



**Metropolitan Transportation Authority**

# Capital Program Oversight Committee Meeting

## October 2014

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### Committee Members

T. Prendergast, Chair

F. Ferrer

A. Albert

R. Bickford

A. Cappelli

S. Metzger

J. Molloy

M. Pally

A. Saul

J. Sedore

V. Tessitore

I. Weinshall

C. Wortendyke

# **Capital Program Oversight Committee Meeting**

**347 Madison Ave. - 5th Floor Board Room**

**New York, NY 10017**

**Monday, 10/27/2014**

**1:45 - 2:45 PM ET**

## **1. PUBLIC COMMENTS PERIOD**

## **2. APPROVAL OF MINUTES SEPTEMBER 22, 2014**

*MTA Minutes from September '14 102314 - Page 3*

## **3. COMMITTEE WORK PLAN**

*CPOC Work Plan October 2014 102314 - Page 6*

## **4. SEMI-ANNUAL UPDATE ON NYCT ON SIGNALS AND TRAIN CONTROL DIVISION**

### **NYCT Singals & Train Control Division**

*NYCT Signals & Train Control Division 102314 - Page 7*

### **Independent Engineering Consultant Project Review**

*IEC Signals Train Control 102314 - Page 22*

## **5. SEMI-ANNUAL UPDATE ON NYCT SYSTEMS AND SECURITY DIVISION**

### **NYCT Systems and Security Division**

*NYCT Systems and Security Division 102314 - Page 26*

### **Independent Engineering Consultant Project Review**

*IEC VHF 102314 - Page 35*

## **6. CAPITAL PROGRAM STATUS**

*MTA Comm Comp 102214 - Page 38*

Date of next meeting: Monday, November 17, 2014 at 1:45 PM

**MINUTES OF MEETING**  
**MTA CAPITAL PROGRAM OVERSIGHT COMMITTEE**  
**September 22, 2014**  
**New York, New York**  
**1:45 P.M.**

MTA CPOC members present:

Hon. Thomas Prendergast, Chairman  
Hon. Fernando Ferrer  
Hon. Andrew Albert  
Hon. Robert Bickford  
Hon. Susan Metzger  
Hon. John Molloy  
Hon. Mitchell Pally  
Hon. James Sedore  
Hon. Carl Wortendyke

MTA CPOC members not present:

Hon. Alan Cappelli  
Hon. Andrew Saul

MTA staff present:

Craig Stewart  
Michael Wetherell

LIRR staff present:

Chris Calvagna

MNR staff present:

Wayne Staley

MTACC staff present:

Uday Durg  
Michael Horodniceanu  
Shawn Kildare  
Anil Parikh

Independent Engineering Consultant staff present:

Patrick Askew  
Kurt Egger  
Jerry Gardvits  
Kent Haggas  
Darlene Rivera

\* \* \*

Chairman Prendergast called the September 22, 2014 meeting of the Capital Program Oversight Committee to order at 2:20 P.M.

**Public Comments Period**

There were no public speakers in the public comments portion of the meeting.

## **Meeting Minutes**

Upon motion duly made and seconded, the CPOC members approved the minutes to the previous meeting held on July 28, 2014.

## **Committee Work Plan**

Mr. Stewart stated that there are no changes to the CPOC Work Plan at this time.

## **MTACC Report on Fulton Center**

Mr. Horodniceanu reported that completion of construction is scheduled for September/October of this year, and that the project is in the final stages of completion, including all life safety systems. In its Project Review, the IEC cited the significant work that has been completed on the project over the past two months. In addition, the IEC reported that approximately 25% of the critical master punch list items remain open, and that approximately 10-15 days of testing remain.

The IEC then recommended that MTACC develop a clearly defined close out schedule citing outstanding items required to achieve a Certificate of Occupancy. In addition, the IEC recommended that a lessons learned report be developed for use on future projects. 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 7-Line Extension**

Mr. Kildare reported that revenue service date is projected for February 24, 2015. He then reported that 92% of construction related to finishes and systems is complete, and that 98% of overall construction required for revenue service has been completed. In its Project Review, the IEC forecast an estimate at completion of \$2.40 billion, including acceleration costs. In addition, the IEC noted that a February 2015 revenue service date is contingent on the success of the contractor's proposed acceleration and NYCT's ability to support the compressed schedule. The IEC then cited an earlier recommendation that MTACC conduct a coordinated review of Fulton Center, 7-Line Extension, and Second Avenue Subway, to ensure that resources can be brought to bear to support the project; the IEC further noted that this review has begun. 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 Second Avenue Subway**

Mr. Parikh reported that the project continues to be on schedule to meet the December 2016 revenue service date, and that the project is on budget. In its Project Review, the IEC reported that revisions to the project's schedule logic that were recommended in March are expected by December. Until these revisions are evaluated, the IEC reserves judgment on the project's reported 120 days of schedule contingency. In addition, the IEC concurred that the project is on budget. The IEC then recommended that MTACC update its Testing and Commissioning Plan, which the IEC regards as critical to producing a useable integrated project 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. Horodniceanu reported that the project is on schedule for a December 2022 Revenue Service Date and that the project remains within its \$10.178 billion budget. In its Project Review, the IEC confirmed MTACC's budget and schedule figures and cited its concerns regarding delays to work in the Harold Interlocking and work on the Westbound Bypass. In addition, the IEC cited concerns regarding the contract package CS 179 governing 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.

#### **LIRR and MNR Update on Positive Train Control**

Mr. Calvagna and Mr. Staley provided a general overview of the Positive Train Control (PTC) initiative, including contract, budget, as well as information regarding a means by which the current schedule will be improved upon. In its Project Review, the IEC recommended that the total cost estimate be revised to include the force account costs associated with the recent schedule improvements. Further details of the presentations, and Committee Members' comments and questions with respect thereto are included in the video recording of the meeting maintained in MTA's records.

#### **MTA Capital Program Commitments and Completions**

Mr. Stewart brought the Committee's attention to the Capital Program Commitments and Completions Report and invited Committee Members' questions, of which there was none.

#### **Quarterly Traffic Light Report**

Mr. Stewart brought the Committee's attention to the Traffic Light Reports for the 2<sup>nd</sup> Quarter 2014 and invited Committee Members' questions, of which there was none.

#### **Executive Session**

Upon motion duly made and seconded, Chairman Prendergast adjourned the public CPOC meeting at 2:55 PM to go into Executive Session.

#### **Adjournment**

Upon motion duly made and seconded, Chairman Prendergast adjourned the Executive Session, reconvened the public session and then immediately adjourned the September 22, 2014 meeting of the MTA Capital Program Oversight Committee

Respectfully submitted,  
Michael Jew-Geralds  
Office of Construction Oversight



## **2014 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**

November 2014

Annual Update on B & T Capital Program  
Annual Update on LIRR Main Line Double Track  
Annual Update on LIRR Police Radio  
Annual Update on MNR Customer Communications  
Annual Review of CPOC Charter

December 2014

Quarterly MTA Capital Construction Company Update  
Quarterly Update on Positive Train Control  
Semi-Annual Update on NYCT Stations Division  
Quarterly Capital Change Order Report  
Quarterly Traffic Light Report

# Signals and Train Control Division

Nidhish Patel, P.E.  
Program Executive

October 2014  
Capital Program Oversight Committee



## CBTC Flushing Line

- Contractor: Thales Inc.
- Award (S32723): June 16, 2010
- Project Description: Project will overlay new CBTC system on the Flushing Line between Main St. and the new 34<sup>th</sup> /11<sup>th</sup> Ave. terminal. Modernize 1<sup>st</sup> Ave and Times Square Interlockings and equip fleet with CBTC carborne equipment.



## CBTC Project Overview

### Overall Status (S-32723 CBTC Flushing Line)

Item	Comments
<b>Schedule</b>	Substantial Completion projected to 2 <sup>nd</sup> Quarter 2017
<b>Cost</b>	Project on budget of \$550M

### Highlights (S-32723 CBTC Flushing Line)

#### Progress


- Placed Main St, Willets Point and 111<sup>th</sup> St. Interlockings In-Service
- CBTC and SSI Factory Acceptance Test Completed
- Dynamic Testing commenced in the 2<sup>nd</sup> Quarter 2014

#### 180 Day Look Ahead




- Carborne: CBTC equipment to be installed using I/H Forces as per schedule
- Wayside: 1<sup>st</sup> Ave Interlocking In-Service scheduled for November 2014
- Wayside: Hunters Point Interlocking In-Service planned for 1<sup>st</sup> Quarter 2015
- Wayside: 74<sup>th</sup> St Interlocking In-Service planned for 2<sup>nd</sup> Quarter 2015
- CBTC Functional Testing will commence following Dynamic Testing
- Risk Assessment Planned for 1<sup>st</sup> Quarter 2015

# CBTC Flushing CBTC

## Critical Milestones

Status	Activity	Date Needed	Issues
 <b>Yellow</b>	G.O. Availability	2014 through 2017	Project's milestones remain on schedule pending the availability of GOs.

### 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.

## Culver Line CBTC Integrated Test Facility

- Contractor: Siemens and Thales Consortium
- Award (S-32748): September 30, 2011
- Project Description: Update and finalize CBTC Interface and Interoperability (I2S) standards; develop two interoperable safety certified CBTC interfaces. Provide Test Track between 7th Avenue and Church Avenue Interlocking on B3 Track.

# Culver Line CBTC Integrated Test Facility

## Overall Status (S-32748 Culver Line CBTC Integrated Test Facility)

Item	Comments
Schedule	Substantial Completion on schedule for July 2015
Cost	Project is within budget of \$100.9M

## Highlights (Culver Line CBTC Integrated Test Facility)

### Progress


- Culver Test Track Hardware delivered and field installation is 95% complete
- Thales' and Siemens' Factory Acceptance Testing (FAT) completed 1<sup>st</sup> Quarter 2014
- Integrated Test Facility (ITF) installed and successfully tested
- Integration Testing on the ITF simulator is ongoing; completion forecast for 4<sup>th</sup> Quarter 2014

### 180 Day Look Ahead




- Complete Interoperability Testing on the ITF (formal demonstration)
- Complete Culver Test Track installation and Field Integration and Testing
- Testing of Digimove on the entire line planned to commence in November 2014

# Culver Line CBTC Integrated Test Facility

## Critical Milestones (Canarsie Line Speed Measurement System Replacement)

Status	Activity	Date Needed	Issues
 <b>RED</b>	Reliability / Availability of Speed Measurement System on the Canarsie Line	4 <sup>th</sup> Quarter 2014	<p>Under this contract we are replacing the current speed measurement system with a new system which requires very low maintenance and also has a high reliability/availability.</p> <p>Safety Certification and software defects are causing delays. NYCT with the Contractor are working to mitigate delays to the extent possible.</p> <p>Completion is anticipated by mid-2015.</p>

### 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.

## Increase the Pool of Qualified CBTC Suppliers

- Current Status: In Procurement
- Award (S-48002): 1<sup>st</sup> Quarter 2015
- Project Description: Provide interoperable CBTC system to meet NYCT I2S standards and safety certify the interoperable system.

### Overall Status (S-48002 Increase the Pool of Qualified CBTC Suppliers)

Item	Comments
Schedule	<ul style="list-style-type: none"><li>• RFP Advertised on April 18, 2014. Award projected 1<sup>st</sup> Quarter 2015.</li><li>• Mitsubishi, GE, and Ansaldo submitted proposals on September 23, 2014.</li></ul>
Cost	Total Project Estimate is \$40M per additional supplier.

## Queens Blvd Line CBTC – Design and Furnish

- Current Status : In Procurement
- Award (S-48004): 1<sup>st</sup> Quarter 2015
- Project Description: Design, furnish, test and place in-service CBTC interoperable system including ATS from Kew Gardens/Union Turnpike Station (Queens) to South of 7<sup>th</sup> Avenue Station (Manhattan)

### Overall Status (S-48004 QBL CBTC)

Item	Comments
<b>Schedule</b>	<ul style="list-style-type: none"><li>• RFP Advertised May 29, 2014; delayed by several months</li><li>• Award deferred to 1<sup>st</sup> Quarter 2015</li><li>• Proposals scheduled for October 31, 2014</li></ul>
<b>Cost</b>	<ul style="list-style-type: none"><li>• Total Project Estimate is in the range of \$150M to \$225M</li><li>• Project to be funded using MTA / Local Funding</li></ul>

## Church Avenue Interlocking

- Contractor: LK Comstock
- Award (S-32742): June 30, 2010
- Project Description: This project will modernize and improve the reliability of the Church Ave. Interlocking on the Culver Line. This project is coordinated with the 4<sup>th</sup> Ave Structures and the Culver CBTC Test Track Projects.

### Overall Status (S-32742 Church Avenue Interlocking)

Item	Comments
<b>Schedule</b>	95% complete; Substantial Completion declared August 28, 2014. Closeout is planned for May 2015.
<b>Cost</b>	Project is within budget of \$210M



## 2 Interlockings: Union Turnpike & 71<sup>st</sup> Ave, QBL

- Contractor: Five Star Electric
- Award (S-32769): November 28, 2012
- Project Description: This project will modernize and improve the reliability of the Union Turnpike and 71<sup>st</sup> Ave. Interlockings on the Queens Line. The interlockings are modernized with conventional relay technology.

### Overall Status (S-32769 Union Turnpike and 71<sup>st</sup> Ave.)

Item	Comments
<b>Schedule</b>	36% complete; Substantial Completion is on schedule for April 2017
<b>Cost</b>	Project is within budget of \$310M

## Roosevelt Avenue Interlocking, QBL

- Contractor: Five Star Electric
- Award (S-32749): January 8, 2013
- Project Description: This project will modernize and improve the reliability of the Roosevelt Avenue Interlocking on the Queens Line. The interlocking will be modernized with conventional relay technology.

### Overall Status (S-32749 Roosevelt Avenue Interlocking)

Item	Comments
Schedule	36% complete; Substantial Completion is on schedule for December 2016
Cost	Project is within budget of \$103M

## Dyre Avenue Line Signals

- Contractor: JTJ Contracting (J Track/TC Electric/Judlau)
- Award (S-32773): April 14, 2013
- Project Description: This project will provide a complete new fixed block system from East 180th Street to Dyre Ave (the Bronx). Install a new Solid State Interlocking (SSI) system at Dyre Ave and Morris Park provided by Invensys (Siemens) and Mitsubishi. SYSTRA is the Independent Safety Assessor (ISA) consultant.

### Overall Status (S-32773 Dyre Avenue Line Signals)

Item	Comments
<b>Schedule</b>	21% complete; Substantial Completion is on schedule for July 2017
<b>Cost</b>	Project is within budget of \$226M

## 34<sup>th</sup> Street Interlocking

- Contractor: TC Electric
- Award (S-32764): April 14, 2014
- Project Description: This project will modernize and improve the reliability of the 34th St. Interlocking on the 6th Avenue Line. The interlocking will be modernized with SSI technology.

### Overall Status (S-32764 34<sup>th</sup> Street Interlocking)

Item	Comments
<b>Schedule</b>	2% complete; Substantial Completion is on schedule for September 2018
<b>Cost</b>	Project is within budget.

## W4th Street Interlocking

- Contractor: TC Electric
- Award (S-32765): July 30, 2014
- Project Description: This project will modernize and improve the reliability of the W4th St Interlocking on the 6<sup>th</sup> Avenue Line. The interlocking will be modernized with SSI technology.

### Overall Status (S32765 W4<sup>th</sup> Street Interlocking)

Item	Comments
<b>Schedule</b>	2% complete; Substantial Completion is on schedule for September 2018
<b>Cost</b>	Project is within budget.

# October 2014 CPOC IEC Project Review



## NYCT Signals & Train Control



October 27, 2014

# CBTC Flushing Line

- **SCHEDULE:** The IEC agrees with the projected 2<sup>nd</sup> Quarter 2017 substantial completion date.
- **BUDGET:** Project is on budget.
- **CRITICAL ISSUES:**
  - GO availability is key to progress as the agency noted. Contractor's GOs due this year and the number requested for 2015 will involve tradeoffs. Customer impact due to planned service changes and other line work is a factor on the project.
  - A comprehensive training effort being planned needs to be managed to match the progression of new equipment install with operational requirements.
  - CBTC equipment installations on converted cars is behind schedule. Contractor and NYCT reviewing ways to meet installation rates planned.



# Culver Line CBTC Integrated Test Facility

- **SCHEDULE:** The IEC agrees with the schedule status and work planned to mitigate potential delays.
- **BUDGET:** There are no issues with the budget.
- **CRITICAL ISSUES:** The software issues mentioned cover the critical items on the project. They are being managed by NYCT with input from the Independent Safety Assessor.





# Interlockings

The status of these projects is reported on in the 2<sup>nd</sup> Quarter Traffic Light report 2014, and they each last achieved a “Green” reporting status.

- 34<sup>th</sup> Street Interlocking
- W 4<sup>th</sup> Street Interlocking
- Roosevelt Avenue Interlocking
- Dyre Avenue Line Signals
- 2 Interlockings: Union Turnpike & 71<sup>st</sup> Avenue
- Church Avenue Interlocking



# Systems & Security Division

Mark Bienstock, P.E.  
Program Officer

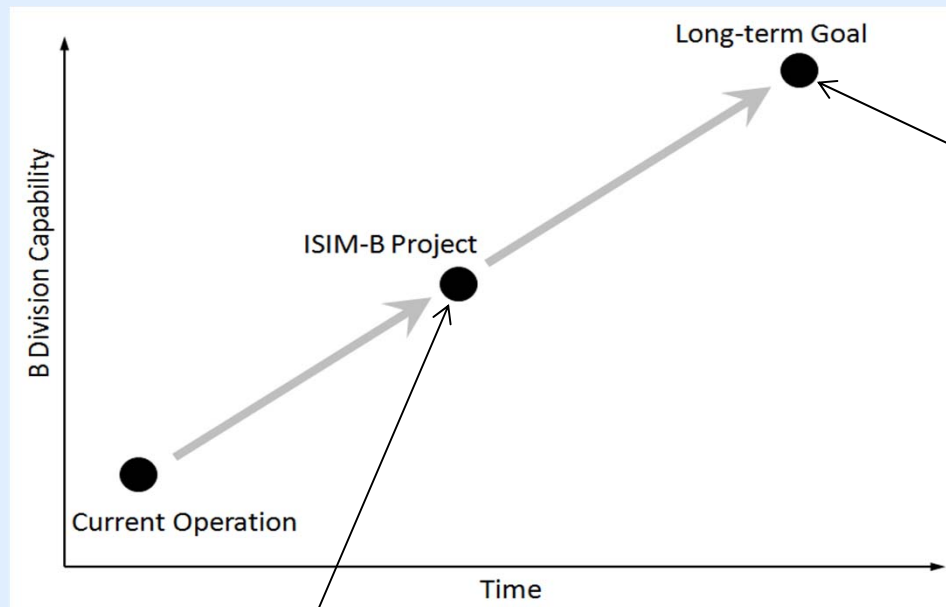
Capital Program Oversight Committee

October 2014

MTA New York City Transit



## Integrated Service Information and Management: B Division (ISIM-B)



### ISIM-B Purpose:

**Provide consistent and timely information about the current state of B-Division service to staff and customers, moving the agency towards centralized monitoring and control**

### Key Objectives:

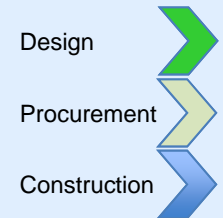
**Better service management**

**Better management of safety and security**

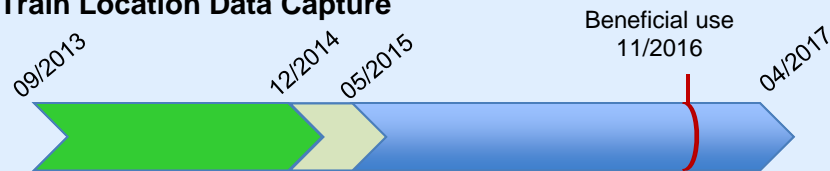
**Better customer information**

**Better operational plans and schedules**

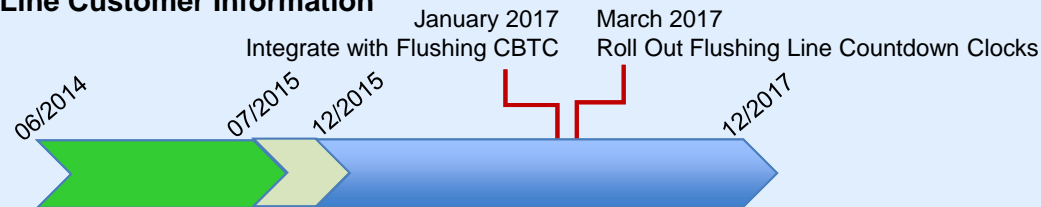
# ISIM-B Program Progress



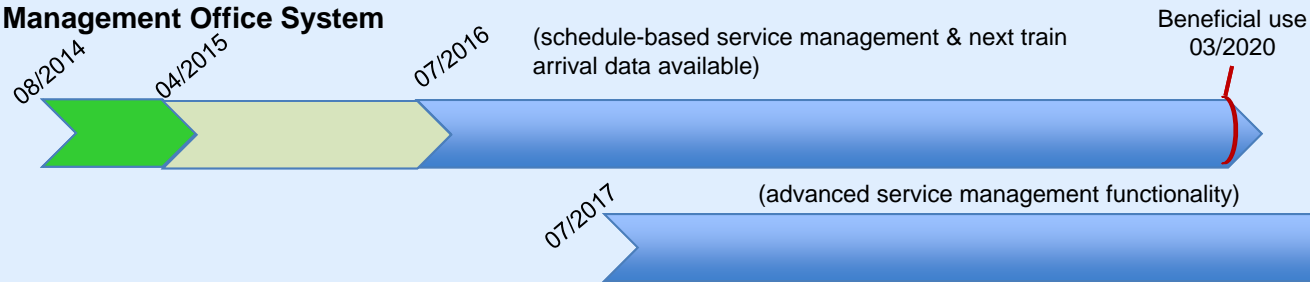
## M1: Train Location Data Capture



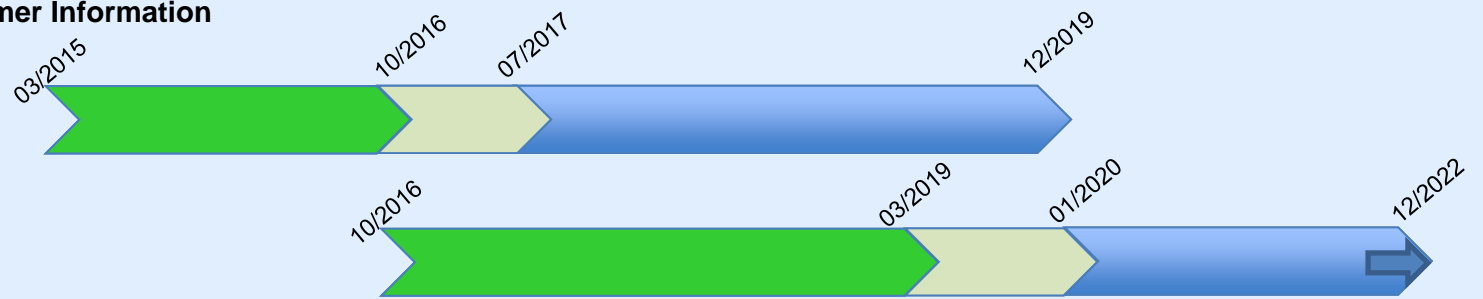
## M2: Flushing Line Customer Information



## M3: Rail Traffic Management Office System



## M4: B Division Customer Information



MTA New York City Transit



# VHF Radio System Upgrade

- Awarded: February 10, 2012
- Contractor: Alcatel-Lucent USA
- Project Description: This project will install new VHF radio base station equipment for Subways to replace legacy equipment that can only operate in wideband mode. The new radio equipment is configured to operate in narrowband mode to meet the FCC mandate.



# VHF Radio System Upgrade

## Overall Status

Item	Comments
Schedule	On schedule for substantial completion in July 2016
Cost	Within Budget of \$221M

## Highlights

### Progress


- Completed cutover of Initial Build Sites in March
- Performed Site Installation Inspection
- Performed Site Equipment Acceptance Test
- Completed Independent Lab Test of Radio Cabinet in May
- Completed Design Verification Testing of Initial Build Sites in June
- Demonstrated P25 system capability of the Radio System in June




### 180 Day Look Ahead

- Complete equipment installation at Rail Control Center
- Complete System Verification Review
- Beneficial Use for Outdoor Base Stations
- Complete equipment installation at Backup Command Center

# VHF Radio System Upgrade

## Critical Milestones and Issues

Status	Activity	Date Needed	Issues
 Yellow	Beneficial Use for 26 Outdoor Base Stations and 8 Transit Bureau Locations	March 2015	<ul style="list-style-type: none"><li>▪ Beneficial use for outdoor base stations was impacted by the environmental testing issue facing the radio cabinets. This issue has been resolved.</li><li>▪ Testing/installation will start in October.</li></ul>

	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.

# New Bus Command Center



MTA New York City Transit



## Executive Summary

- Design, furnish, and install a new digital bus radio communications system for NYCT and MTA Bus.
- Design and construct a modern, secure command center for NYCT and MTA Bus operations.



# Project Schedule

Milestone	Bus Command Center	Bus Radio System
PE Completion	2/28/2014 (A)	2/7/2014 (A)
FE Completion	5/23/2014 (A)	4/7/2014 (A)
Advertise	8/28/2014 (A)	9/25/2014 (A)
Award	12/31/2014	6/30/2015
Beneficial Use	01/31/2017	2/28/2020
Substantial Completion	01/31/2017	2/28/2020
Closeout	05/31/2017	12/31/2021



# October 2014 CPOC IEC Project Review



## VHF Radio

October 27, 2014



# Project Status Review

NYCT correctly states the project's status and issues.

- **BUDGET** – There are no issues.
- **SCHEDULE** – There is a potential to be late. Interim milestones have been delayed.

Contract Event	FCC Waiver Date	W32686 Contract	Actual or Forecast	No. Base Stations
Initial Build Out	Not Applicable	8/13	6/14 A	4
Outdoor Locations Complete	8/14	9/14	3/15 F	26
Remaining Stations Complete	7/16	7/16	7/16 F	85

# Recommendations

The agency is subject to fines and the contractor to penalties for not meeting the end date for narrowband operations. The IEC suggests efforts should be focused on attaining narrowband operations before the end date:

- Without relaxing contract compliance but where possible streamlining contract requirements.
- CPM continue exploring with the contractor installation options along with assuring operations/maintenance provide the necessary support to achieve narrowband operations. The IEC will continue to monitor the progress going forward and will report concerns/issues accordingly.

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# **MTA Capital Program Commitments & Completions**

## **through September 30, 2014**

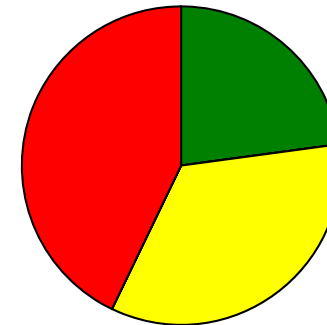
## Capital Projects – Major Commitments – September 2014

55 major commitments are planned for 2014, totaling \$6.5 billion; 35 are reported on through September. There are 27 slips through September, of which 15 commitments are late and 12 others were late, but have now been achieved. All variances are discussed on the following pages.

Agencies have committed a total of \$3.3 billion through September, versus a \$4.7 billion goal. The YTD shortfall is mostly due to delays, including the purchase of 256 Articulated Buses, South Ferry Sandy restoration work and three East Side Access projects. Despite a \$1.4 billion YTD shortfall, the MTA still forecasts meeting 99% of its year-end goal in large part due to \$0.5 billion in unplanned MTACC commitments to date, \$129 million in additional cost for ESA's GCT Concourse Finishes contract, and \$0.9M YTD goals that are late but still forecasted to be committed within the year.

For YTD commitments, 23% are on time and 69% are within budget. By year-end, 33% of major commitments are forecasted to be achieved on time and 67% are forecasted to be within budget. 47 of the 55 major commitments are forecasted to be committed within 2014.

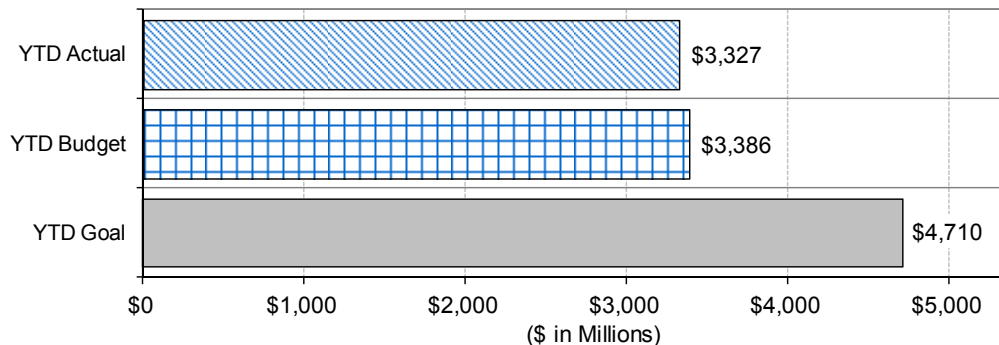
## Year-to-Date Major Commitments



	Count	Percent	Change from Prior Month
<b>GREEN</b> = Commitments made/forecast within Goal	8	23%	-
<b>YELLOW</b> = Commitments delayed beyond Goal (already achieved)	12	34%	↑ 2
<b>RED</b> = Commitments delayed beyond Goal (not yet achieved)	15	43%	↑ 1
	35	100%	↑ 3

## Budget Analysis

2014 Annual Goal	\$6,545	(\$ in millions)
2014 Annual Forecast	99%	of Annual Goal
Left to Complete	49%	(\$3,153)



## Year-to-Date Agency Breakdown

	Prior month variance		
	GREEN	YELLOW	RED
<b>New York City Transit</b>			
2 7 6	----	+2 YELLOW	-2 RED
<b>Long Island Rail Road</b>			
1 3 1	----	----	----
<b>Metro-North Railroad</b>			
1 1	----	----	+1 RED
<b>Bridges and Tunnels</b>			
3	----	----	----
<b>Capital Construction Company</b>			
1 2 3	----	----	----
<b>MTA Bus Company</b>			
3	----	----	+2 RED
<b>MTA Police Department</b>			
1	----	----	----

## Capital Projects – Major Commitments – September 2014 – Schedule Variances

*Actual Results Shaded*

Project	Commitment	Goal	Forecast
<b>15 All-Agency Red Commitments (3 new this month; net increase of 1)</b>			
<b>NYCT</b>			
<b>Signals &amp; Communications</b>			
PA/CIS: Furnish & Install Cabinets, 89 Stations	Construction Award	Jun-14 \$44.8M	Nov-14 \$46.3M
Award delayed by two months due to additional time required to repackage scope for separate PA and CIS contracts. Bid opening postponed to mid September due to bid protest prior to bid opening, delaying the award by two additional months. Cost increase due to revised engineer's estimate at advertisement.			
<b>Bus Replacement</b>			
Purchase 256 Articulated Buses	Purchase Award	Jun-14 \$245.5M	Jun-15 \$219.1M
Delay due to extended negotiations with vendors and an allowance for possible State review prior to award. Cost decrease reflects latest market conditions.			
<b>Depots</b>			
Bus Command Center	Construction Award	Aug-14 \$50.9M	Dec-14 \$42.7M
The project award has been delayed due to additional scope added to the contract, such as ADA compliance and electrical work, which require additional drawings and specifications. Cost reflects Memorandum of Understanding with MTA Bus and refined engineer's estimate at advertisement.			
<b>Sandy Restoration</b>			
Rutgers and Cranberry Tubes	Construction Award	Jun-14 \$154.0M	Feb-16 \$155.9M
The Rutgers tube award has been moved to February, 2016 in order to minimize the impact to the public. Previously Rutgers and Cranberry were a single contract, but are now to be split into separate contracts. To allow for repackaging, the Cranberry award has consequently slipped to December, 2014. Project cost adjusted to reflect estimates of separated contracts.			
South Ferry Station Complex	Construction Award	Jul-14 \$221.3M	Oct-14 \$254.6M
Project delayed to resolve design coordination issues and regulatory requirements. Cost increase reflects added scope, including leak mitigation, and circuit breaker house and relay room work.			

Project	Commitment	Goal	Forecast
<b>Sandy Restoration (cont'd)</b>			
Clark Street Tube Restoration	Construction Award	Aug-14 \$77.4M	Feb-16 \$77.4M
Project has been rescheduled as a result of coordination with other tube projects due to several factors, including programmatic concerns, community impacts and service impacts.			
<b>LIRR</b>			
<b>Structures</b>			
Colonial Road Improvements Project (Bridge & Pocket Track)	Construction Award	Jul-14 \$18.6M	Oct-14 \$26.7M
Award date re-forecast to allow for more detailed vendor evaluation during procurement. Cost increase reflects modified bridge type required to accommodate existing road alignment.			
<b>MNR</b>			
<b>Stations</b>			
GCT Trainshed/Tunnel Structure - (New Item)	Construction Award	Sep-14 \$18.1M	Nov-14 \$18.1M
Due to additional design scope, construction start has been adjusted and is now scheduled to be awarded in the 4th quarter.			
<b>MTA Bus</b>			
<b>Depots</b>			
Bus Command Center	Construction Award	Aug-14 \$8.7M	Dec-14 \$14.2M
The project award has been delayed due to additional scope added to the contract, such as ADA compliance and electrical work, which require additional drawings and specifications. Cost reflects Memorandum of Understanding with NYCT and refined engineer's estimate at advertisement.			



## Capital Projects – Major Commitments – September 2014 – Schedule Variances

## Actual Results Shaded

Project	Commitment	Goal	Forecast
<b>15 All-Agency Red Commitments (3 new this month) (cont'd)</b>			
<b>MTA Bus (cont'd)</b>			
<b>Buses</b>			
<b>45 Diesel Buses - (New Item)</b>	Purchase Award	Sep-14 \$23.8M	Dec-14 \$23.8M
Delay is due to the determination by the NYS Comptroller to undertake a procurement review for this project.			
<b>75 Articulated Buses - (New Item)</b>	Purchase Award	Sep-14 \$61.6M	Dec-14 \$61.6M
Delay is due to the determination by the NYS Comptroller to undertake a procurement review for this project.			
<b>MTACC</b>			
<b>East Side Access</b>			
GCT Concourse & Cavern Finishes (CM014B)	Construction Award	Jul-14 \$195.5M	Dec-14 \$324.7M
Change in procurement methodology to an RFP process has added significant time to the procurement period. Forecast value increased due to the decision to include option in base contract.			
System Package 4 (CS084)	Construction Award	Jul-14 \$114.7M	Oct-14 \$114.7M
Delay due to additional time needed to finalize contract award documentation and extension of bid period.			
Harold Structures Part 3D (CH057)	Construction Award	Aug-14 \$106.5M	Apr-15 \$122.5M
Award date has been updated to reflect adjustments to the overall Harold schedule and in order to allow for assessment of completed work and resource availability in the area of the Harold interlocking. Cost increase reflects repackaging process.			
<b>MTA Police Department</b>			
<b>PD Communications</b>			
MTA Police Radio Project	Design-Build Award	Jul-14 \$90.3M	Jan-15 \$90.3M
A delay in starting the procurement process has pushed back the forecast project award date.			

Project	Commitment	Goal	Forecast
<b>12 All-Agency Yellow Commitments (2 new this month)</b>			
<b>NYCT</b>			
<b>Signals &amp; Communication</b>			
34th Street Interlocking/ 6th Ave	Construction Award	Feb-14 \$226.9M	Apr-14 (A) \$170.0M
Delay was due to time needed to resolve a statement of adverse information (SAI) finding with a signals supplier. The budget variance is favorable due to a low bid.			
Passenger Station LAN: 30 Stations	Construction Award	Mar-14 \$28.1M	May-14 (A) \$26.5M
Project award was delayed 2 months as a result of bid period extension to address proposers' questions. The forecast cost decreased reflecting a low bid.			
West 4th Interlocking- 6th Avenue	Construction Award	Jun-14 \$221.2M	Jul-14 (A) \$155.3M
Award delayed by a month to resolve concerns of a signals supplier meeting production schedule. Project cost decreased reflecting a favorable bid.			
<b>Stations</b>			
Ozone Park - Lefferts Blvd Station Renewal and ADA Liberty	Construction Award	Apr-14 \$28.0M	May-14 (A) \$23.9M
Award delayed due to a review of a supplier which was required due to prior adverse finding. The supplier was cleared. Cost decreased due to good bid savings.			
<b>Station Renewal: Culver Line, 7 Stations - (New Item)</b>	Construction Award	Jun-14 \$106.1M	Sep-14 (A) \$132.2M
Delay and cost increase reflects additional scope, including component work at two additional locations. Additional delay caused by extended time needed for procurement sign-off.			
<b>Track &amp; Switch</b>			
Track & Switch Program (18 Projects) - 1st QTR	Construction Start	Mar-14 \$174.1M	May-14 (A) \$174.2M
All but one of 18 projects was awarded in first quarter. Track work on White Plains Rd. (\$20M) rescheduled to May, 2014. Construction delayed due to issues related to track access.			
<b>Sandy Restoration</b>			
<b>St. George Interlocking - (New Item)</b>	Construction Award	Jul-14 \$118.7M	Sep-14 (A) \$119.9M
Project award was delayed due to addition of Tower B restoration work to contract. Cost increase reflects added scope.			

## Capital Projects – Major Commitments – September 2014 – Schedule Variances

*Actual Results Shaded*

Project	Commitment	Goal	Forecast
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### 12 All-Agency Yellow Commitments (2 new this month) (cont'd)

#### LIRR

##### Track

2014 Annual Track Program	Construction Award	Apr-14 \$50.9M	May-14 (A) \$50.6M
The overall award slipped one month as a result of delays in processing the final track program commitments.			
Jamaica Capacity Improvements - Johnson Yard	Design-Build Award	Feb-14 \$56.6M	May-14 (A) \$46.6M
Delay was due to contract addenda, requests for extensions from vendors, evaluation of Means and Methods and Value Engineering opportunities. Forecast reflects good bid savings.			

##### Stations

Escalator Program	Construction Award	Apr-14 \$11.2M	Aug-14 (A) \$11.2M
Delays being experienced in finalizing procurement as the Vendor is experiencing difficulty in satisfying its MWDBE requirement.			

#### MTACC

##### East Side Access

System Package 1 (CS179)	Construction Award	Feb-14 \$366.9M	Mar-14 (A) \$366.9M
Delay was due to additional time needed to finalize contract award documentation.			
System Package 3 (VS086)	Construction Award	Feb-14 \$21.8M	Jun-14 (A) \$21.8M
Delay was due to additional time needed to finalize contract award documentation.			

## Capital Projects – Major Commitments – September 2014 – Budget Only\* Variances

*Actual Results Shaded*

*\*for variances of more than \$5 million or 10%*

Project	Commitment	Goal	Forecast
<b>2 All-Agency Budget Only Commitments (0 new this month)</b>			
<b>Bridges &amp; Tunnels</b>			
<i>Roadways &amp; Decks</i>			
Deck Replacement - Bronx Toll Plaza - Training Facility, Design/Build	Design/Build	Jun-14 \$11.8M	Jun-14 (A) \$13.1M
Increase in actual value reflects additional scope, including modifications to building design specifications in order to safely coordinate with ongoing construction projects at the bridge.			
<i>Sandy Restoration</i>			
Hugh Carey Tunnel - Structural	Construction Administration	May-14 \$11.7M	May-14 (A) \$8.5M
Decrease in actual value reflects good bid savings.			

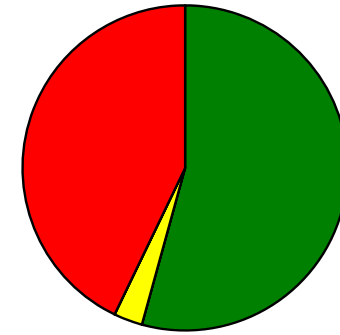
## Capital Projects – Major Completions – September 2014

46 major completions are planned for 2014, totaling \$5.7 billion; 35 are reported on through September. Fourteen projects are on-time and five additional were completed early. There are sixteen delays through September, of which fifteen are forecast as late and one was forecast as late but has now been completed. These variances are explained on the following pages.

Agencies have completed \$3.1 billion through September versus a \$4.5 billion year-to-date goal. The shortfall is due mostly to year-to-date slips, which collectively represent about \$1.4 billion. By year-end, the MTA forecasts meeting 77% of its overall \$5.7 billion goal. The decrease in annual budget forecast, from last month's 79%, is primarily due to the slip of the Culver Viaduct Phase 3 contract to October 2015.

For YTD completions, 54% are on time and 83% are on budget. By year-end, currently 54% of major completions are forecasted to be on time and 78% are forecasted to be on budget. 35 of the 46 major completions are forecasted to be achieved within 2014.

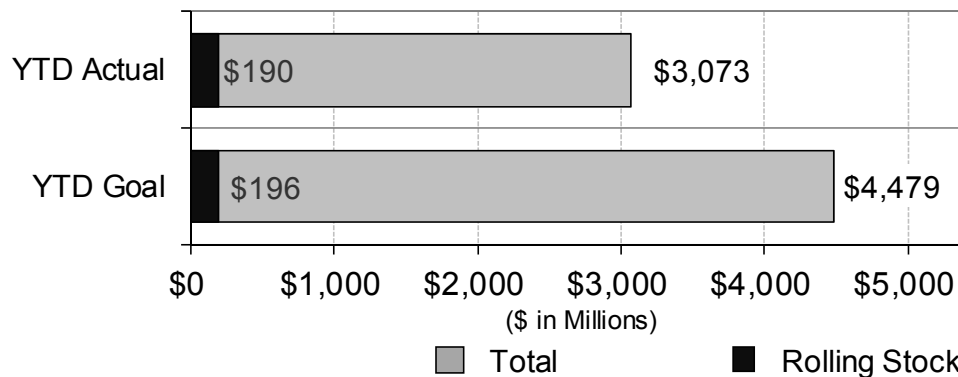
## Year-to-Date Major Completions



	Count	Percent	Change from Prior Month
<b>GREEN</b> = Completions made/forecast within Goal	19	54%	↑ 5
<b>YELLOW</b> = Completions delayed beyond Goal (already achieved)	1	3%	-
<b>RED</b> = Completions delayed beyond Goal (not yet achieved)	15	43%	↑ 2
	35	100%	↑ 7

## Budget Analysis

2014 Annual Goal	\$5,721	(\$ in millions)
2014 Annual Forecast	77%	of Annual Goal
Left to Complete	31%	(\$1,355)



## Year-to-Date Agency Breakdown

	Prior month variance		
	GREEN	YELLOW	RED
<b>New York City Transit</b>			
5 1 5	---	---	+1 RED
<b>Long Island Rail Road</b>			
2	+1 GREEN	---	---
<b>Metro-North Railroad</b>			
3 2	---	---	---
<b>Bridges and Tunnels</b>			
4	+4 GREEN	---	---
<b>Capital Construction Company</b>			
5 5	---	---	---
<b>MTA Bus Company</b>			
2	---	---	+1 RED
<b>MTA Police Department</b>			
1	---	---	---

## Capital Projects – Major Completions – September 2014 – Schedule Variances

**Actual Results Shaded**

Project	Completion	Goal	Forecast
<b>15 All-Agency Red Completions (2 new this month)</b>			
<b>NYCT</b>			
<b>Track &amp; Switch</b>			
Track & Switch Program (9 Projects) - 1st QTR	Construction	Mar-14 \$58.5M	Nov-14 \$62.6M
All installations on the 6th Ave line have been completed except one, which requires a pre-final inspection and punch list work to be finished. General Orders for remaining work were not available until June 2014.			
Track & Switch Program (19 Projects) - 2nd QTR	Construction	Jun-14 \$193.3M	Mar-15 \$191.5M
2nd Quarter completions were impacted by scheduling conflicts, particularly on the 7th Ave and Concourse Lines. In addition, coordination for piggybacking opportunities for remaining work on the Myrtle Ave Line has resulted in delays. The value of the delayed projects represents \$115M of the \$193M goal.			
Track & Switch Program (4 projects) 3rd Quarter - (New Item)	Construction	Sep-14 \$33.7M	Dec-14 \$36.0M
Completion of two track projects was delayed due to a general order for 7th Ave Line work being rescheduled.			
<b>Stations</b>			
Station Rehab: Smith- 9th St & 4th Ave	Construction	Jul-14 \$40.7M	Mar-15 \$43.5M
Due to work coordination issues, completion of rehab work is forecasted for September, excluding manuals, As-built drawings and other deliverables. NYCT forecasts Substantial Completion for 1st Qtr 2015. Cost increase reflects extended project duration.			
<b>Depots</b>			
Clara Hale Depot Reconstruction	Construction	Aug-14 \$246.4M	Oct-14 \$250.4M
Delay due to scope modifications, as well as late delivery of Con Edison equipment, postponing initiation of electrical service. Cost increase can be attributed to additional scope and increased support costs due to extended project duration.			

Project	Completion	Goal	Forecast
<b>MNR</b>			
<b>Structures</b>			
Moodna/Woodbury Viaducts Priority Repairs	Construction	Jun-14 \$9.0M	Oct-14 \$9.0M
Delay due to additional rehabilitation work needed to address significant cracking discovered in areas of the concrete foundation on the Woodbury Viaduct.			
<b>Track</b>			
West of Hudson Track Program	Construction	Jul-14 \$21.2M	Dec-14 \$19.8M
Work on this project has been delayed due to re-deployment of resources for other MNR priority projects. Budget decrease reflects revised cost to complete.			
<b>MTA Bus Company</b>			
<b>Depots</b>			
Upgrade Parking Lot: JFK and Baisley Park	Construction	Jul-14 \$9.2M	Dec-14 \$9.2M
Completion delayed due to requirement from Department of Environmental Protection to reconfigure the connection to the sewer main.			
Relocate Fuel Tanks at Eastchester Depot - (New Item)	Construction	Sep-14 \$12.9M	Dec-14 \$13.5M
Delay and cost increase attributed to additional scope, inclusive of demolition of bus washer due to unforeseen issue with depot wall.			
<b>MTACC</b>			
<b>East Side Access</b>			
44th Street Fan Plant and 245 Park Ave Entrance (CM004)	Construction	Feb-14 \$55.5M	Oct-14 \$55.5M
The completion of this contract has been delayed due to slower construction progress and coordination issues with ongoing utility work on the adjacent street. An additional one month delay was due to water intrusion mitigation and related work.			

## Capital Projects – Major Completions – September 2014 – Schedule Variances

**Actual Results Shaded**

Project	Completion	Goal	Forecast
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### 15 All-Agency Red Completions (2 new this month) (cont'd)

#### MTACC (cont'd)

##### East Side Access

GCT Concourse Finishes Early Work, CM014A	Construction	Apr-14 \$56.7M	Mar-15 \$56.7M
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Delay is due to the need to re- design the Supervisory Control and Data Acquisition (SCADA) system and delays in delivery of medium voltage switchgear. Additional one month delay due to mitigation work for leak in facility control room that recently developed.

Harold Structures Part 2A (CH054A)	Construction	Jun-14 \$80.0M	Feb-15 \$67.4M
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Delay due to re- design of the 12 kV feeder duct bank and change order work for storm sewer construction. Budget reduced to reflect final approval of outstanding change orders.

Harold Structures - Part 1(CH053)	Construction	Aug-14 \$326.1M	Apr-15 \$316.5M
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Delays resulting from the cutover of the new duct bank and resource issues have impacted contract and have pushed substantial completion out of the year. Cost decrease due to final approved value of previously outstanding change order.

##### Fulton Center

Transit Center Building (4F)	Construction	Jun-14 \$241.7M	Dec-14 \$241.7M
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Substantial completion of this contract has been delayed due to extended testing and commissioning and subsequent punchlist items.

#### MTA Police Department

##### Facilities

K-9 Training Facility	Construction	Jul-14 \$15.0M	Dec-14 \$15.0M
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Delay due to unforeseen field conditions at the construction site.

Project	Completion	Goal	Forecast
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### 1 All-Agency Yellow Completions (0 new this month)

#### NYCT

##### Service Vehicles

Purchase 28 Diesel- Electric Locomotives	Purchase	May-14 \$109.3M	Jul-14 (A) \$109.3M
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All 28 units have been tested and released for service. Delay was caused by late delivery and acceptance testing of several units.

## Capital Projects – Major Completions – September 2014 – Budget\* Variances

*Actual Results Shaded*

*\*for variances of more than \$5 million or 10%*

Project	Completion	Goal	Forecast
<b>1 All-Agency Budget Only Completions (0 new this month)</b>			
<b>MTACC</b>			
<i>East Side Access</i>			
Queens Bored Tunnel and Structures (CQ031)	Construction Award	Apr-14 \$801.6M	Apr-14 (A) \$777.0M
Budget decrease reflects the final contract value, including all approved change orders and scope transfers.			

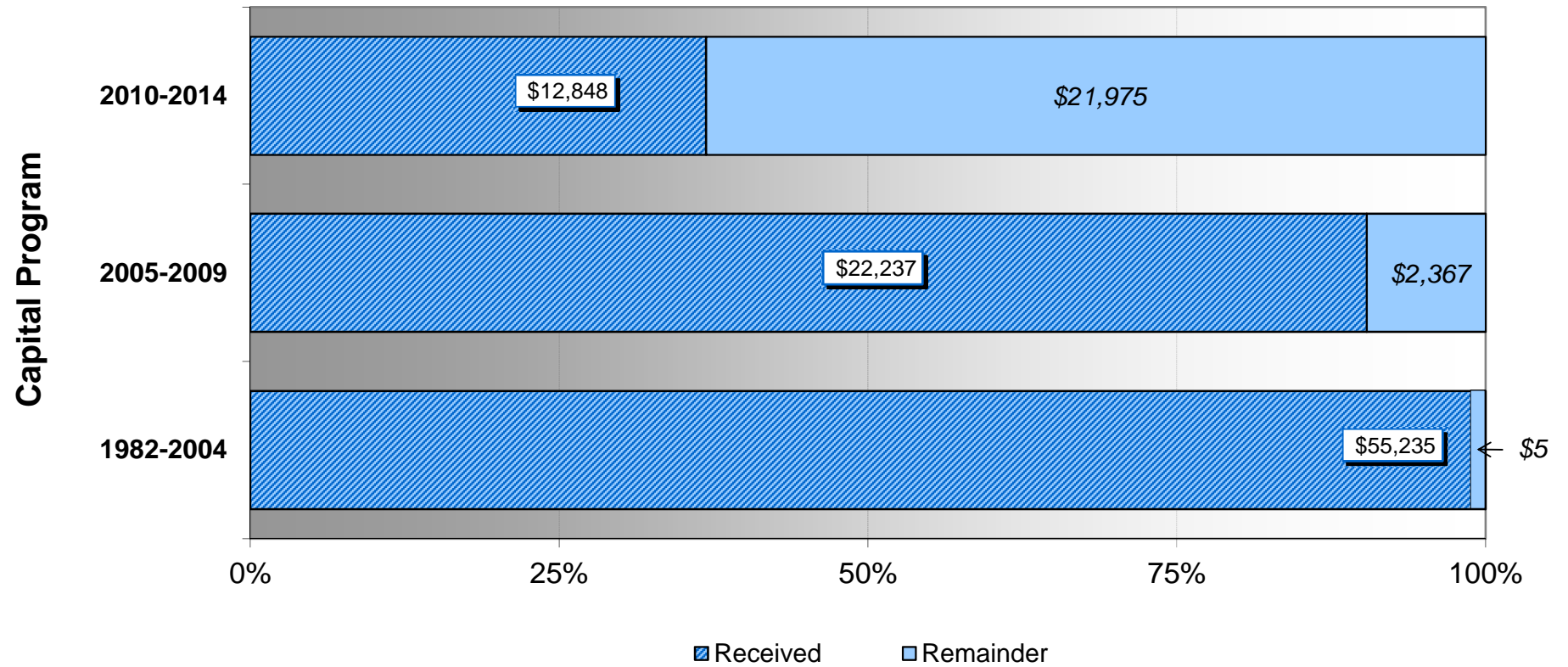
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## Status of MTA Capital Program Funding



## Capital Funding (September 30, 2014)

\$ in millions



## Capital Funding Detail (September 30, 2014)

\$ in millions

### 2005-2009 Program

Funding Plan	Receipts			
	<u>Current</u>	<u>Thru Aug</u>	<u>This month</u>	<u>Received to date</u>
Federal Formula and Flexible Funds	\$5,186	\$5,186	\$ -	\$5,186
Federal New Start	2,810	1,832	-	1,832
Federal Security	322	258	-	258
Federal Other	11	11	-	11
Federal ARRA - Stimulus	654	654	-	654
City of New York	418	409	-	409
City #7 Line Extension Funds	2,367	2,038	42	2,080
MTA Bus Federal and City Match	149	142	-	142
Asset Sales and Program Income	1,214	595	-	595
State Transportation Bond Act	1,450	1,064	-	1,064
MTA Bonds (Including LGA)	3,039	3,039	-	3,039
B&T Bonds	1,221	1,221	-	1,221
Bonds from New Sources	5,624	5,624	-	5,624
Other (Including Operating to Capital)	138	122	-	122
<b>Total</b>	<b>24,604</b>	<b>22,195</b>	<b>42</b>	<b>22,237</b>

### 2010-2014 Program

Funding Plan	Receipts			
	<u>Current</u>	<u>Thru Aug</u>	<u>This month</u>	<u>Received to date</u>
Federal Formula, Flexible, Misc	\$5,835	\$4,029	\$ -	\$4,029
Federal High Speed Rail	295	295	-	295
Federal Security	206	100	-	100
Federal RIFF Loan	-	-	-	-
City Capital Funds	778	350	-	350
State Assistance	770	150	-	150
MTA Bus Federal and City Match	132	20	31	51
MTA Bonds (Payroll Mobility Tax)	12,703	5,232	-	5,232
Other (Including Operating to Capital)	1,500	410	0	410
B&T Bonds	2,079	634	-	634
Hurricane Sandy Recovery				
Insurance Proceeds/Federal Reimbursement	9,431	912	685	1,596
PAYGO	160	-	-	-
Sandy Recovery MTA Bonds	758	-	-	-
Sandy Recovery B&T Bonds	175	-	-	-
<b>Total</b>	<b>34,823</b>	<b>12,133</b>	<b>716</b>	<b>12,848</b>