead roadway bridge.</li> <li>• Differing site conditions from the contract drawings at expansion joints and subsurface roadway utilities.</li> <li>• The additional time required by the contractor to complete scheduled activities due to NYCDOT lane closure impacts.</li> </ul> <p><b>Contingency:</b> The high contingency index was triggered in the Fourth Quarter of 2016 due to the multiple change orders that have been/are in the process of being executed that resulted from the above additional work.</p>
<b>What is Being Done</b>
<p><b>Schedule:</b> The schedule is currently being reviewed for opportunities to mitigate the delay. However, since some of the remaining work is weather dependent (i.e. paving, painting) the project may not be finished earlier than the current forecast date.</p> <p><b>Contingency:</b> Project budget is being evaluated and balanced. Funding from tasks currently projected to be under budget will be reallocated to offset tasks which are over budget.</p>
<b>IEC Comment</b>
<p><b>Budget and Schedule Performance:</b> The IEC substantially agrees with the material presented in this report, including the stated problems and actions taken by the Agency.</p>
<p><b>All Agency Contractor Evaluation:</b> The overall Contractor/Consultant Performance rating for the current All-Agency Contractor Evaluation (ACE) report for this project is consistent with the IEC's observation of project performance during this reporting period.</p>

<b>MTA Agency: Metro-North Railroad</b>	<b>Status as of December 31, 2016</b>
<b>Project Name: Grand Central Terminal Utility System Improvements</b>	<b>Current Budget: \$33.3M &amp; \$11.45M</b>
	<b>Project EAC: \$31.58M &amp; \$11.45M</b>
	<b>Substantial Completion Date at Award: Dec 2017</b>
<b>Project No: M6020108 &amp; M7020104</b>	<b>Current Substantial Completion Date: Jun 2018</b>
<b>Project Phase: Construction</b>	<b>Phase Complete: 33%</b>

<b>Project Description</b>	
<p>The project scope of improvements includes:</p> <ol style="list-style-type: none"> <li>1) Replacement of the Grand Central Terminal (GCT) domestic water services (located at 43<sup>rd</sup> St. and 49<sup>th</sup> St.) as well as the domestic water holding tank and pumping system. All domestic water services work was completed in 2015.</li> <li>2) Replacement of the GCT lower level standpipe (fire suppression water distribution system) and the 49<sup>th</sup> St. fire pump assembly.</li> </ol>	
<b>Problem Since Last Quarterly Report</b>	
<b>Index Trigger(s): Schedule</b>	
<p><b>Schedule:</b> During the Fourth Quarter of 2016, the scheduled Substantial Completion date for the fire suppression system replacement slipped six months from December 2017 to June 2018. This was a result of progress being impacted by challenges in obtaining track outages and delays associated with the 49<sup>th</sup> St. fire pump shop drawing submittal/approval and fabrication process.</p>	
<b>What is Being Done</b>	
<p><b>Schedule:</b> The schedule is currently being reviewed for opportunities to revise logic, modify the sequence of tasks to maximize concurrent work, and to mitigate any related impact.</p>	
<b>IEC Comment</b>	
<p><b>Budget and Schedule Performance:</b> The IEC substantially agrees with the material presented in this report, including the stated problems and actions taken by the Agency.</p>	
<p><b>All Agency Contractor Evaluation:</b> The overall Contractor/Consultant Performance rating for the current All-Agency Contractor Evaluation (ACE) report for this project is consistent with the IEC's observation of project performance during this reporting period.</p>	

<b>MTA Agency: MTA Bus</b>	<b>Status as of December 31, 2016</b>
<b>Project Name: Bus Command Center</b>	<b>Current Budget: \$17.1M</b>
	<b>Project EAC: \$17.1M</b>
	<b>Substantial Completion Date at Award: Jun 2017</b>
<b>Project No: U6030225</b>	<b>Current Substantial Completion Date: Nov 2017</b>
<b>Project Phase: Construction</b>	<b>Phase Complete: 30%</b>

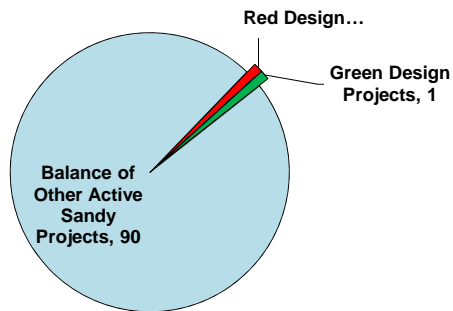
<b>Project Description</b>	
<p>This project will construct a new Bus Command Center facility for NYCT, DOB and MTA Bus Company which will comply with the NY State building code requirements and will be energy efficient. The new Bus Command Center will house modern digital radio communications system equipment in order to provide data communications and enhanced voice communications.</p>	
<b>Problem Since Last Quarterly Report</b>	
<b>Index Trigger(s): Schedule</b>	
<p><b>Schedule:</b> During the Fourth Quarter of 2016, the Substantial Completion date slipped by five months, from June 2017 to November 2017. The variance in the schedule was due to the steel subcontractor who filed for bankruptcy; therefore, the contractor had to find a new subcontractor to fabricate and erect structural steel.</p>	
<b>What is Being Done</b>	
<p><b>Schedule:</b> A new qualified subcontractor to fabricate and erect structural steel was contracted, and the construction of the steel building structure commenced. Substantial Completion is expected to be achieved November 2017.</p>	
<b>IEC Comment</b>	
<p><b>Budget and Schedule Performance:</b> The IEC substantially agrees with the material presented in this report, including the stated problems and actions taken by the Agency.</p>	
<p><b>All Agency Contractor Evaluation:</b> The overall Contractor/Consultant Performance rating for the current All-Agency Contractor Evaluation (ACE) report for this project is consistent with the IEC's observation of project performance during this reporting period.</p>	

**4<sup>th</sup> Quarter 2016 Traffic Light Report on MTA SANDY Program**

**A total of 92 Active Sandy Projects were Reviewed for the 4th Quarter 2016**

**The 92 active projects include 2 projects in Design, 17 in Post-Design to Construction Award, 73 in Construction**

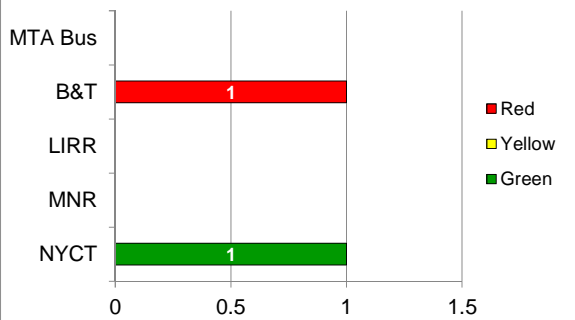
**2 of 92 Projects in Design**



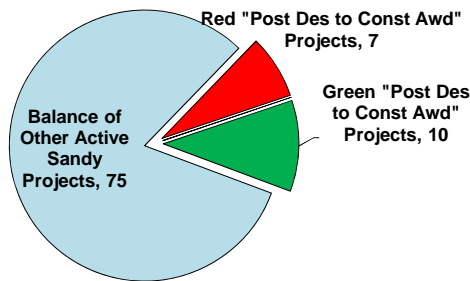
**Summary of Projects in Design:** 2 projects were reviewed in the design phase this quarter with 1(50%) designated green and 1(50%) was Red. The project was designated Red for a schedule variance due to a delay in receiving the results of the field surveys.

**Last Quarter:** 1 project was reviewed in the design phase and it was designated green.

**2 Projects in Design**



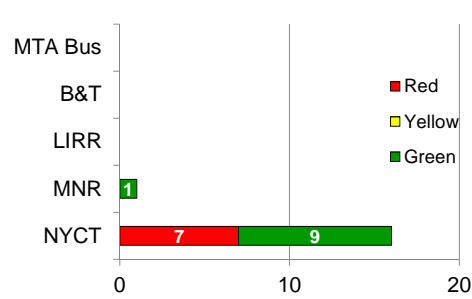
**17 of 92 Projects in Post-Design to Construction Award**



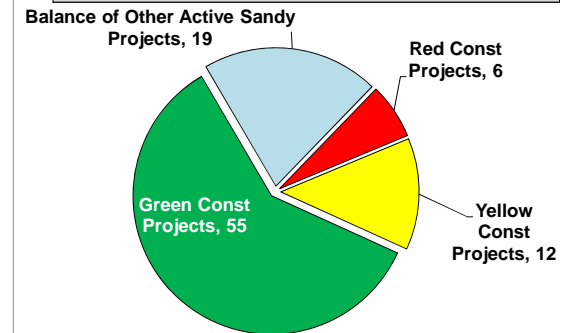
**Summary of Projects in Post-Design to Construction Award:** 17 projects were reviewed in this phase with 10 (59%) designated green and 7 (41%) were Red. All 7 of the Red projects in this phase this quarter were Red for a schedule variance. The schedule variances were due to negotiation of an easement agreement, coordination of funding for other work, a bid protest filed against the project, and repackaging.

**Last Quarter:** 15 projects were reviewed in this phase with 10 (67%) designated green, none were yellow and 5 (33%) were Red.

**17 Projects in Post-Design to Construction Award**



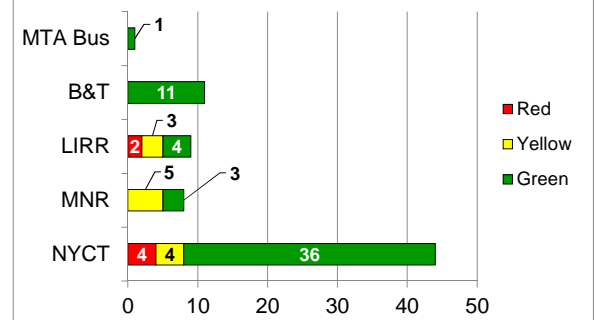
**73 of 92 Projects in Construction**



**Summary of Projects in Construction:** 73 projects were reviewed in this phase with 19 (75%) designated green, 12 (17%) yellow and 6 (8%) were Red. The 6 projects in the Construction phase which were designated Red, 3 were for a schedule variance, 1 was for a cost variance, 1 for a contingency variance, and 1 for both cost and contingency. The prevailing reason for schedule variances this quarter was due to slow progress.

**Last Quarter:** 69 projects were reviewed in this phase with 54 (78%) designated green, 6 (9%) yellow and 9 (13%) were Red.

**73 Projects in Construction**







## MTA Sandy Recovery Projects Terms and Definitions

### 4<sup>th</sup> Quarter 2016 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 one-page 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.

#### Sandy Recovery Traffic Light Report Project Terms and Definitions





##### **Projects in Design: 2**

	Green: Indices less than 115% and index movement less than 15%
	Red: Cost Index: An EAC increase of 15% (or index movement of 15% 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 <b>red</b> 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: 17**

	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 <b>red</b> with no new substantial change since last Traffic Light Report.

##### **Projects in Construction: 73**

	Green: Indices less than 110% and index movement less than 10% Other indices not exceeding those criteria specified in index formulas and criteria.
	Red: Cost or Contingency Index: An increase of 10% (or index movement of 10% more since last Traffic Light Report)
	Red: Schedule Variance: An increase of 3 months or more to substantial completion or since last Traffic Light Report
	Yellow: Previously indicated as <b>red</b> 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.



<b>Projects in Planning:</b>
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Projects in Planning are reviewed but not displayed in the TLR until the project reaches the design phase.
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<b>Projects Completed:</b>
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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.
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<b>Report Index Formulas and Criteria:</b>
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- |  |
|--|
| ➤ Cost Variance = $EAC / \text{Current Project Budget Amount}$<br>(Note: Current Budget is not Budget at Award)  |
| ➤ Cost Contingency Index = $\% \text{ Contingency Spent} / \% \text{ 3}^{\text{rd}} \text{ Party Contract Completion}$<br>– Contingency used includes expended & pending AWOs.<br>– Prompted when project has reached 50% completion or higher.  |
| ➤ Schedule Variance = Number of months of change in schedule since last Traffic Light Report   |
| ➤ Projects with current budgets below \$5M 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 \$5M minimum threshold, the projects will return to an active status. |

**4th Quarter 2016 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
<b>NYCT - New York City Transit Sandy Program</b>												
<b>South Ferry Rehab</b>												
ET040213	Recovery: South Ferry Station Complex	Construction	Recovery	\$187,427,641	85	.55	▲	1.11	▲	0	▬	R
ET050213	Recovery: Mainline Track (South Ferry)	Construction	Recovery	\$14,337,838	84	.93	▲	.76	▼	0	▬	Y
ET050216	Recovery: Mainline Switches (South Ferry)	Construction	Recovery	\$4,746,779	85	.14	▲	.70	▼	0	▬	G
ET060217	Recovery: Pump Room (South Ferry)	Construction	Recovery	\$4,403,075	84	.14	▲	.81	▼	0	▬	G
ET060223	Recovery: Fan Plant (South Ferry)	Construction	Recovery	\$6,307,176	87	1.37	▲	.86	▼	0	▬	R
ET060227	Recovery: Tunnel Lighting (South Ferry)	Construction	Recovery	\$9,198,732	85	.00	▬	1.00	▬	0	▬	G
ET080201	Recovery: South Ferry Interlocking	Construction	Recovery	\$60,355,909	85	.00	▬	.90	▼	0	▬	G
ET090235	Recovery: 2 Circuit Breaker Houses (South Ferry)	Construction	Recovery	\$16,891,129	85	.00	▬	.89	▼	0	▬	G
ET160212	Recovery: Leak Remediation (South Ferry)	Construction	Recovery	\$11,334,524	82	.40	▼	1.00	▬	0	▬	G
<b>Cranberry Tube Rehab</b>												
ET060230	Recovery: 2 Pump Rooms (Cranberry Tube)	Construction	Recovery	\$11,001,874	80	.14	▲	1.00	▼	2	▲	Y
ET060231	Recovery: 2 Fan Plants (Cranberry Tube)	Construction	Recovery	\$15,616,778	68	.27	▲	1.00	▬	2	▲	G
ET080214	Recovery: Signals (Cranberry Tube)	Construction	Recovery	\$15,038,416	46	.05	▲	1.00	▬	2	▲	G
ET090220	Recovery: Power and Communication Cables (Cranberry Tube)	Construction	Recovery	\$54,186,785	80	.43	▲	1.00	▬	2	▲	G
<b>Coney Island Yard Flood Mitigation</b>												
ET100307	Mitigation: Long Term Perimeter Protection at Coney Island Yard	Post Des to Const Awd	Mitigation	\$46,604,915	100	.00	▬	2.12	▬	7	▲	R
<b>53rd St Tube Rehab</b>												
ET050212	Recovery: Mainline Track (53 Street Tube)	Construction	Recovery	\$12,036,095	90	.28	▲	1.00	▬	0	▬	G
ET080215	Recovery: Signals (53 Street Tube)	Construction	Recovery	\$10,394,141	99	.00	▬	1.00	▬	0	▬	G
ET090225	Recovery: Power and Communication Cables (53 Street Tube)	Construction	Recovery	\$49,710,404	75	.00	▬	1.00	▬	0	▬	G
ET090238	Recovery: Substation (53 Street Tube)	Construction	Recovery	\$20,145,722	35	.30	▲	1.00	▬	0	▬	G

**4th Quarter 2016 Traffic Light Report**  
**Sandy Projects in Design, Post-Design to Construction Award or Construction**

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ACEP #	Description	Phase	Project Type	Total Project EAC	% Phase Complete	Cont. Index	Cont. Trend	Cost Index	Cost Trend	Schedule Variance (Mths)	Sched. Trend	Traffic Light
<b>NYCT - New York City Transit Sandy Program</b>												
<b>All Other NYCT Projects</b>												
ET040217	Recovery: Purchase and Install Automated Fare Collection Equipment	Construction	Recovery	\$12,021,714	100	.00	■	1.00	■	6	▲	R
ET040314	Mitigation: Stairwell Protection (Flexgates)	Construction	Mitigation	\$20,018,686	86	.75	▼	1.07	▲	0	■	Y
ET040318	Mitigation: Coastal Storm Mechanical Closure Devices	Construction	Mitigation	\$10,436,603	3	-3.25	▼	.99	■	0	■	G
ET040320	Mitigation: Critical Room Resiliency	Construction	Mitigation	\$22,739,633	5	.00	■	1.00	■	0	■	G
ET040322	Mitigation: Street Level Openings	Construction	Mitigation	\$45,924,466	0	.00	■	1.00	■	0	■	G
ET040324	Mitigation: Internal Station Hardening at 7 Stations	Construction	Mitigation	\$5,031,262	0	.00	■	1.00	■	0	■	G
ET050211	Recovery: Mainline Track (Clark Tube)	Construction	Recovery	\$9,581,139	0	.00	■	1.00	■	0	■	G
ET060216	Recovery: Tunnel Lighting (Joralemon Tube)	Construction	Recovery	\$41,977,300	43	.17	▲	.94	▼	2	▲	G
ET060218	Recovery: 2 Pump Rooms (Southern Manhattan)	Construction	Recovery	\$7,215,402	91	.30	■	1.00	■	0	■	G
ET060224	Recovery: 3 Fan Plants (Southern Manhattan)	Construction	Recovery	\$25,711,415	97	.20	■	1.00	■	0	■	G
ET060226	Recovery: Fan Plant (Clark Tube)	Construction	Recovery	\$5,234,519	0	.00	■	1.00	■	0	■	G
ET060228	Recovery: Tunnel Lighting (200th to 207th Street / 8th Avenue)	Construction	Recovery	\$18,893,646	93	.03	■	1.00	■	2	▲	Y
ET060234	Recovery: Pump Room (Clark Tube)	Construction	Recovery	\$7,988,704	0	.00	■	1.00	■	0	■	G
ET060305	Mitigation: 17 Fan Plants and Adjacent Tunnels	Construction	Mitigation	\$44,059,844	3	4.29	▲	1.00	■	0	■	G
ET060306	Mitigation: Above-Grade Surface Protection at 6 Fan Plants	Construction	Mitigation	\$6,890,122	0	.00	■	1.06	■	0	■	G
ET060313	Mitigation: 2 Pump Rooms (Joralemon Tube)	Construction	Mitigation	\$9,853,461	16	5.90	▲	1.34	▲	2	▲	R
ET060320	Mitigation: 11 Fan Plants	Construction	Mitigation	\$27,496,537	0	.00	■	1.00	■	1	▲	G
ET060321	Mitigation: 4 Fan Plants	Construction	Mitigation	\$33,044,714	0	.00	■	1.00	▼	0	■	G
ET060324	Mitigation: 3 Pump Rooms (Clark Tube)	Construction	Mitigation	\$6,074,200	0	.00	■	1.00	■	0	■	G

**4th Quarter 2016 Traffic Light Report**  
**Sandy Projects in Design, Post-Design to Construction Award or Construction**

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ACEP #	Description	Phase	Project Type	Total Project EAC	% Phase Complete	Cont. Index	Cont. Trend	Cost Index	Cost Trend	Schedule Variance (Mths)	Sched. Trend	Traffic Light
<b>NYCT - New York City Transit Sandy Program</b>												
<b>All Other NYCT Projects</b>												
ET080212	Recovery: Signals (Clark Tube)	Construction	Recovery	\$9,204,970	0	.00	▬	1.00	▬	0	▬	G
ET090218	Recovery: Substation (Joralemon Tube)	Construction	Recovery	\$5,617,241	11	.00	▬	1.00	▬	2	▲	G
ET090221	Recovery: Power and Communication Cables (Joralemon Tube)	Construction	Recovery	\$60,570,909	38	.03	▬	1.01	▬	2	▲	G
ET090224	Recovery: Power and Communication Cables (Clark Street Tube)	Construction	Recovery	\$78,026,559	2	.00	▬	1.00	▬	0	▬	G
ET120307	Mitigation: Various Bus Depots	Design	Mitigation	\$5,648,244	65	.00	▬	1.00	▼	0	▬	G
ET040222	Recovery: Shaft Excavation - 1 Avenue (Canarsie Tube)	Post Des to Const Awd	Recovery	\$7,862,708	100	.00	▬	1.00	▬	2	▲	G
ET040317	Mitigation: Upgrade Emergency Booth Communication System	Post Des to Const Awd	Mitigation	\$74,665,281	98	.00	▬	1.00	▼	2	▲	G
ET040327	Mitigation: Street Level Openings at 7 Stations and 1 Fan Plant	Post Des to Const Awd	Mitigation	\$52,137,298	0	.00	▬	1.00	▼	3	▲	R
ET050209	Recovery: Mainline Track (Canarsie Tube)	Post Des to Const Awd	Recovery	\$165,385,926	100	.00	▬	1.00	▬	2	▲	G
ET060219	Recovery: Pump Room (Canarsie Tube)	Post Des to Const Awd	Recovery	\$11,090,049	100	.00	▬	1.00	▬	2	▲	G
ET080211	Recovery: Signals (Canarsie Tube)	Post Des to Const Awd	Recovery	\$73,267,595	100	.00	▬	1.00	▬	2	▲	G
ET090211	Recovery: 2 Circuit Breaker Houses (Canarsie Tube)	Post Des to Const Awd	Recovery	\$6,709,584	100	.00	▬	.97	▬	2	▲	G
ET090212	Recovery: Power Cable, Communication Cable and Ducts (Canarsie Tube)	Post Des to Const Awd	Recovery	\$250,473,100	100	.00	▬	1.00	▬	2	▲	G

**4th Quarter 2016 Traffic Light Report**  
**Sandy Projects in Design, Post-Design to Construction Award or Construction**

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 ─ = No Change since last quarterly report

ACEP #	Description	Phase	Project Type	Total Project EAC	% Phase Complete	Cont. Index	Cont. Trend	Cost Index	Cost Trend	Schedule Variance (Mths)	Sched. Trend	Traffic Light
<b>NYCT - New York City Transit Sandy Program</b>												
<b>All Other NYCT Projects</b>												
ET090219	Recovery: Power and Communication Cables (Rutgers Tube)	Post Des to Const Awd	Recovery	\$41,712,027	100	.00	─	4.20	─	0	─	G
ET090309	Mitigation: Power Cable, Communication Cable and Ducts (Canarsie Tube)	Post Des to Const Awd	Mitigation	\$153,440,456	100	.00	─	.80	▼	2	▲	G
ET100209	Recovery: Power Cable at 148 Street Yard	Post Des to Const Awd	Recovery	\$18,097,380	100	.00	─	1.01	─	5	▲	R
ET100211	Recovery: Power Cable at Coney Island Yard	Post Des to Const Awd	Recovery	\$7,241,164	100	.00	─	1.02	─	7	▲	R
ET100218	Recovery: 207 Street Yard Signal System	Post Des to Const Awd	Recovery	\$10,924,307	100	.00	─	1.72	▼	6	▲	R
ET100309	Mitigation: Long Term Perimeter Protection at 148th Street Yard	Post Des to Const Awd	Mitigation	\$104,162,843	99	.00	─	.99	─	5	▲	R
ET100311	Mitigation: 148th Street Yard Portal	Post Des to Const Awd	Mitigation	\$6,767,042	99	.00	─	1.00	─	5	▲	R
ES070211	Recovery: Reconstruction of Clifton Car Repair Shop	Construction	Recovery	\$34,890,731	0	.00	─	.99	▼	0	─	G
ES070213	Recovery: St. George Terminal Tower B - Phase 2	Construction	Recovery	\$6,612,102	0	.00	─	1.00	─	0	─	G
ES070214	Recovery: St. George Interlocking	Construction	Recovery	\$102,306,871	82	.55	▼	1.00	─	0	─	G
ES070302	Mitigation: Reconstruction of Clifton Car Repair Shop	Construction	Mitigation	\$161,748,625	0	.00	─	1.01	▼	0	─	G
<b>LIRR - Long Island Rail Road Sandy Program</b>												
<b>All Other Projects</b>												
EL0303ZH	Flood and Emergency Management Equipment Mitigation	Construction	Mitigation	\$20,000,000	14	.00	─	1.00	─	9	▲	R
EL0402ZB	Wreck Lead Bridge Systems Restoration	Construction	Recovery	\$14,859,812	40	.00	─	1.00	─	0	─	G
EL0403ZJ	Atlantic Ave Tunnels Mitigation	Construction	Mitigation	\$9,900,000	89	.00	─	1.00	─	12	▲	R
EL0502ZC	Restoration of the Long Beach Branch	Construction	Recovery	\$64,910,327	13	.00	─	1.00	─	0	─	Y

**4th Quarter 2016 Traffic Light Report**  
**Sandy Projects in Design, Post-Design to Construction Award or Construction**

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 ▬ = No Change since last quarterly report

ACEP #	Description	Phase	Project Type	Total Project EAC	% Phase Complete	Cont. Index	Cont. Trend	Cost Index	Cost Trend	Schedule Variance (Mths)	Sched. Trend	Traffic Light
<b>LIRR - Long Island Rail Road Sandy Program</b>												
<b>All Other Projects</b>												
EL0602ZD	West Side Storage Yard Restoration	Construction	Recovery	\$43,300,000	28	.00	▬	1.00	▬	0	▬	G
EL0603ZK	Long Island City Yard Resiliency	Construction	Mitigation	\$26,803,366	9	8.24	▼	1.00	▬	0	▬	Y
EL0702ZE	Long Beach Branch Substation Replacement.	Construction	Recovery	\$51,378,558	37	.00	▬	.99	▬	0	▬	G
EL0702ZM	First Avenue Substation Restoration	Construction	Recovery	\$8,429,861	50	.00	▬	1.00	▬	2	▲	Y
EL0902ZF	Infrastructure / System Upgrades (Various Locations)	Construction	Recovery	\$9,700,000	95	.00	▬	1.00	▬	0	▬	G
<b>MNR - Metro-North Railroad Sandy Program</b>												
<b>Hudson Line Ph I Power and C&amp;S Restoration</b>												
EM040205	Communications & Signal Infrastructure Restoration Phase 1	Construction	Recovery	\$44,396,376	33	.00	▬	.95	▬	1	▲	Y
EM040206	Communications & Signal Infrastructure Restoration Phase 2	Construction	Recovery	\$34,910,260	0	.00	▬	.99	▬	0	▬	G
EM040301	Power and Signals Mitigation	Construction	Mitigation	\$49,968,066	33	.00	▬	.99	▬	1	▲	Y
EM040302	Hudson Line Power and Signal Resiliency	Construction	Mitigation	\$31,000,000	33	.00	▬	1.00	▬	1	▲	Y
EM050206	Power Infrastructure Restoration Phase 1	Construction	Recovery	\$84,344,709	33	.00	▬	.95	▬	1	▲	Y
EM050207	Power Infrastructure Restoration Phase 2	Construction	Recovery	\$72,285,477	0	.00	▬	.99	▬	0	▬	G
<b>All Other Projects</b>												
EM030202	Right of Way Restoration	Construction	Recovery	\$8,000,000	60	.00	▬	1.00	▬	1	▲	Y
EM050208	Power Infrastructure Restoration - Substations	Construction	Recovery	\$40,091,038	56	.93	▼	.91	▬	2	▲	G
EM030301	Rail Vacuum Mitigation	Post Des to Const Awd	Mitigation	\$5,656,302	5	.00	▬	.94	▬	4	▲	G
<b>B&amp;T - Bridges and Tunnels Sandy Program</b>												
<b>Hugh Carey Tunnel Restoration</b>												
ED010228	Restoration of Hugh Carey Tunnel after Super Storm Sandy	Construction	Recovery	\$153,930,745	43	.00	▬	.66	▲	0	▬	G

Master Page # 150 of 165 - Capital Program Oversight Committee Meeting 4/24/2017

**4th Quarter 2016 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
<b>B&amp;T - Bridges and Tunnels Sandy Program</b>												
<b>Hugh Carey Tunnel Restoration</b>												
ED020202	Restore Hugh Carey Tunnel roadway after Super Storm Sandy	Construction	Recovery	\$8,484,013	43	.00	─	.47	─	0	─	G
ED040243	Restore Hugh Carey Tunnel utilities damaged by Super Storm Sandy	Construction	Recovery	\$137,991,096	43	.17	▲	.80	─	0	─	G
ED050202	Environmental clean-up at the Hugh Carey Tunnel after Super Storm Sandy	Construction	Recovery	\$16,675,381	43	.18	─	.82	─	0	─	G
<b>Queens Midtown Tunnel Rehab</b>												
ED010240	Restoration of Queens Midtown Tunnel after Super Storm Sandy	Construction	Recovery	\$142,562,280	32	.14	▼	.95	▲	0	─	G
ED020203	Restore Queens Midtown Tunnel roadway after Super Storm Sandy	Construction	Recovery	\$2,025,966	32	.00	─	.26	─	0	─	G
ED040281	Restoration of Queens Midtown Tunnel - Control/Communications Systems CCTV Traffic Signals after Super Storm Sandy	Construction	Recovery	\$111,682,880	32	.00	▼	.95	─	0	─	G
ED050203	Environmental clean-up at Queens Midtown Tunnel after Super Storm Sandy	Construction	Recovery	\$11,452,200	32	.00	─	.70	─	0	─	G
<b>All Other Projects</b>												
ED040207	Restoration of Marine Parkway Bridge -electrical equipment damaged by Super Storm Sandy	Construction	Recovery	\$8,002,447	21	.00	▼	.89	─	0	─	G
ED040210	Restoration of Cross Bay Bridge Utilities damaged by Super Storm Sandy	Construction	Recovery	\$13,196,234	21	.00	─	.95	─	0	─	G
ED050301	Flood Mitigation - Relocate revenue equipment at the Verrazano Narrows Bridge	Construction	Mitigation	\$7,260,566	65	.00	─	.95	─	0	─	G
ED010324	Master Plan and resiliency needs for Marine Parkway and Cross Bay Bridges	Design	Mitigation	\$9,598,426	75	.00	─	.95	─	7	▲	R



4th Quarter 2016 Traffic Light Report  
Sandy Projects in Design, Post-Design to Construction Award or Construction

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■ = No Change since last quarterly report

ACEP #	Description	Phase	Project Type	Total Project EAC	% Phase Complete	Cont. Index	Cont. Trend	Cost Index	Cost Trend	Schedule Variance (Mths)	Sched. Trend	Traffic Light
<b>MTA Bus Program</b>												
<b>All Other Projects</b>												
EU030201	Recovery: Far Rockaway Depot	Construction	Recovery	\$15,000,000	5	.00	■	1.00	■	0	■	



<b>MTA Agency: New York City Transit</b>	<b>Status as of December 31, 2016</b>
<b>Project Name: Sandy Recovery: South Ferry Station Complex</b>	<b>Current Budget: \$168.0M</b>
	<b>Project EAC: \$187.4M</b>
	<b>Substantial Completion Date at Award: Nov 2015</b>
<b>Project No: ET040213</b>	<b>Current Substantial Completion Date: Jun 2017</b>
<b>Project Phase: Construction</b>	<b>Phase Complete: 87%</b>

<b>Project Description</b>	
<p>Reconstruction of the South Ferry Station includes but is not limited to: surveys, comprehensive assessment of damages, demolition plans, plans to remove existing damaged equipment, final architectural/engineering design, and drawings for repair/replacement/reconstruction work within the station.</p>	
<b>Problem Since Last Quarterly Report</b>	
<b>Index Trigger(s): Cost</b>	
<p><b>Cost:</b> During the Fourth Quarter 2016, the Estimate at Completion (EAC) of \$187.4M exceeded the Current Budget of \$168.0M due to the redistribution of Engineering Force Account, TA Labor and contingency cost estimate allocations within the South Ferry contract. Budget reallocation was initiated at the same time to address the EAC changes, however, there was a delay in budget approvals.</p>	
<b>What is Being Done</b>	
<p><b>Cost:</b> A cash flow analysis was prepared to identify the full need within the multiple South Ferry projects. Requests were submitted for budget redistribution and approval of funds based on cash flow analyses. The overall South Ferry contract EAC and budget remain the same and no additional funds were added to the overall project.</p>	
<b>IEC Comment</b>	
<p><b>Budget and Schedule Performance:</b> The IEC substantially agrees with the material presented in this report, including the related problems and the actions taken by the Agency.</p>	
<p><b>All Agency Contractor Evaluation:</b> The overall Contractor/Consultant Performance rating for the current All-Agency Contractor Evaluation (ACE) report for this project is consistent with the IEC's observation of project performance during this reporting period.</p>	

<b>MTA Agency: New York City Transit</b>	<b>Status as of December 31, 2016</b>
<b>Project Name: Sandy Recovery: Fan Plant - South Ferry Terminal</b>	<b>Current Budget: \$7.3M</b>
	<b>Project EAC: \$6.3M</b>
	<b>Substantial Completion Date at Award: Jun 2017</b>
<b>Project No: ET060223</b>	<b>Current Substantial Completion Date: Jun 2017</b>
<b>Project Phase: Construction</b>	<b>Phase Complete: 87%</b>

**Project Description**

This project will rehabilitate a South Ferry Fan Plant damaged in Superstorm Sandy. This work is part of the overall South Ferry Terminal Complex contract to return the station to normal operations and implement long-term mitigation measures to prevent damage from future storm surge events.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Contingency**

**Contingency:** During the Fourth Quarter 2016, the reported rate of contingency expenditures exceeded the percent complete for the Fan Plant component of the South Ferry Terminal Repair contract due to \$432,225 in Additional Work Orders (AWOs) approved through the reporting quarter, resulting in a contingency index of 1.37. The AWOs were for:

- Ventilation tower modifications due to existing conditions
- Replacement of fire damper bearing housing
- Unanticipated work orders through substantial completion

**What is Being Done**

**Contingency:** Subsequent to the reporting period, a request of funds was processed and approved on January 24, 2017 for AWOs. The remaining contingency is expected to be sufficient to complete the remaining work. Project contingency is currently \$599K, based on a recent budget action of \$200K.

**IEC Comment**

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

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

<b>MTA Agency: New York City Transit</b>	<b>Status as of December 31, 2016</b>
<b>Project Name: Power Cabling &amp; Long-Term Perimeter Protection - Coney Island Yard</b>	<b>Current Budget: \$7.0M &amp; \$22.0M</b>
	<b>Project EAC: \$7.2M &amp; \$46.6M</b>
	<b>Original Award Date: Nov 2016</b>
<b>Project No: ET100211 &amp; ET100307</b>	<b>Current Award Date: Oct 2017</b>
<b>Project Phase: Post-Design to Construction Award</b>	<b>Phase Complete 100%</b>

<b>Project Description</b>
<p>This contract will build a new cable bridge, install new traction power and communication cables, and construct long-term flood mitigation measures at the Coney Island Yard that were damaged due to Superstorm Sandy. Mitigation work will include construction of a perimeter protection wall and installation of a water detention and a pumping system to improve yard drainage.</p>
<b>Problem Since Last Quarterly Report</b>
<b>Index Trigger(s): Schedule</b>
<p><b>Schedule:</b> During the Fourth Quarter 2016, the forecasted Construction Award date slipped seven months, from March 2017 to October 2017, due to scope reduction, redesign and repackaging to address budget concerns.</p>
<b>What is Being Done</b>
<p><b>Schedule:</b> The re-design is being finalized to meet the October 2017 award date.</p>
<b>IEC Comment</b>
<p><b>Budget and Schedule Performance:</b> The IEC substantially agrees with the material presented in this report, including the stated problems and actions taken by the Agency.</p>
<p><b>All Agency Contractor Evaluation:</b> An Agency ACE evaluation is not required for this project.</p>

<b>MTA Agency: New York City Transit</b>	<b>Status as of December 31, 2016</b>
<b>Project Name: Sandy Recovery: Purchase and Install Automated Fare Collection Equipment</b>	<b>Current Budget: \$12.0M</b>
	<b>Project EAC: \$12.0M</b>
	<b>Substantial Completion Date at Award: Aug 2016</b>
<b>Project No: ET040217</b>	<b>Current Substantial Completion Date: Sep 2017</b>
<b>Project Phase: Construction</b>	<b>Phase Complete: 94%</b>

<b>Project Description</b>
<p>This project is for the purchase and installation of automated fare collection equipment throughout the system to replace assets damaged from Superstorm Sandy. This included Select Bus Service (SBS) equipment and 481 Automated Fare Collection (AFC) units, including 51 vending machines.</p>
<b>Problem Since Last Quarterly Report</b>
<b>Index Trigger(s): Schedule</b>
<p><b>Schedule:</b> During the Fourth Quarter 2016, the forecast Substantial Completion date slipped six months, from March 2017 to September 2017, primarily due to field installation of equipment and installation acceptance testing, which coordinates the equipment's one year warranty period with the overall Substantial Completion date.</p>
<b>What is Being Done</b>
<p><b>Schedule:</b> As of January 2017, procurement of all units has been completed and all units that are earmarked for installation will be installed and tested in the field by project completion.</p>
<b>IEC Comment</b>
<p><b>Budget and Schedule Performance:</b> The IEC substantially agrees with the material presented in this report, including the stated problems and actions taken by the Agency.</p>
<p><b>All Agency Contractor Evaluation:</b> An Agency ACE evaluation is not required for this project.</p>

<b>MTA Agency: New York City Transit</b>	<b>Status as of December 31, 2016</b>
<b>Project Name: Sandy Mitigation: Two Pump Rooms - Joralemon Tube</b>	<b>Current Budget: \$7.4M</b>
	<b>Project EAC: \$9.9M</b>
	<b>Substantial Completion Date at Award: Apr 2017</b>
<b>Project No: ET060313</b>	<b>Current Substantial Completion Date: Jun 2017</b>
<b>Project Phase: Construction</b>	<b>Phase Complete: 55%</b>

<b>Project Description</b>	
<p>This project will implement mitigation measures for the pumping systems (Pump Rooms #3190 and #3191) at the shaft locations for the Joralemon Tube.</p>	
<b>Problem Since Last Quarterly Report</b>	
<b>Index Trigger(s): Contingency &amp; Cost</b>	
<p><b>Contingency:</b> During the Fourth Quarter 2016, the reported rate of contingency expenditures exceeded the percent complete due to \$330,000 in Additional Work Orders (AWOs) approved through the reporting quarter, resulting in a contingency index of 5.90. This was attributable to AWO #1 for Instrument &amp; Control revised scope of work.</p> <p><b>Cost:</b> In addition, the Estimate at Completion (EAC) of \$9.85M exceeded the Current Budget of \$7.35M, due to redistribution of TA Labor cost estimate allocations within the Joralemon Tube contract. Budget reallocation was initiated at the same time to address the EAC changes, however, there was a delay in budget approvals. The overall Joralemon Tube contract EAC and budget did not change.</p>	
<b>What is Being Done</b>	
<p><b>Contingency:</b> There is sufficient contingency remaining within the contract. Substantial completion is scheduled for June 2017. No AWOs will be required for this project.</p> <p><b>Cost:</b> A request was processed to re-distribute existing available funds between the multiple projects within the Joralemon Tube contract.</p>	
<b>IEC Comment</b>	
<p><b>Budget and Schedule Performance:</b> The IEC substantially agrees with the material presented in this report, including the stated problem and action taken by the Agency.</p>	
<p><b>All Agency Contractor Evaluation:</b> The overall Contractor/Consultant Performance rating for the current All-Agency Contractor Evaluation (ACE) report for this project is consistent with the IEC's observation of project performance during this reporting period.</p>	

<b>MTA Agency: New York City Transit</b>	<b>Status as of December 31, 2016</b>
<b>Project Name: Street Level Openings at 7 Stations and 1 Fan Plant</b>	<b>Current Budget: \$52.0M</b>
	<b>Project EAC: \$52.1M</b>
	<b>Original Award Date: May 2016</b>
<b>Project No: ET040327</b>	<b>Current Award Date: Mar 2017</b>
<b>Project Phase: Post-Design to Construction Award</b>	<b>Phase Complete: 75%</b>

<b>Project Description</b>
This project involves the implementation of long-term flood protection measures at seven stations and one Fan Plant in flood prone areas of Manhattan, Queens and the Bronx.
<b>Problem Since Last Quarterly Report</b>
<b>Index Trigger(s): Schedule</b>
<b>Schedule:</b> During the Fourth Quarter 2016, the forecast award date slipped three months, from November 2016 to February 2017, due to a bid protest filed against the project.
<b>What is Being Done</b>
<b>Schedule:</b> Subsequent to the reporting quarter, award slipped an additional month to March 2017, due to the protest filed. Ultimately, the protest was denied and award is anticipated in March 2017.
<b>IEC Comment</b>
<b>Budget and Schedule Performance:</b> The IEC substantially agrees with the material presented in this report, including the stated problems and actions taken by the Agency.
<b>All Agency Contractor Evaluation:</b> An Agency ACE evaluation is not required for this project.

<b>MTA Agency: New York City Transit</b>	<b>Status as of December 31, 2016</b>
<b>Project Name: Sandy Mitigation: Power Cabling Replacement, Portal &amp; Long-Term Perimeter Protection – 148<sup>th</sup> Street Yard</b>	<b>Current Budget: \$17.9M, \$104.2M &amp; \$6.8M</b>
	<b>Project EAC: \$18.1M, \$104.2M &amp; \$6.8M</b>
	<b>Original Award Date: Nov 2015</b>
<b>Project No: ET100209, ET100309 &amp; ET100311</b>	<b>Current Award Date: Aug 2017</b>
<b>Project Phase: Post-Design to Construction Award</b>	<b>Phase Complete 99%</b>

<b>Project Description</b>
<p>This contract will address damage at the 148<sup>th</sup> Street Yard from Superstorm Sandy and institute long-term measures to protect assets from damage from a future storm surge event. Work includes construction of a floodwall at the north and south end of the site, installation of watertight driveway gates, installation of steel stop logs at the tunnel portal, and replacement of power cables.</p>
<b>Problem Since Last Quarterly Report</b>
<b>Index Trigger(s): Schedule</b>
<p><b>Schedule:</b> During the Fourth Quarter 2016, the forecasted Award date slipped five months, from March 2017 to August 2017, due to ongoing easement agreement negotiations with the adjacent property owner.</p>
<b>What is Being Done</b>
<p><b>Schedule:</b> Resolution of easement issues is currently being addressed. Construction of the yard’s perimeter protection requires accessibility from the adjacent properties. The project cannot be awarded until the easement agreement has been negotiated.</p>
<b>IEC Comment</b>
<p><b>Budget and Schedule Performance:</b> The IEC substantially agrees with the material presented in this report, including the stated problem and action taken by the Agency.</p>
<p><b>All Agency Contractor Evaluation:</b> An Agency ACE evaluation is not required for this project.</p>

<b>MTA Agency: New York City Transit</b>	<b>Status as of December 31, 2016</b>
<b>Project Name: Signal Repairs at 207<sup>th</sup> St. Yard</b>	<b>Current Budget: \$6.3M</b>
	<b>Project EAC: \$10.9M</b>
	<b>Original Award Date: Nov 2017</b>
<b>Project No: ET100218</b>	<b>Current Award Date: May 2018</b>
<b>Project Phase: Post-Design to Construction Award</b>	<b>Phase Complete: 100%</b>

**Project Description**

This project will repair signal system components at the 207<sup>th</sup> St. Yard damaged in Superstorm Sandy and modernize the existing signal system. Work will include construction of relay room, tower and ancillary rooms, as well as signal replacement and related work.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule**

**Schedule:** During the Fourth Quarter 2016, the Construction Award date slipped six months, from November 2017 to May 2018, due to contract preparation and the coordination of funding for other capital project work proposed in the yard.

**What is Being Done**

**Schedule:** Subsequent to the reporting period, funding was secured and project coordination was reassessed. Bid documents are being finalized. Award is scheduled for May 2018.

**IEC Comment**

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

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



<b>MTA Agency: Long Island Rail Road</b>	<b>Status as of December 31, 2016</b>
<b>Project Name: Emergency Management Equipment Mitigation</b>	<b>Current Budget: \$20.0M</b>
	<b>Project EAC: \$20.0M</b>
	<b>Substantial Completion Date at Award: Jul 2018</b>
<b>Project No: EL0303ZH</b>	<b>Current Substantial Completion Date: Apr 2019</b>
<b>Project Phase: Construction</b>	<b>Phase Complete: 14%</b>

**Project Description**

This project involves the purchase of Emergency Management Equipment (Emergency Generators, Vehicle Fueling Stations, Weather Fighting Equipment, Site Specific Backups, Communication Upgrades and other miscellaneous equipment) to improve LIRR preparedness and post-event recovery from future extreme weather events. The Mobile Substation is one of the equipment items to be procured.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule**

**Schedule:** The Mobile Substation is a unique piece of equipment that LIRR is designing in-house. This distinctive piece of equipment has required more time to design than anticipated. Currently, the design has progressed to 100% and is being reviewed. The Substantial Completion date has slipped nine months from July 2018 to April 2019 to reflect design / procurement durations and lead time for the Mobile Substation.

**What is Being Done**

**Schedule:** The design specifications for the equipment are being written and the status of the equipment completion varies in phase from predesign, requisition, purchase order and delivery to closeout. Thirteen different types of equipment (out of 30) have been delivered, 3 are in the purchase order phase, 9 are in requisition and 5 are in design. Currently, the Mobile Substation is in 100% design.

**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 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.

<b>MTA Agency: Long Island Rail Road</b>	<b>Status as of December 31, 2016</b>
<b>Project Name: Atlantic Ave Tunnels Mitigation Project</b>	<b>Current Budget: \$9.9M</b>
	<b>Project EAC: \$9.9M</b>
	<b>Substantial Completion Date at Award: Oct 2016</b>
<b>Project No: EL0403ZJ</b>	<b>Current Substantial Completion Date: Mar 2018</b>
<b>Project Phase: Construction</b>	<b>Phase Complete: 89%</b>

**Project Description**

The purpose of this project is to mitigate the infiltration of rain or flood water from entering the Atlantic Branch Tunnel and to address drainage deficiencies. The scope includes: raising 13 of the 50 existing air vent grates located in the median of Atlantic Ave. six inches to reduce water infiltration from the roadway into the tunnel; cleaning all 105 vent grates to remove debris; upgrading 14 existing pump rooms in the Atlantic Branch Tunnel, replacing / upgrading 14 existing sump pumps; replacement of the deteriorated downspout system and vault drains leading from air vent grates to track bed (105 locations); and the installation of SCADA pump monitoring equipment in each pump room.

All work is being performed by LIRR Force Account crews.

**Problem Since Last Quarterly Report**

**Index Trigger(s): Schedule**

**Schedule:** During the Fourth Quarter of 2016, the forecast Substantial Completion date slipped from March 2017 to March 2018. Due to an agreement with New York City, which is also undertaking an Atlantic Avenue resiliency improvement project and raising the medians, LIRR’s Substantial Completion date was pushed out to coincide with the estimated Substantial Completion date for New York City’s Atlantic Avenue project.

**What is Being Done**

**Schedule:** New York City Department Of Transportation (NYCDOT) plans on raising the entire median of Atlantic Ave. 20”. Since NYCDOT’s project will support LIRR’s goal of improving resiliency along the Atlantic Branch Tunnel, LIRR entered into an agreement with the City to fund a portion of the work (\$3.3M). A Memorandum of Understanding (MOU) between LIRR and NYCDOT regarding disbursements of the \$3.3M to the City will be made throughout construction as milestones are met.

NOTE: The LIRR portion of the work is 95% complete.

**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.

<b>MTA Agency: Bridges and Tunnels</b>	<b>Status as of December 31, 2016</b>
<b>Project Name: Master Plan and Resiliency needs for Marine Parkway and Cross Bay Bridges</b>	<b>Current Budget: \$10.0M</b>
	<b>Project EAC: \$9.6M</b>
	<b>Original Design Completion Date: May 2017</b>
<b>Project No: ED010324</b>	<b>Current Design Completion Date: Dec 2017</b>
<b>Project Phase: Design</b>	<b>Phase Complete: 75%</b>

<b>Project Description</b>
<p>This project, CB-24 involves the assessment and development of engineering alternatives for the potential reconstruction of the two Rockaway Crossings (Cross Bay Bridge and Marine Parkway Bridge). The Master Plan will evaluate the availability of the Rockaway Crossings to meet performance standards for vulnerabilities and risks, and evaluate and recommend options to repair, strengthen or replace the crossings.</p>
<b>Problem Since Last Quarterly Report</b>
<b>Index Trigger(s): Schedule</b>
<p><b>Schedule:</b> The design completion date was extended from March 2017 to December 2017 due to delays in the field investigations to collect data needed for the evaluation of deficiencies of the current bridges.</p>
<b>What is Being Done</b>
<p><b>Schedule:</b> Field investigations will be performed through July 31, 2017 to collect data needed for evaluation of deficiencies of the current bridges. The evaluation of engineering alternatives will be performed using information from the field investigations. The overall Master Plan is on track to be completed by December 2017.</p>
<b>IEC Comment</b>
<p><b>Budget and Schedule Performance:</b> The IEC substantially agrees with the material presented in this report, including the stated problems and actions taken by the Agency.</p>
<p><b>All Agency Contractor Evaluation:</b> An Agency ACE evaluation is not required for this project.</p>



## **Projects in CPOC's Risk-Based Monitoring Program (4th Quarter 2016 Traffic Light Report – Period Ending Dec 31, 2016)**

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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.

### **2010-14 Capital Program**

- **Second Avenue Subway**
- **East Side Access & Regional Investments**
- **East Side Access Readiness**
- **Cortlandt Street Station #1 Line**
- **Signals & Communications**
  - Positive Train Control
  - CBTC- Flushing Line
  - CBTC Queens Blvd. West, Phase I
  - CBTC Queens Blvd West, Phase II
  - B Division- Beacon Train Arrival System
  - Integrated Service Information & Management (ISIM B-Div.)
  - Replace Bus Radio System
  - Construct Bus Operations Command Center
- **New Fare Payment System**
- **New Subway Car Procurement**
- **New Bus Procurement**
- **CRR Rolling Stock Procurement**
- **NYCT Stations Program**
  - Sea Beach Line –Renewal 9 Stations
- **MNR Shops and Yards**
  - Harmon Shop Replacement Phase V, Stage 1
- **LIRR Infrastructure**
  - Main Line Double Track – Phase I and II, Farmingdale to Ronkonkoma
- **Bridges & Tunnels**
  - Verrazano-Narrows Bridge Upper Level Deck Replacement
  - RFK Bridge Bronx Toll Plaza Structure Reconstruction



**Projects in CPOC's Risk-Based Monitoring Program  
(4th Quarter 2016 Traffic Light Report – Period Ending Dec 31, 2016)**

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**Sandy Program**

- South Ferry Terminal Complex Rehabilitation
- Hugh L. Carey Tunnel Restoration
- Queens Midtown Tunnel Rehabilitation
- Hudson Line, Phase I - Power and C&S Infrastructure Restoration
- Canarsie Tube Reconstruction
- Clifton Shop

**2015-2019 Capital Program**

- **NYCT Stations Program**
  - Enhanced Stations Initiative
- **NYCT Structural Component Repairs**
  - Bushwick Cut – Myrtle Viaduct & Deck Rehabilitation
- **MNR Customer Communication**
  - Customer Service Initiative –GCT PA & VIS System