



Metropolitan Transportation Authority

Capital Program Oversight Committee Meeting

October 2015

Committee Members

T. Prendergast, Chair

F. Ferrer

R. Bickford

A. Cappelli

S. Metzger

J. Molloy

M. Pally

J. Sedore

V. Tessitore

C. Wortendyke

N. Zuckerman

Capital Program Oversight Committee Meeting

2 Broadway, 20th Floor Board Room

New York, NY 10004

Monday, 10/26/2015

1:45 - 2:45 PM ET

1. PUBLIC COMMENTS PERIOD

2. APPROVAL OF MINUTES SEPTEMBER 21, 2015

- *Minutes from September '15 - Page 3*

3. COMMITTEE WORK PLAN

- *2015-2016 CPOC Work Plan - Page 6*

4. NYCT CAPITAL PROGRAM UPDATE

- *Progress Report on Signals and Train Control Division - Page 8*
- *IEC's Project Review on CBTC Flushing Line, Culver Line, and Interlockings - Page 28*
- *IEC's Project Review on CBTC Queens Boulevard Line - Page 32*
- *Progress Report on Systems and Security Division - Page 34*
- *IEC's Project Review on VHF Radio - Page 54*
- *IEC's Project Review on Bus Radio System - Page 57*
- *IEC's Project Review on Bus Command Center - Page 60*
- *IEC's Project Review on ISIM-B - Page 63*

5. NYCT, LIRR, MNR UPDATE ON NEW FARE PAYMENT SYSTEM

- *Progress Report on New Fare Payment System - Page 66*
- *IEC's Project Review on New Fare Payment System - Page 73*
- *IEC's New Fare Payment System Appendix - Page 74*

6. CAPITAL PROGRAM STATUS

- *Commitments, Completions, and Funding Report - Page 75*

7. EXECUTIVE SESSION

Date of next meeting: Monday, November 16, 2015 at 1:15 PM

MINUTES OF MEETING
MTA CAPITAL PROGRAM OVERSIGHT COMMITTEE
September 21, 2015
New York, New York
1:15 P.M.

MTA CPOC members present:

Hon. Thomas Prendergast
Hon. Fernando Ferrer
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. Vincent Tessitore
Hon. Neal Zuckerman

MTA Board members present:

Hon. Andrew Albert

LIRR staff present:

Debbie Chin

MNR staff present:

Anthony Forcina

MTACC staff present:

Uday Durg
Bill Goodrich
Shawn Kildare
Anil Parikh

Independent Engineering Consultant staff present:

Patrick Askew
Joe DeVito
Kurt Egger
Gerry Gardvits
Kent Haggas
Darlene Rivera

* * *

Chairman Prendergast called the September 21, 2015 meeting of the Capital Program Oversight Committee to order at 1:30 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 20, 2015.

Committee Work Plan

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

LIRR and MNR Positive Train Control (PTC) Update

Ms. Chin reported on progress on the Positive Train Control (PTC) initiative since the last report to CPOC in June, 2015. She stated that the Railroads' current estimated project cost remains \$968 million. With respect to schedule, Ms. Chin reported that the Railroads are still targeting full implementation by December 2018. In its Project Review, the IEC reported that there have been no cost issues nor has there been a change to the project end date since the June 2015 report to CPOC (this in spite of a delay to the Final Design Review (FDR) and an extension to the Pilot test schedule). Several Board members asked about the status of New Jersey Transit's Port Jervis and Pascack Valley Lines, as well as the status of West-of Hudson monopoles. Ms. Chin said she would follow-up. 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 was achieved on September 13, 2015 and that the project, including the site P entrance, is forecast to be completed within budget. In its Project Review, the IEC recognized the hard work and long hours both MTACC and NYCT staff put into completing the project by this date. Further, the IEC stated that based on project information, the IEC currently forecasts the project to be completed within budget. 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 agreed that the project is on budget, and with respect to schedule, the IEC reported that the 86th Street Station is running behind its recovery plan to support project completion in December 2016. The IEC also stated that monthly construction expenditures will need to increase from the current average of \$34 million per month to \$40 million per month to support the schedule to complete the project by December 2016. 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 the project remains within its \$10.178 billion budget. In its Project Review, the IEC confirmed MTACC's budget and schedule figures. The IEC then expressed the following concerns with respect to the Facilities Systems Package (CS179) Schedule: the contractor is falling behind in achieving the design milestones; the field workforce in August was roughly at half the anticipated strength; and the current contractor schedule shows unattainable resource peaks for installation and local testing. The IEC then recommended that MTACC address these resource issues in the current contractor schedule in order to improve schedule certainty. 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 Cortland Street #1 Line

Mr. Durg reported that project Substantial Completion is August 2018, pending results of the risk assessment. In addition, pending results of the risk assessment, the estimated project budget remains \$158 million. In its Project Review, the IEC concurred with the budget figure cited by the agency. The IEC then cited its concern that the logistical challenges and complexities of the site pose additional cost and schedule risks, and recommended that a funding reserve be identified to address any potential budget shortfall. 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 reported that in 2015 agencies plan to commit a total of \$3.1 billion dollars, including 34 major commitments that will be tracked throughout the year. Agencies committed a total of \$2.1 billion through August, versus a \$2.5 billion year-to-date goal. With respect to Completions, the agencies plan a total of \$2.6 billion in 2015, including 25 major completions. Agencies completed \$1.2 billion through May, versus a \$1.9 billion year-to-date goal.

Quarterly Traffic Light Report

Mr. Stewart brought the Committee's attention to the Traffic Light Reports for the 2nd Quarter 2015 and invited Committee Members' questions, of which there was none.

Quarterly Capital Change Order Report (for information only)

Mr. Stewart brought the Committee's attention to the Quarterly Capital Change Order Report for the 2nd Quarter 2015 and invited Committee Members' questions, of which there was none.

Adjournment

Upon motion duly made and seconded, Chairman Prendergast adjourned the September 21, 2015 meeting of the MTA Capital Program Oversight Committee at 2:30 PM.

Respectfully submitted,
Michael Jew-Geralds
Office of Construction Oversight



2015-2016 CPOC Committee Work Plan

I. Recurring Agenda Items

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

II. Specific Agenda Items

November 2015

LIRR and MNR Quarterly Update on Positive Train Control (PTC)

LIRR Capital Programs Update

- Jamaica Capacity Improvements
- Main Line Double Track
- Rolling Stock

MNR Capital Programs Update

- Harmon Shop Replacement
- Hudson Line Sandy Restoration
- Rolling Stock

December 2015

Quarterly MTACC Capital Program Update

- Cortlandt Street Station
- East Side Access
- Second Avenue Subway

Quarterly Change Order Report

Quarterly Traffic Light Reports

January 2016

NYCT Capital Program Update

- Stations Program Update
- Rolling Stock Update

Update on Minority, Women and Disadvantaged Business Participation

February 2016

B&T Capital Program Update

LIRR and MNR Quarterly Update on Positive Train Control (PTC)

March 2016

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

April 2016

NYCT Capital Program Update
NYCT, LIRR, MNR Update on New Fare Payment System

May 2016

LIRR and MNR Capital Programs Update

- Quarterly Positive Train Control (PTC) Update

June 2016

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

July 2016

NYCT Capital Program Update
Update on Minority, Women and Disadvantaged Business Participation

September 2016

Quarterly MTACC Capital Program Update
LIRR and MNR Quarterly Update on Positive Train Control (PTC)
Quarterly Change Order Report
Quarterly Traffic Light Reports

October 2016

NYCT Capital Program Update
NYCT, LIRR, MNR Update on New Fare Payment System

Signals and Train Control Division

Nidhish Patel, P.E.

Program Executive

October 2015

Capital Program Oversight Committee



CBTC Flushing Line

- Contractor: Thales Inc.
- Award (S-32723): June 16, 2010
- Project Description: Project will overlay new CBTC system on the Flushing Line between Main St. and the new 34th St. /11th Ave. Terminal. Modernize 1st Ave. and Times Square Interlockings and equip fleet with CBTC carborne equipment.



CBTC Flushing Line

Overall Status

Item	Comments
Schedule	Substantial Completion projected to 3 rd Quarter 2017 (Delayed from 2 nd Quarter 2017)
Cost	\$550M is the current budget - additional funds of approximately \$20M are required

Highlights

Progress

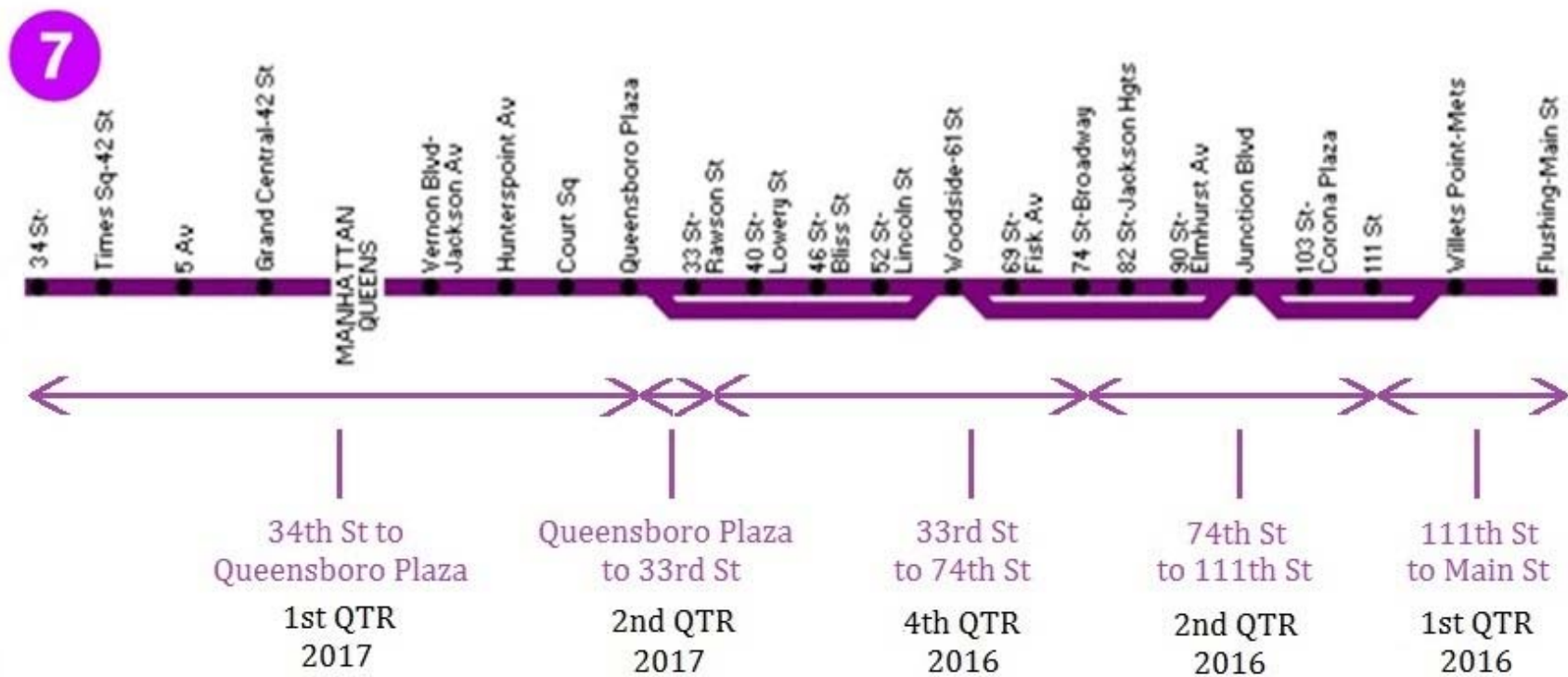
- Carborne CBTC equipment installation by In-house forces is ongoing – a total of 19 out of 46 trains have been completed
- Automatic Train Supervision testing started in August 2015 – delayed by 2 months
- Wayside: 74th St. Interlocking In-service was completed August 2015 – ahead of schedule

180 Day Look Ahead

- CBTC system monitoring period will commence from Main St. to 111th St. in November 2015
- RTO Train Operator training will commence in November 2015 – delayed by 2 months
- CBTC will be in service from Main St. to 111th St. in the 1st Quarter 2016
- Carborne CBTC equipment will be installed on an additional 12 – 14 trains
- CBTC will be in service from 111th St. to 74th St. in the 2nd Quarter of 2016






CBTC Flushing Line

Projected Dates for CBTC Cutover






CBTC Flushing Line

Critical Milestones and Issues

Status	Activity	Date Needed	Issues
 Red	CBTC Testing and Commissioning	Now through 3 rd Quarter 2017	Contractor needs more testing time to validate and verify safety aspect of the CBTC system
 Yellow	G.O., Work Train, and Flagging Availability	Now through 2017	All planned TA provided services are essential to maintaining the current schedule.
 Yellow	TIA Cable	January 2016	Transponder Interrogation Antenna (TIA) cables require replacement. Contractor needs to resolve this issue by January 2016.
 Yellow	Car Installation at Corona Shop	September 2016	Carborne CBTC equipment needs to be installed on the remaining 27 out of 46 trains. Corona Shop is implementing a plan to complete by September 2016.
 Yellow	CBTC Software Stability	October 2016	Existing signaling system will be disconnected starting October 2016. We need a reliable and stable software by this time.

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 Ave. Station and Church Ave. Interlocking on B3 track.

Culver Line CBTC Integrated Test Facility

Overall Status

Item	Comments
Schedule	Substantial Completion projected to December 2015 (Delayed from July 2015)
Cost	\$100.4M - project is within budget

Highlights

Progress



- CBTC interoperability field testing is on-going – delayed by 5 months
- Digimove: started revenue service and retrofitting of the Canarsie Line car fleet

180 Day Look Ahead




- Complete Interoperability field testing on the Culver Test Track
- Digimove: system stability will be achieved by December 2015 – delayed by 5 months

Culver Line CBTC Integrated Test Facility

Critical Milestones and Issues

Status	Activity	Date Needed	Issues
 Yellow	Complete Interoperability Testing in the field	December 2015	Potential delays if issues are discovered during field testing. Contractor will be working extended shifts in the field to mitigate schedule delays.
 Yellow	Stability of Digimove system on the Canarsie Line	December 2015	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.


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.


CBTC Equipment Supplier Interoperability

- Contractor: Mitsubishi Electrical Power Products
- Award (S-48002): September 25, 2015
- Project Description: Provide interoperable CBTC system to meet NYCT I2S standards and safety certify the interoperable system.

Overall Status

Status	Item	Comments
 Green	Schedule	Contract is on schedule
	Cost	\$20M - project is within budget


Legend

	Green	No Near Term Impact for Design, Procurement & Construction. Successful management of major activity to stay on schedule or budget.
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CBTC Queens Blvd Line – Design and Furnish

- Contractor: Siemens and Thales
- Award (S-48004): Siemens – August 24, 2015
Thales – August 31, 2015
- Project Description: Design and furnish a CBTC interoperable system including ATS (Automatic Train Supervision) from Union Turnpike station in Queens to 50th St. – 8th Ave. station in Manhattan.

Overall Status

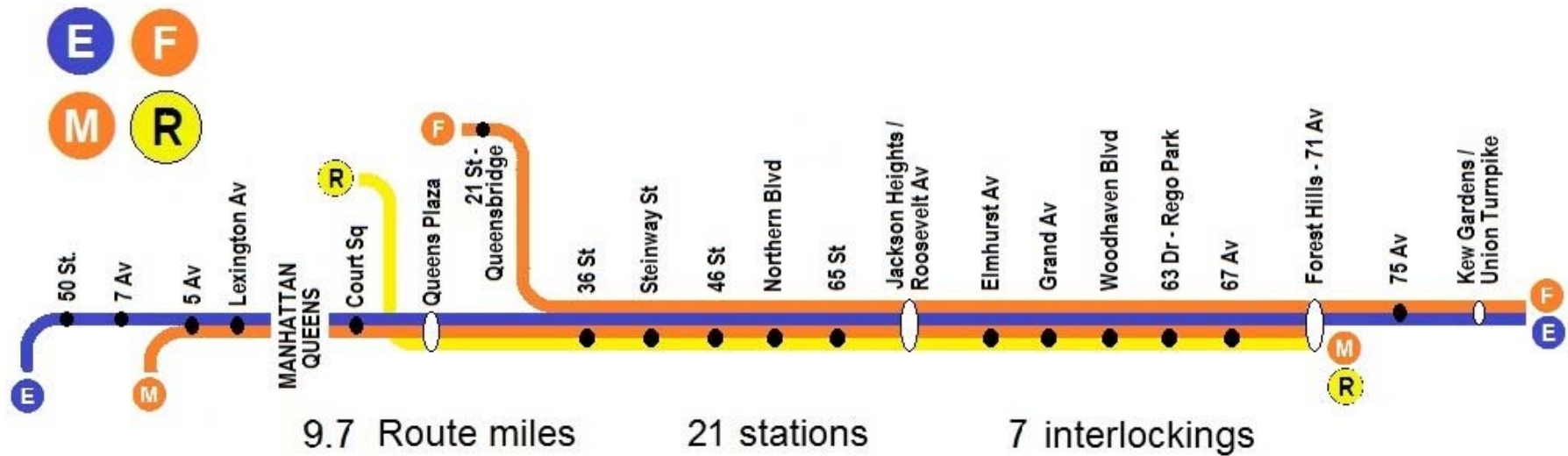
Status	Item	Comments
 Green	Schedule	Contract is on schedule
	Cost	\$238M - project is within budget

Legend

	Green	No Near Term Impact for Design, Procurement & Construction. Successful management of major activity to stay on schedule or budget.
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CBTC Queens Blvd Line


CBTC Limits on QBL




CBTC Queens Blvd Line– Installer

- Project Status: In Design
- Award (S-48005): 2nd Quarter 2016
- Project Description: Design, Furnish and Install conventional signal system. Install all CBTC equipment, support testing and in-service of the CBTC interoperable system including ATS from Union Turnpike station in Queens to 50th St. – 8th Ave. station in Manhattan.

Overall Status

Status	Item	Comments
 Green	Schedule	Award is on schedule subject to funding availability
	Cost	\$250M to \$325M – project estimate (2015 - 2019 Capital Program)


Legend

	Green	No Near Term Impact for Design, Procurement & Construction. Successful management of major activity to stay on schedule or budget.
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2 Interlockings: Union Turnpike & 71st 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 71st Ave. Interlockings on the Queens Blvd. Line. The interlockings are modernized with conventional relay technology.

Overall Status

Status	Item	Comments
 Yellow	Schedule	51% complete; Substantial Completion originally scheduled April 2017 is now projected to 3 rd Quarter 2017 due to the impact of prioritized projects / work which resulted in limited service outages and other resources on the Queens Blvd. Line.
	Cost	\$311M - 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 1 – Train Location Data Capture

- Project Status: In Procurement
- Award (W-32784): 4th Quarter 2015 (delayed from July 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	Schedule	Bid opened on August 19, 2015; Low bidder is Yonkers Electric
	Cost	\$56M – project estimate (2010-2014 Capital Program)


Legend

	Green	No Near Term Impact for Design, Procurement & Construction. Successful management of major activity to stay on schedule or budget.
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ISIM-B: Module 3 – Rail Traffic Management Office System

- Project Status: In Design
- Award (W-32789): 4th Quarter 2016 (delayed from 3rd QTR. 2016)
- Project Description: This project will furnish and install a rail traffic management system (including train tracking) for the entire B Division at the RCC, including remote workstations at approximately 44 field locations.

Overall Status

Status	Item	Comments
 Green	Schedule	Design Completed in June 2015; 53-month construction duration RFP Advertisement in 4th Quarter 2015 – subject to funding availability
	Cost	\$125-\$160M – project estimate (2010-2014 and 2015-2019 Capital Programs)

Legend

	Green	No Near Term Impact for Design, Procurement & Construction. Successful management of major activity to stay on schedule or budget.
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Interim Train Arrival Information

- Contractor:
 - MTA – In-house – Concourse Line
 - Siemens – West End and Sea Beach line
- Award:
 - MTA – In-house – 1/26/2015
 - Siemens – 3/26/2015
- Project Description:
 - To provide the interface for real time train arrival information (PACIS II) to the Subway Times Mobile App for the riding customers

Mobile Apps CIS/Cabinets as part of Contracts W-32697/W32694

Concourse B D	145 St to 205 St	13 stations	5 sta. with PA/CIS (mid 2017)
West End D	9 th Av to Stillwell Av	13 stations	8 sta. with PA/CIS (mid 2016)
Sea Beach N	8 th Av to Stillwell Av	10 stations	5 sta. with PA/CIS (late 2017) 4 sta. with PA/CIS (2018)


Overall Interim ISIM Status

Item	Comments
Schedule	ATS work for Sea Beach and West End Lines - Siemens – 2/28/16. ATS work for Concourse Line MTA in-house – 11/30/15. Cabinet contract is on schedule.
Cost	Total Project Estimate is \$3.0M. (2010-2014 Capital Program).


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 Ave. Interlocking on the Queens Blvd. Line. The interlocking will be modernized with conventional relay technology.

Overall Status

Status	Item	Comments
 Green	Schedule	66% complete; Substantial Completion is on schedule for December 2016
	Cost	\$103M - project is within budget


Legend

	Green	No Near Term Impact for Design, Procurement & Construction. Successful management of major activity to stay on schedule or budget.
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34th 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 Ave. Line. The interlocking will be modernized with SSI (Solid State Interlocking) technology.

Overall Status

Status	Item	Comments
 Green	Schedule	13% complete; Substantial Completion is on schedule for September 2018. However, due to prioritized projects, the potential lack of available service outages and other resources may impact the completion date.
	Cost	\$185M - project is within budget


Legend

	Green	No Near Term Impact for Design, Procurement & Construction. Successful management of major activity to stay on schedule or budget.
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W. 4th Street Interlocking

- Contractor: TC Electric
- Award (S-32765): July 30, 2014
- Project Description: This project will modernize and improve the reliability of the W. 4th St. Interlocking on the 6th Ave. Line. The interlocking will be modernized with SSI technology.

Overall Status

Status	Item	Comments
 Green	Schedule	12% complete; Substantial Completion is on schedule for September 2018. However, due to prioritized projects, the potential lack of available service outages and other resources may impact the completion date.
	Cost	\$174M - project is within budget


Legend

	Green	No Near Term Impact for Design, Procurement & Construction. Successful management of major activity to stay on schedule or budget.
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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 St. to Dyre Ave in the Bronx. Install a new SSI system at Dyre Ave and Morris Park provided by Invensys (Siemens) and Mitsubishi.

Overall Status

Status	Item	Comments
 Green	Schedule	45% complete; Substantial Completion is on schedule for July 2017
	Cost	\$226M - project is within budget

Legend

	Green	No Near Term Impact for Design, Procurement & Construction. Successful management of major activity to stay on schedule or budget.
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October 2015 CPOC IEC Project Review



NYCT Signals & Train Control



October 26, 2015

CBTC Flushing Line

- **SCHEDULE:** Based on the additional time required for testing and commissioning, the IEC agrees that the substantial completion date will move out to 3rd Quarter 2017.
- **BUDGET:** The project budget increase reflects in-house support costs . The additional funds required should carry the project to closeout.
- **CRITICAL ISSUES & HIGHLIGHTS:**
 - Critical path work goes through car equipment installations and cut over of various segments to CBTC operations.
 - CBTC car equipment installations has not progressed as planned. NYCT identified issues and has a plan to finish the fleet in time for CBTC operations.
 - Shadow mode operations start was delayed several months. IEC concurs that steps are in place to begin in November 2015.



Culver Line CBTC Test Track

- **SCHEDULE:** The IEC agrees with the substantial completion slip, as cited by NYCT.
- **BUDGET:** There are no issues with the budget.
- **CRITICAL ISSUES:**
 - Completing the formal interoperability field demonstration testing and the retrofit and stability with Digimove (R160/R143 cars) will complete the carborne portion to achieve substantial completion.



Interlockings

- Each of the below interlockings achieved a “Green” reporting status in the Traffic Light Report presented at the September 2015 CPOC meeting.
 - 34th Street Interlocking
 - W 4th Street Interlocking
 - Roosevelt Avenue Interlocking
 - Dyre Avenue Line Signals
- The IEC concurs with NYCT’s reporting status on Union Turnpike & 71st Avenue interlockings.



October 2015 CPOC IEC Project Review



NYCT Signals & Train Control

Queens Blvd -CBTC

October 26, 2015



Queens Blvd Line CBTC – Design and Furnish

- **SCHEDULE:** The IEC agrees that the duration of the contracts are reasonable based on lessons learned from similar projects.
- **BUDGET:** Project is on budget but still needs to be confirmed once the install contract is awarded.
- **CRITICAL ISSUES**
 - Availability of Transit Agency services to allow contractors to perform wayside work in a timely manner
 - Availability of in house forces to complete carborne Installations at multiple locations in accordance with the schedule.
 - Install contract for Queens Blvd. CBTC should be awarded by 2nd Quarter 2016 to meet the overall project schedule.



Systems & Security Division

Mark Bienstock, P.E.
Program Officer

Capital Program Oversight Committee

October 2015

MTA New York City Transit



VHF Radio System Upgrade (Subways) - W32686

- 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 (Subways)

Overall Status

Item	Comments
Schedule	Substantial Completion forecast is Sept 24, 2016 - 55 days behind schedule
Cost	Within Budget of \$221M

Highlights

Progress

- Placed in service 48 out of 114 VHF base stations.
- Completed narrowband transition of IRT outdoor locations in Bronx and Junius Street in Brooklyn.
- Completed cutover of Tone Remote Control Console (TRCC) at 50 out of 69 dispatch towers.

180 Day Look Ahead

- Complete VHF Radio Base Station cutovers at IRT underground and portal locations.
- Complete installation and cutover of TRCC at remaining 19 locations.
- Complete narrowband transition of outdoor base stations on Rockaway Line.
- Remove old base stations and start punch list work.

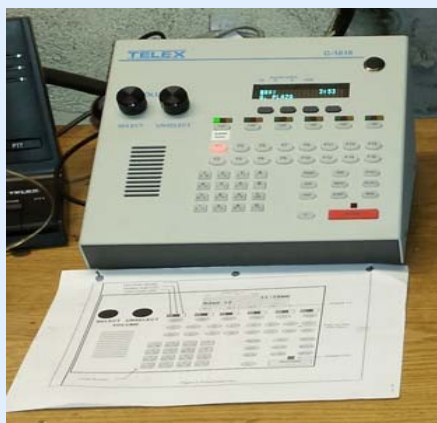
VHF Radio System Upgrade (Subways)



Base station cabinet



Rail Control Center



Tone Remote Control Console







Back-up Command Center



VHF Radio System Upgrade (Subways)

Critical Milestones and Issues

Status	Activity	Date Needed	Issues
 Yellow	Beneficial Use for 26 Outdoor Base Stations	Dec. 2015	To date, 50% of the as-built drawings have been submitted and remaining as-built drawings will be submitted by December 2015.

	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.



New Bus Command Center



East New York, Brooklyn
20,000 ft² building footprint

MTA New York City Transit

New Bus Command Center (Site Photo)



MTA New York City Transit

Bus Command Center

Overall Status

Item	Comments
Schedule	Substantial Completion forecast is June 26, 2017
Cost	Within Budget of \$77.1M

Highlights

Progress





- Maintenance and Protection of Traffic (MPT) installed along with site fencing.
- Site cleared and ready for construction start.
- Vibration monitoring equipment installed, and baseline monitoring completed.
- Test pits and soil sampling completed.




180 Day Look Ahead

- Removal of soil 5 feet deep from site.
- Adjacent building underpinning.
- Pile and pile cap installation underway.

Bus Command Center

Critical Milestones and Issues

Status	Activity	Date Needed	Issues
 Green	Foundations Complete	June 2016	None
 Green	Steel Erection and Floor/Roof Slabs Complete	November 2016	None
 Green	Building Enclosed and Weather-tight	December 2016	None
 Green	Substantial Completion	June 2017	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 Radio System (W-32366)

Design, furnish, and install a new digital bus radio communications system for NYCT and MTA Bus.



MTA New York City Transit

Project Schedule

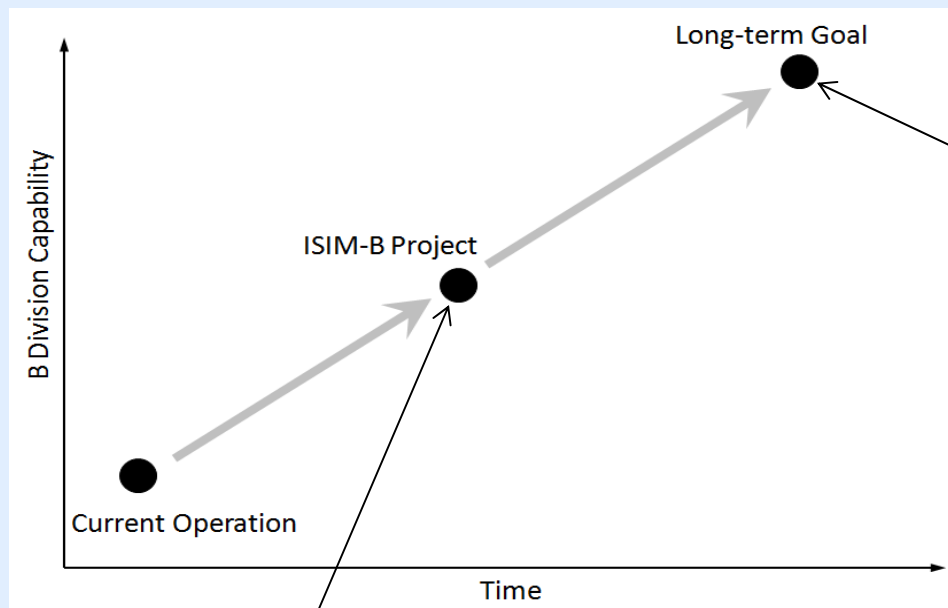
Milestone	Bus Radio System W-32366
PE Completion	2/7/2014 (A)
FE Completion	4/7/2014 (A)
Advertise	9/25/2014 (A)
Award	1/31/2016
Beneficial Use	11/30/2020
Substantial Completion	11/30/2020
Closeout	5/30/2021
Projected Cost	\$225-300M

- Project Award has been delayed due to extended technical and cost negotiations.

INTEGRATED SERVICE INFORMATION & MANAGEMENT - B DIVISION



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



Centralized service monitoring, control and customer information at the RCC

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

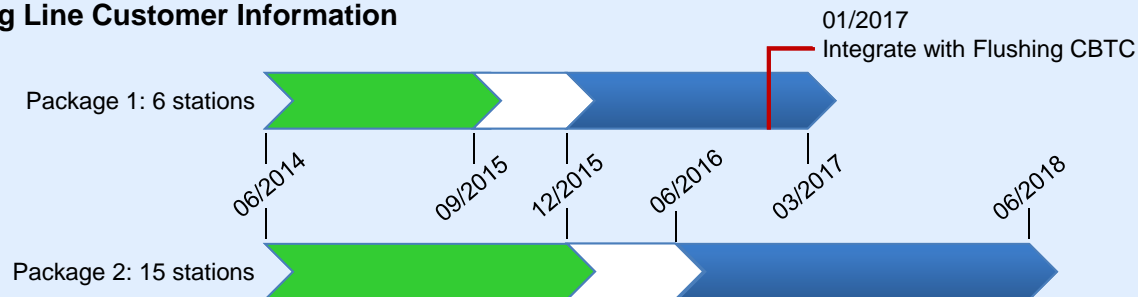
Better operational plans and schedules

ISIM-B: Module 2 – Flushing Line Customer Communications

Current Status:	In Design
Award (W-32785):	Phase 1: 4th Quarter 2015
Project Description:	Furnish and install new Public Address and Information Screens with real time train arrival information on the Flushing Line

Item	Comments
Schedule	<p>Design and Procure in Two Phases: Phase I: 6 Locations; Design ongoing; 15-month construction duration. Final completion 9/30/2015. Award planned for 4th Quarter 2015.</p> <p>Phase II: 15 Locations; Design ongoing; 24-month construction duration. IFB Advertisement in 1st Quarter 2016. Award planned for 2nd Quarter 2016.</p> <p>Note: Phases may be combined into single contract to be awarded in 2016.</p>
Cost	Total Project Estimate is \$40-\$60M. (2010-2014 Capital Program).

M2: Flushing Line Customer Information

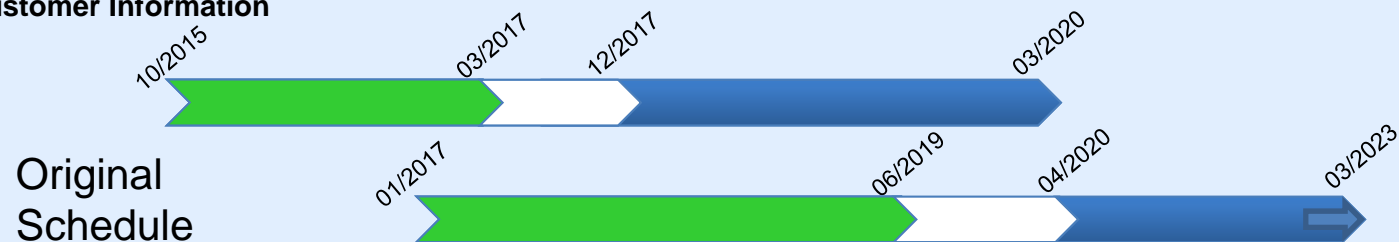


ISIM-B: Module 4 – B Division Customer Information

Current Status:	In Master Plan
Project Description:	Deliver real-time train arrival information via web/mobile apps and to all B Division stations. Install/replace PA/CIS at 171 stations.

Item	Comments
Schedule	Design and Contract in phases contingent upon funding availability. The schedule shown below may be revised based on final approval of the 2015-2019 Capital Plan.
Cost	Total Project Estimate is \$400M - \$450M.

M4: B Division Customer Information



HELP POINT SYSTEM

Help Point is a communications intercom in passenger stations for information and emergency reporting. It is highly visible, visually appealing, has faster response time and higher quality audio than existing CAIs, and features induction loop technology for the hearing impaired. An average of 7 units in underground stations and 5 units in elevated stations are installed.



Beacon

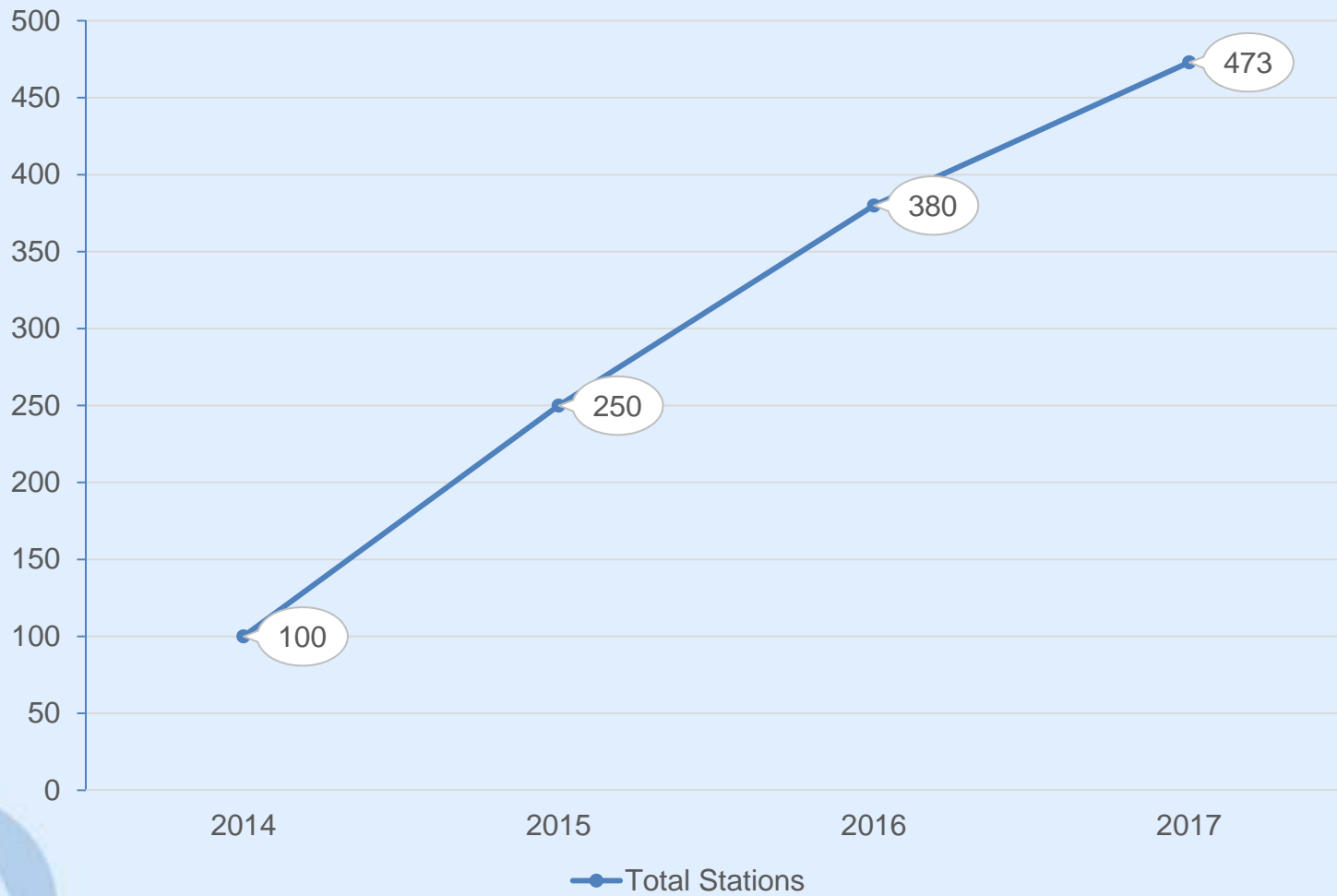
Emergency Call Button

Information Call Button



MTA New York City Transit

Help Point Stations



MTA New York City Transit

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.



MTA New York City Transit

Passenger Stations Local Area Network (PSLAN)

Project Group	Existing	2015	2016	2017	Total
Full PSLAN	14	30			44
Partial PSLAN			6		6
Help Point (In-house)	53	30	49	23	155
Help Point (SBM)	17	4	17	9	47
Electronic Security Systems		4	3		7
Station Renewal			2	10	12
Transit Wireless (Dark Fiber)		22	131	35	188
ISIM-B (Flushing)				4	4
MTACC (FSTC)	5				5
MTACC (7 West & 2 nd Ave.)		1	4		5
Annual Total	89	91	212	81	473

October 2015 CPOC IEC Project Review



VHF Radio

October 26, 2015



Project Status Review

- BUDGET: There are no issues to report.
- SCHEDULE:
 - Outdoor sites were completed July 2015.
 - Although the project is reporting a 55-day delay, in the IEC's opinion, the schedule outlook is improving and should improve further as several sites are in various stages of completion but not yet reflected in the latest CPM schedule.
 - The transition to narrow band may be achieved by July 2016, as noted in NYCT's presentation.



Observation

- NYCT achieved all of the 180 Day Look Ahead objectives stated in the March 2015 CPOC slide presentation.
- NYCT and contractor have worked together to achieve an average site cut-over rate of two per week. Consideration is being given to increasing the cut-over rate to three per week.



October 2015 CPOC IEC Project Review



NYCT DOB/MTA Bus Radio System



October 26, 2015

Project Status Review

- **BUDGET:** The IEC will re-evaluate the budget once the contract is awarded.
- **SCHEDULE:** The IEC agrees with the project's characterization of the schedule for the award date of the NYCT DOB/MTA Bus Radio System contract.



Observations

- The IEC is working with NYCT to conduct a refresh of the December 2013 Risk Assessment to reflect any differences from the time of the Risk Assessment and the issuance of the RFP.
- The IEC notes that the RFP does not contain contractual interim milestones to monitor against construction progress. NYCT indicates that interim non-contractual milestones will be established once the contract is awarded.



October 2015 CPOC IEC Project Review



Bus Command Center



October 26, 2015

Schedule & Budget Review

- **SCHEDULE** - The IEC has reviewed the project schedule and agrees with the characterization of the milestones cited in the report.
- **BUDGET** - The IEC has reviewed the project estimate. Based on the current project budget, it appears that there will be sufficient funding to complete this project.



Observation

- The IEC will be working with NYCT to develop a risk register to identify risk mitigations.



October 2015 CPOC IEC Project Review



**Integrated Service Information & Management,
B Division (ISIM-B)**

October 26, 2015



Schedule and Budget Review

- Timely award of contract for modules 1 and 2 will be important to allow effective testing of Module 3.
- Module 3 design has been completed but advertising of the RFP has been deferred due to 2015 to 2019 capital program delays.
- IEC confirms that estimates for modules 1, 2, and 3 are reasonable based on past experience with implementation of the A Division count down clocks.



Comments

- A formal risk assessment of the Module 3 program is planned for Q1 2016.



Capital Program Oversight Committee
October 26, 2015

New Fare Payment System Update

Long Island Railroad
Metro-North Railroad
New York City Transit



Today's Presentation

Update on Agency Plans and Progress

- This will be an update to our joint presentation to CPOC in January 2015.
- Status report on current/planned next generation fare payment system-related initiatives at NYCT, LIRR, and MNR:

NYC Transit – Replacement for MetroCard system

LIRR/MNR – On Board Ticket Issuing Machines

– Mobile Ticketing

– Long Term Strategy Study



NYC Transit – MetroCard Replacement Design Elements / Industry Best Practices

- Standards-based (non-proprietary, avoid “new” engineering costs).
- Account-based (calculations at back-end, secure).
- Open-payments (most versatile, many choices for customers).
- Commercial “Off-the-Shelf” components.
- Multi-vendor integration.
- Supports Payment Convergence strategies (tolling, parking, bike share, etc.)



NYC Transit – MetroCard Replacement

Overview of System Components

- An **integrated, reliable, and convenient** fare payment and collection system.
- Adoptable by **other MTA agencies and transit systems** in the NY region.
- Accept payment media **already in the hands of customers** (like contactless credit/debit cards and smartphones) but **also serving those without**.
- Customers **pay fares by tapping** a contactless bankcard, smartphone, or an MTA-issued smartcard against an electronic reader.
- A **new back-end system** that supports financial functions, payments processing, and other back-office functions.
- Enhance the customer experience with an **on-line customer account management** function and **mobile device application**.



NYC Transit – New Fare Payment System Project Status

Business Requirements Development Process – *Complete*

- Design/Build Project Delivery Approach

Prepare RFP Solicitation “Package” – *Complete*

Industry Outreach – *Ongoing*

- Participation in payments industry collaboration efforts
- Hosted event at MTA with industry stakeholders
- Monitoring similar projects / Peer reviews

Advertise RFP for System Supplier – *On Hold* (Pending Capital Program)



Commuter Railroads

Current Projects

Onboard Ticket Issuing Machines

- Features include acceptance of cash and credit/debit cards, driver's license scanning for customer invoice issuance, instructional manual storage/display and mobile ticket validation.
- MNR completed systemwide deployment in March 2015
- LIRR has equipped eight special duty conductors with devices and will begin rollout to all train crew members 3-4 months after receiving green light to proceed. It is estimated that system-wide deployment would be completed in 19 months.

Mobile Ticketing

- Application being developed by Masabi will enable customers to purchase tickets using mobile devices and allow for inspection onboard.
- Application is expected to be fully developed and tested by the end of 2015.
- MNR intends to initiate a pilot launch in the first quarter of 2016 and complete system-wide rollout by the fourth quarter of 2016.
- LIRR estimates it can begin rollout 19 months after receiving green light to proceed with onboard ticket issuing machine deployment.



Commuter Railroads

Long Term Strategy Study

- The Railroads have engaged Ch2mHill to assist in the development of a long term fare payment strategy, which will serve as the foundation for a future system that is cost effective, customer convenient, operationally efficient, interoperable and revenue protective.
- The study was launched in April 2015 and is on schedule for completion by April 2016.

Documentation of Current Condition

Completed - June 2015

Peer Review

Completed - June 2015

Long-Term Strategy

On Schedule - November 2015

Implementation and Migration Plan

On Schedule - April 2016

Technical Scope of Work (optional)

July 2016



Recommendations Log

Recommendation	Agency Action	Status
May 2014 Address barcode testing in faregate readers in conjunction with the upcoming LIRR/MNR mobile payment programs	NYCT working with Railroad's vendor on structuring a proof of concept test	CLOSED
May 2014 Extend SOGR investments for MetroCard system beyond 2019 as part of the budget program	NYCT identified additional SOGR investments required to keep MetroCard system operational at current levels of performance until 2023	CLOSED



Recommendations Log

Recommendation	Agency Action	Status
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MTA Capital Program Commitments & Completions

through September 30th, 2015

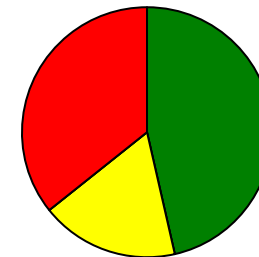
Capital Projects – Major Commitments – September 2015

34 major commitments are planned for 2015, totaling \$3.1 billion. Only projects funded in approved capital plans are included. Projects scheduled for the proposed 2015-19 plan will be added subsequent to plan approval. Through September, 28 major commitments are being reported on. Ten commitments are delayed, five projects had been delayed, but have since been awarded, and 13 commitments were made on time. Additional year-to-date commitments will be reported on as the year progresses.

Through September, agencies have committed \$2.3 billion versus a \$2.6 billion YTD goal. The YTD shortfall is predominantly due to the aforementioned slips. By year-end, the MTA forecasts committing 106% of its \$3.1 billion goal due in part to non-goal commitments from MTACC, NYCT and LIRR.

The MTA continues to track 2014 major commitments that slipped beyond 2014. These are reported quarterly under a separate section.

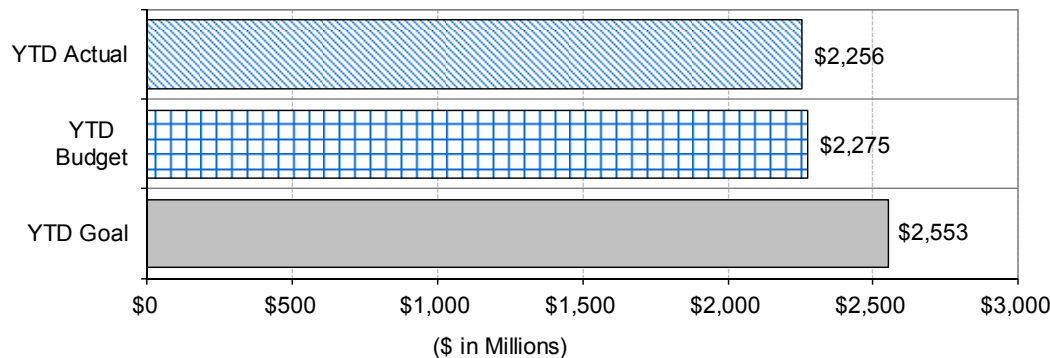
Year-to-Date Major Commitments



	Count	Percent	Change from Prior Month
GREEN = Commitments made/forecast within Goal	13	46%	-
YELLOW = Commitments delayed beyond Goal (already achieved)	5	18%	↑ 1
RED = Commitments delayed beyond Goal (not yet achieved)	10	36%	-
Total	28	100%	↑ 1

Budget Analysis

2015 Annual Goal	\$3,123	(\$ in millions)
2015 Annual Forecast	106%	of Annual Goal
Forecast left to Commit	32%	(\$1,051)



Year-to-Date Agency Breakdown

2015 Goals	Prior month variance		
	GREEN	YELLOW	RED
New York City Transit			
5	3	3	
	----	+1 YELLOW	-1 RED
Long Island Rail Road			
3	2		
	----	----	+1 RED
Metro-North Railroad			
1	1		
	----	----	----
Bridges and Tunnels			
4	4		
	----	----	----
Capital Construction Company			
1			
	----	----	----
MTA Bus Company			
1			
	----	----	----
MTA Police Department			
	----	----	----

Capital Projects – Major Commitments – September 2015 – Schedule Variances

Actual Results Shaded

Project	Commitment	Goal	Forecast
10 All-Agency Red Commitments (1 new this month)			
NYCT			
<i>Signals & Communications</i>			
Integrated Service Information & Management B- Div: Module 1	Construction Award	Jun-15 \$43.2M	Oct-15 \$55.5M
Delays continue due to scope and schedule revisions. Cost increase reflects a longer project duration (from 25 to 37 months) and an unfavorable bid.			
<i>Bus Depots</i>			
Bus Radio System - NYCT	Construction Award	Aug-15 \$215.0M	Nov-15 \$195.1M
Delayed due to protracted evaluation of proposals. Project cost decreased due to refined estimate based on signed drawings and project MOU with MTA Bus Company.			
<i>Sandy Recovery and Resiliency</i>			
Sidewalk Vent Grating- 8 Stations	Construction Award	Jul-15 \$70.4M	Dec-15 \$70.4M
Continuing delays attributable to design revisions, including incorporation of additional locations for mechanical closure devices.			
LIRR			
<i>Sandy Recovery and Resiliency</i>			
Long Beach Substation Replacement	Construction Award	Jun-15 \$18.7M	Nov-15 \$18.7M
\$10.7M of the project was committed in March for in- house work. Commitment of the 3rd party construction (\$8M) has been delayed due to a design change.			
<i>Main Line Corridor Improvements</i>			
MLC - Hicksville Siding (New Item)	Construction Award	Sep-15 \$25.7M	Oct-15 \$25.7M
Delay due to addition of scope to the Hicksville Station Project (an October goal), which will be advanced in conjunction with this project.			

Project	Commitment	Goal	Forecast
B&T			
<i>RFK Bridge</i>			
Construction of New Harlem River Drive Ramp - RFK Bridge	Memorandum of Understanding	Jun-15 \$15.0M	Dec-16 \$15.0M
Delay to 2016 due to additional time required to negotiate and better coordinate with NYC DOT and their contractors.			
<i>Marine Parkway Bridge</i>			
Miscellaneous Steel Repairs & Structural Rehab - Marine Parkway	Construction Award	Jun-15 \$21.8M	Nov-15 \$21.8M
MPX- B was bid as one contract, thus more time was required to prepare procurement documents. Bids have been received.			
Roadway Structures Painting	Construction Award	Jun-15 \$17.0M	Nov-15 \$17.0M
MPX- B was bid as one contract, thus more time was required to prepare procurement documents. Bids have been received.			
Rehab of Programmable Logic Controller & Mechanical System	Construction Award	Jun-15 \$24.3M	Nov-15 \$24.3M
MPX- B was bid as one contract, thus more time was required to prepare procurement documents. Bids have been received.			
MTA Bus			
<i>Bus Projects</i>			
Bus Radio System - MTA Bus	Construction Award	Aug-15 \$58.5M	Nov-15 \$58.5M
Delay due to protracted evaluation of proposals.			

Capital Projects – Major Commitments – September 2015 – Schedule Variances

Actual Results Shaded

Project	Commitment	Goal	Forecast	Project	Commitment	Goal	Forecast
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5 All-Agency Yellow Commitments (1 new this month)

NYCT

Track & Switches

2015 Track & Switch Program (11 Projects) - 1st Qtr	Construction Award	Feb-15 \$180.4M	May-15 (A) \$180.4M
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The overall commitment was delayed due to the re-scheduling of Jerome Line track work until May (\$1M out of \$180.4M goal). All 10 other projects were committed on time.

Signals & Communications

CBTC: Queens Boulevard Phase 1	Construction Award	Apr-15 \$213.6M	Aug-15 (A) \$235.7M
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Delay was due to a protracted procurement period to complete negotiations with prospective bidders. Previously this commitment was reported as having been made in July following a Board action, but procurement activities delayed the final commitment to August. The increased cost was due to an unfavorable bid.

CBTC: Equipment Supplier Interoperability - (New Item)	Construction Award	Apr-15 \$38.4M	Sep-15 (A) \$18.9M
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The award was approved at the July Board meeting and the commitment month was reported as July. However, a delay in procurement activities delayed the notice to proceed until September. The project's cost decreased due to a lower negotiated price.

MNR

Structures

Replace/Repair Undergrade Bridges	Construction Award	Apr-15 \$10.1M	May-15 (A) \$9.9M
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Full award was delayed due to timing of the force account commitment.

MTACC

Cortlandt Station

Cortlandt Station Reconstruction	Construction Award	Mar-15 \$110.0M	Apr-15 (A) \$116.0M
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Delay due to extended negotiations to transfer the contract to the MTA. Cost increase represents executed work orders. Force Account support is not included and will be committed as the year progresses.

Capital Projects – Major Commitments – September 2015 – Budget Only* Variances

Actual Results Shaded

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

Project	Commitment	Goal	Forecast
6 All-Agency Budget Only Commitments (0 new this month)			
NYCT			
<i>Sandy Recovery and Resiliency</i>			
Joralemon Tube - Sandy Restoration	Construction Award	Jul-15 \$57.1M	Jul-15 (A) \$117.1M
Initial cost increase due to scope added to address unforeseen field conditions, resiliency measures, and construction phase costs not initially included in estimates. Subsequent cost increase attributable to unfavorable bids.			
B&T			
<i>Queens Midtown Tunnel</i>			
Tunnel Wall and Ceiling Repairs and Leak Control - QMT	Construction Award	Apr-15 \$62.0M	Apr-15 (A) \$36.8M
Cost decrease reflects a favorable bid as part of the QMT Mega- Contract.			
Restore QMT - Structural	Construction Award	Apr-15 \$100.1M	Apr-15 (A) \$87.6M
Cost decrease reflects a favorable bid as part of the QMT Mega- Contract.			
Restore Control/Comm System, CCTV, Traffic Signals - QMT	Construction Award	Apr-15 \$54.0M	Apr-15 (A) \$90.8M
Cost increase due to refined estimate and high bid for scope of work. The QMT Mega-contract, however, had an overall net decrease due to a favorable bid.			
Environmental Cleanup - QMT	Construction Award	Apr-15 \$24.1M	Apr-15 (A) \$7.5M
Cost decrease reflects a favorable bid as part of the QMT Mega- Contract.			

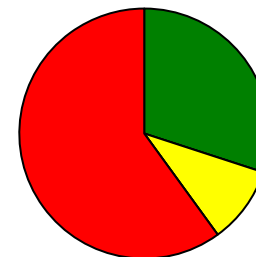
Project	Commitment	Goal	Forecast
MNR			
<i>Sandy Recovery and Resiliency</i>			
Power/C & S Infrastructure Restoration Ph 1	Construction Award	May-15 \$117.4M	May-15 (A) \$141.8M
The original budget was based on a design concept. As the preliminary design progressed, estimates were refined resulting in an increase to the overall project budget.			

Capital Projects – Major Completions – September 2015

25 major completions are planned for 2015, totaling \$2.6 billion. Through September, 20 projects are being tracked. 12 projects are late, two projects were late, but have now been completed, and six projects were completed on time. Additional year-to-date completions will be reported on as the year progresses.

Through September, agencies completed \$1.4 billion versus a \$2.0 billion YTD goal. The YTD shortfall is mostly due to the 12 late completions, most of which are expected to be completed by year-end. By year-end, the MTA forecasts meeting 88% of its \$2.6 billion goal. The projected shortfall is mainly due to the forecast slip of Second Avenue Subway's contract completion for the 63rd Street station (\$225M), now forecast for 2016.

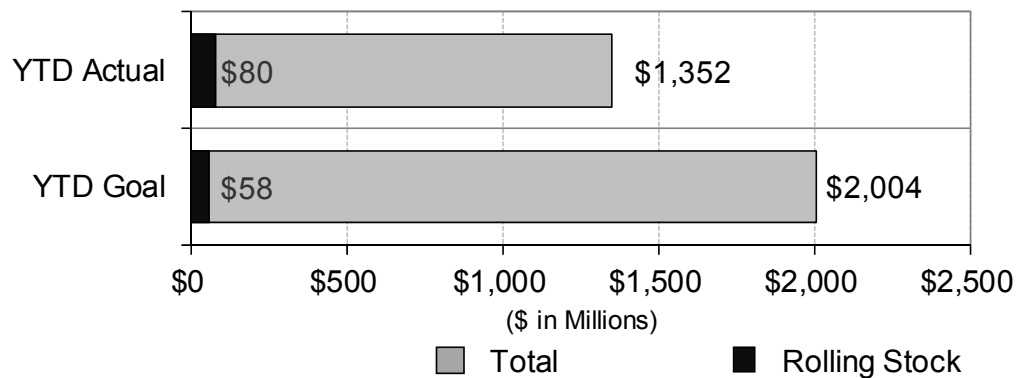
Year-to-Date Major Completions



	Count	Percent	Change from Prior Month
GREEN = Completions made/forecast within Goal	6	30%	-
YELLOW = Completions delayed beyond Goal (already achieved)	2	10%	-
RED = Completions delayed beyond Goal (not yet achieved)	12	60%	-
	20	100%	-

Budget Analysis

2015 Annual Goal	\$2,550	(\$ in millions)
2015 Annual Forecast	88%	of Annual Goal
Forecast left to Complete	40%	(\$900)



Year-to-Date Agency Breakdown

2015 Goals	Prior month variance		
	GREEN	YELLOW	RED
New York City Transit	3	1	5
Long Island Rail Road	2	2	
Metro-North Railroad	1	2	
Bridges and Tunnels	1	2	
Capital Construction Company	1		
MTA Bus Company			
MTA Police Department			

Capital Projects – Major Completions – September 2015 – Schedule Variances

Actual Results Shaded

Project	Completion	Goal	Forecast
12 All-Agency Red Completions (0 new this month)			
NYCT			
<i>Buses & Depots</i>			
Bus Time Customer Information System	Construction	Apr-15 \$48.8M	Dec-15 \$47.5M
Delay due to extension to allow for training of in-house forces. Cost decrease reflects refined estimate.			
<i>Track & Switches</i>			
2015 Track & Switch Program (13 Projects) - 2nd Qtr	Construction	Jun-15 \$149.6M	Dec-15 \$164.3M
Delay due to availability of general orders for work on the Lexington, White Plains Road and Brighton Lines, also contributing to higher costs for completion.			
<i>Security</i>			
Electronic Security - Under River Tunnel Ph 2	Construction	May-15 \$31.0M	Dec-15 \$27.9M
Initial delay due to contractor staffing constraints, incomplete power work and delayed site acceptance test procedures. Additional delay attributed to flagging support issues in 60th St. and Montague Tunnels.			
<i>Signals & Communications</i>			
CBTC Test Track Pilot - Culver Line	Construction	Jul-15 \$97.5M	Dec-15 \$97.6M
Continued delay due to interoperability testing and pending software delivery.			
Duct Rehabilitation and Negative Cable - Steinway/Flushing	Construction	Jul-15 \$49.7M	Mar-16 \$51.7M
Delay due to limited availability of general orders in the Steinway Tube. Increased cost reflects the extended project duration.			

Project	Completion	Goal	Forecast
LIRR			
<i>Power</i>			
Replace Hillside & Kew Gardens Substations	Construction	Jun-15 \$25.5M	Oct-15 \$25.5M
Delay due to scheduling conflicts between Con Ed and LIRR.			
<i>Signals & Communications</i>			
Centralized Train Control	Construction	Jun-15 \$12.9M	Jan-16 \$12.9M
Theater Operations were re-evaluated, resulting in the need to re-design the rail control theater and has, subsequently, delayed substantial completion.			
MNR			
<i>Stations</i>			
North White Plains Parking Garage	Construction	Jun-15 \$41.8M	Oct-15 \$41.8M
Delay due to subcontractor performance issues.			
<i>Power</i>			
Harlem River Lift Bridge Cable/Breaker House /Controls	Construction	Aug-15 \$25.4M	Dec-15 \$25.4M
Due to elevator subcontractor performance issues, the project completion date is now forecasted for December 2015.			
MTACC			
<i>East Side Access</i>			
55th Street Vent Plant (CM013A)	Construction	Apr-15 \$58.9M	Dec-15 \$58.9M
Delayed due to extreme cold temperatures, which hindered the productivity of shotcrete activities. Additional 5 month delay due to change in design of hoist system due to unknown site condition.			

Capital Projects – Major Completions – September 2015 – Schedule Variances

Actual Results Shaded

Project	Completion	Goal	Forecast
12 All-Agency Red Completions (0 new this month) (cont'd)			
B&T			
<i>Marine Parkway Bridge</i>			
Substructure & Underwater Scour Protection	Construction	Jul-15 \$26.5M	Oct-15 \$26.5M
Delay due to unforeseen field conditions.			
<i>Bronx Whitestone Bridge</i>			
Necklace Lighting	Construction	Jul-15 \$12.5M	Nov-15 \$12.5M
Delay due to severe winter weather conditions in addition to facility coordination and access issues.			

Project	Completion	Goal	Forecast
2 All-Agency Yellow Completions (0 new this month)			
NYCT			
<i>Sandy Recovery and Resiliency</i>			
Greenpoint Tube Equipment Restoration	Construction	Apr-15 \$37.7M	Aug-15 (A) \$37.7M
Initial delay was due to modification of fan plant remote control system. Additional three month delay due to issues with one of the pumps.			
MNR			
<i>Rolling Stock</i>			
M-8 23 Cars Acceptance	Procurement	May-15 \$26.7M	Jun-15 (A) \$26.7M
Seventeen cars were accepted on-time. Remaining six were delayed to June 2015 due to additional car inspections.			

Capital Projects – Major Completions – September 2015 – Budget* Variances

Actual Results Shaded

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

Project	Completion	Goal	Forecast
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1 All-Agency Budget Only Completions (0 new this month)

NYCT

Sandy Recovery and Resiliency

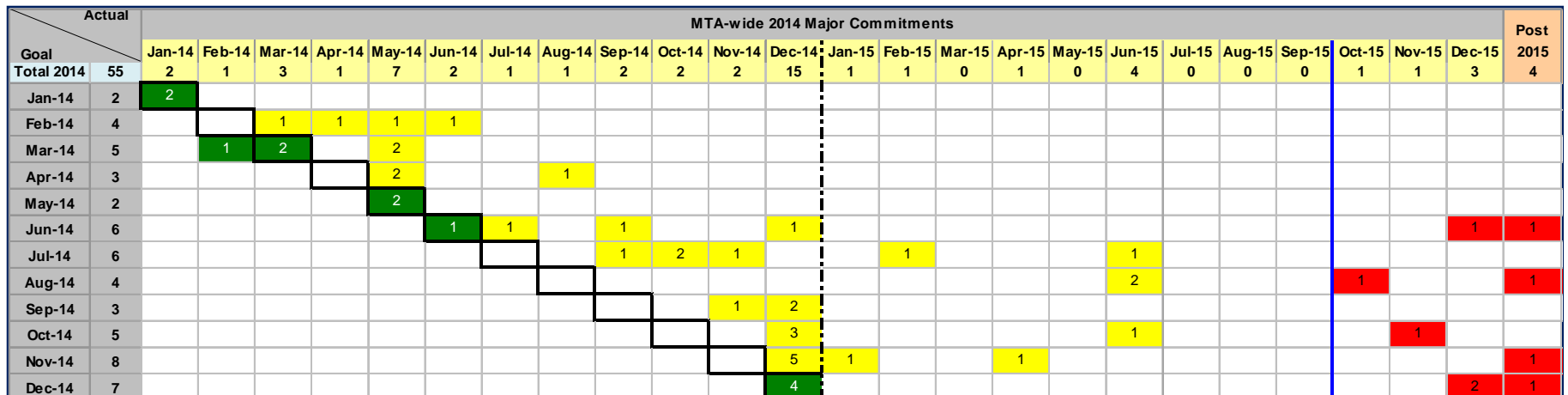
Repairs at Montague Tube	Construction	Mar-15 \$220.9M	Mar-15 (A) \$205.8M
Decrease in forecasted cost due to early completion of contract. Savings realized as part of closeout process.			

MTA Capital Program Commitments & Completions Quarterly Report of 2014 Delays

Major goals delayed beyond 2014 continue to be tracked until committed. The status of these projects are reported on a quarterly basis. All variances are discussed on the following pages.

Through September, seven of the 16 projects have been committed. The remaining nine commitments have a combined value of over \$800 million. All but one of these will have been committed by the end of 2016. The exception is the Rutgers Tube restoration project which has been rescheduled by NYCT to 2022.

Forecast	\$7,367
2014 Goal	\$6,545 (\$ in millions)
Left to Commit	11% (\$816)



GREEN = Commitments made/forecast within Goal

YELLOW = Commitments delayed beyond Goal (already achieved)

RED = Commitments delayed beyond Goal (not yet achieved)

Prior Year Major Commitments – September 2015 – Schedule Variances

Actual Results Shaded

Project	Commitment	Goal	Forecast
9 All-Agency Red Commitments			
NYCT			
Stations			
ADA: Phase 2; 57th Street/7th Ave	Construction Award	Nov-14 \$35.9M	Dec-16 \$66.8M
Additional delay reflects unforeseen field conditions that needed to be incorporated and, consequently, extended design. Cost increase reflects changes to duct and elevator scope.			
Station Components: 4 Stations (Jamaica)	Construction Award	Dec-14 \$37.8M	Dec-15 \$64.2M
This project originally included 6 stations, but was reduced to 4 during design. The cost increase and initial delay are attributed to scope added to the project to address significant infrastructure issues such as platform slabs, windscreens and girder repairs. Additional delay and cost increase are due to new scope for painting.			
Facilities			
HVAC Repair and Maint. for DCE Facilities Phase 2	Construction Award	Dec-14 \$53.6M	Dec-15 \$53.6M
Based on a review, the project scope may increase to include a new centralized HVAC SMS facility at the 207th Street location. Due to the delay in completing the specifications for the overhead crane at 207th Street, Construction Start will need to be rescheduled to December 2015.			
Bus Replacement			
Purchase 231 Articulated Buses	Purchase Award	Jun-14 \$245.5M	Dec-15 \$202.0M
The number of Articulated buses was reduced from 256 to 231 in order to fund the purchase of 72 standard buses. Delay was due to extended negotiations with vendors and an allowance for possible State review prior to award. Cost decrease reflects the reduced number of buses.			
Sandy Restoration			
Rutgers and Cranberry Tubes	Construction Award	Jun-14 \$154.0M	Feb-22 \$165.0M
The Rutgers tube commitment has now been rescheduled to 2022 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 slipped to December, 2014. Project cost was adjusted to reflect estimates of separated contracts.			

Project	Commitment	Goal	Forecast
Sandy Restoration			
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.			
Power Infrastructure Restoration: 4 Substations	Construction Award	Oct-14 \$48.5M	Nov-15 \$49.2M
Delay due to prioritization of design work on Harlem River Lift Bridge facility houses over design of substations. At this time, \$3.3M is left to commit. Additional delay due to extended negotiation with NYSEG regarding remaining scope of work. Cost increase represents a redesign of Brewster substation to incorporate post- Sandy resiliency standards.			
MTA Bus			
Sandy Restoration			
Depot Rehabilitation at Far Rockaway	Construction Award	Dec-14 \$25.0M	Mar-16 \$15.0M
Delay due to additional time needed for compilation of technical design specifications. Additional one month delay due to pending environmental and code compliance reviews. Reduction in budget reflects a revision in the scope of work for the bus washer relocation.			
MTACC			
East Side Access			
Harold Structures Part 3D (CH057)	Construction Award	Aug-14 \$106.5M	Oct-15 \$122.5M
Award previously delayed due to adjustments to the overall Harold schedule and the completion of the predecessor work and resource availability in Harold. Current delay due to pending investigation of potential adverse information. Budget adjustment reflects repackaging of Harold work.			

Prior Year Major Commitments – September 2015 – Schedule Variances

Actual Results Shaded

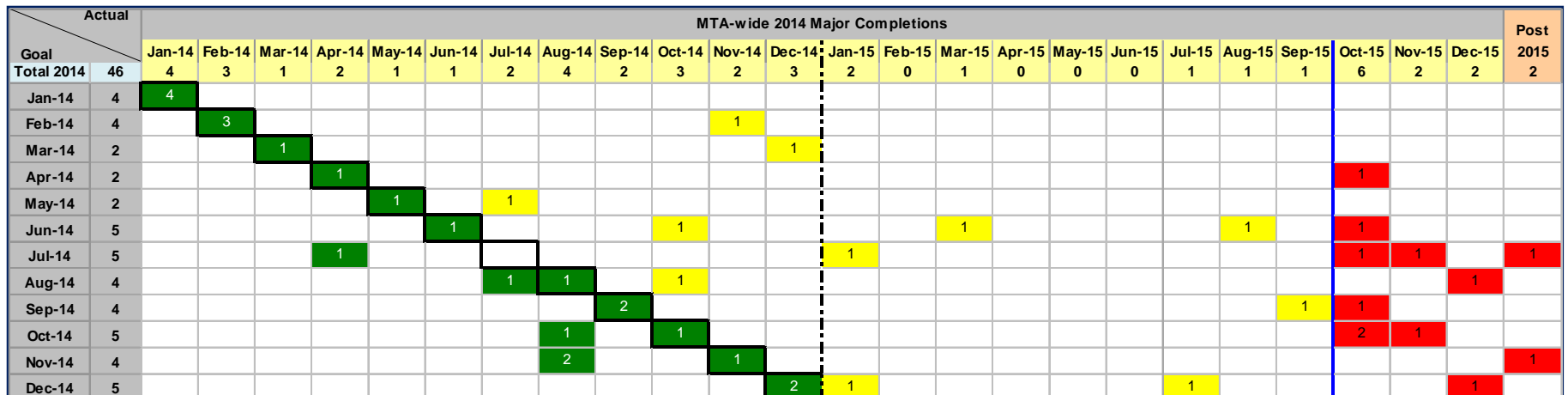
Project	Commitment	Goal	Forecast
7 All-Agency Yellow Commitments (0 new this quarter)			
NYCT			
Stations			
Sea Beach Line: 3 Stations and Retaining Walls	Construction Award	Nov-14 \$124.3M	Jan-15 (A) \$111.8M
Delay was due to extended advertisement in order to increase competition. Additional one month delay was attributed to approval of DBE goals. Cost decrease reflects budget at award.			
Depots			
Bus Command Center	Construction Award	Aug-14 \$50.9M	Jun-15 (A) \$51.4M
Initial delay was due to additional scope added to the contract, which required additional drawings and specifications. Delay beyond year-end due to additional scope addressing comments on structural and foundation design. Final recent delay was due to disqualification of low bidder. Cost reflects Memorandum of Understanding with MTA Bus and selected bid.			
Sandy Restoration			
53rd St. Tube	Construction Award	Nov-14 \$77.6M	Apr-15 (A) \$92.6M
Award schedule had slipped due to protracted advertisement and procurement period. Cost increased reflecting a refined engineer's estimate at time of advertisement.			
MNR			
Track			
2014 Cyclical Track Program	Construction Award	Oct-14 \$12.7M	Jun-15 (A) \$12.8M
Due to other competing priorities, including the Bronx Remediation Project, work was delayed. \$1.2M was committed in December 2014 for purchase of materials, and \$11.6M is left to commit in 2015.			

Project	Commitment	Goal	Forecast
MTA Bus			
Depots			
Bus Command Center	Construction Award	Aug-14 \$8.7M	Jun-15 (A) \$17.1M
The project award was delayed due to additional scope added to the contract, such as ADA compliance and electrical work, which require additional drawings and specifications. Final delay was due to disqualification of low bidder. Cost reflects Memorandum of Understanding with NYCT and selected bid.			
MTACC			
East Side Access			
GCT Concourse & Cavern Finishes (CM014B)	Construction Award	Jul-14 \$195.5M	Feb-15 (A) \$427.7M
There was an additional two-month slip from December to February due to extended procurement process. The initial delay was due to a change in the procurement methodology to an RFP process. Forecast value increased due to the decision to include option in base contract and impact of an unfavorable bid.			
MTA Police Department			
PD Communications			
MTA Police Radio Project	Design-Build Award	Jul-14 \$90.3M	Jun-15 (A) \$71.1M
Initial delay was due to late start of procurement process. Additional delays were attributable to the pace of the procurement process. Cost decrease reflects good bid savings and is inclusive of base award plus support costs.			

Major goals delayed beyond year-end continue to be tracked until substantially complete. The status of these projects are reported on a quarterly basis. Variances are discussed on the following pages.

Six projects were completed in the first three quarters of 2015.

Forecast	\$6,007	
2014 Annual Goal	\$5,722	(\$ in millions)
Left to Complete	20%	(\$1,199)



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

YELLOW = Completions delayed beyond Goal (already achieved)

Prior Year Major Completions – September 2015 – Schedule Variances

Actual Results Shaded

Project	Completion	Goal	Forecast
12 All-Agency Red Completions			
NYCT			
<i>Track</i>			
Track & Switch Program (4 projects) 3rd Quarter	Construction	Sep-14 \$33.7M	Oct-15 \$36.5M
Completion of work on the Jerome Line has been postponed due to track access and availability of General Orders. These issues have increased project cost.			
<i>Stations</i>			
Station Rehab: Smith-9th St & 4th Ave	Construction	Jul-14 \$40.7M	Nov-15 \$44.2M
Due to work coordination issues, completion of rehab work was completed in 2014, excluding manuals, as-built drawings and other deliverables. Additional delays due to pending submission of deliverables by Surety in addition to pending commencement of repair work on drain lines and water service. Cost increase reflects extended project duration.			
<i>Line Structures</i>			
Culver Viaduct Rehab Ph 3	Construction	Oct-14 \$49.8M	Nov-15 \$63.0M
Delay attributed to a number of factors including additional steel and concrete needed due to unforeseen site conditions. Cost increase reflects additional quantities and additional scaffolding necessary to protect the public from work through project duration.			
<i>Buses</i>			
AVLM: Paratransit Vehicles	Procurement	Dec-14 \$35.8M	Dec-15 \$37.0M
Delay and cost increase due to pre-wiring of an additional 433 vehicles.			
LIRR			
<i>Power</i>			
F Circuit Breaker House	Construction	Oct-14 \$7.2M	Oct-15 \$7.2M
Delay due to a re-evaluation of the project's need to be informed by a power load study.			
<i>Line Structures</i>			
Atlantic Avenue Tunnel Lighting	Construction	Nov-14 \$7.0M	Mar-16 \$7.0M
Delayed due to an unforeseen issue in tunnel ducts that requires additional abatement efforts.			

Project	Completion	Goal	Forecast
MNR			
<i>Track</i>			
West of Hudson Track Program	Construction	Jul-14 \$21.2M	Jan-16 \$17.7M
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.			
MTACC			
<i>East Side Access</i>			
GCT Concourse Finishes Early Work, CM014A	Construction	Apr-14 \$56.7M	Oct-15 \$58.0M
Delay due to the need to re-design the Supervisory Control and Data Acquisition (SCADA) system and delays in delivery of medium voltage switchgear. Additional delay due to mitigation work for leak in facility control room that recently developed.			
Harold Structures Part 2A (CH054A)	Construction	Jun-14 \$80.0M	Oct-15 \$61.1M
Initial delay due to re-design of the 12 kV feeder duct bank and change order work for storm sewer construction. Continued delays attributed to completion of relay transmission unit. Budget reduced to reflect final approval of outstanding change orders.			
Harold Structures - Part 1 (CH053)	Construction	Aug-14 \$326.1M	Dec-15 \$311.5M
Delays resulting from the cutover of the new duct bank and resource issues have continued to delay substantial completion of contract. Cost decreased due to change order.			
<i>#7 Extension</i>			
Systems, Finishes, and Core & Shell of Site A (Vent Building)	Construction	Oct-14 \$580.1M	Oct-15 \$594.3M
Contract completion was delayed due to testing and commissioning of vent fans, inclined elevators and escalators. Punchlist items, while not required for opening, are ongoing. Revenue service was achieved in September. The cost increase reflects negotiated settlement agreement with contractor.			
MTAPD			
K-9 Training Facility	Construction	Jul-14 \$15.0M	Oct-15 \$15.5M
Delay due to unforeseen field conditions at the construction site, which also increased the forecast value.			

Prior Year Major Completions – September 2015 – Schedule Variances

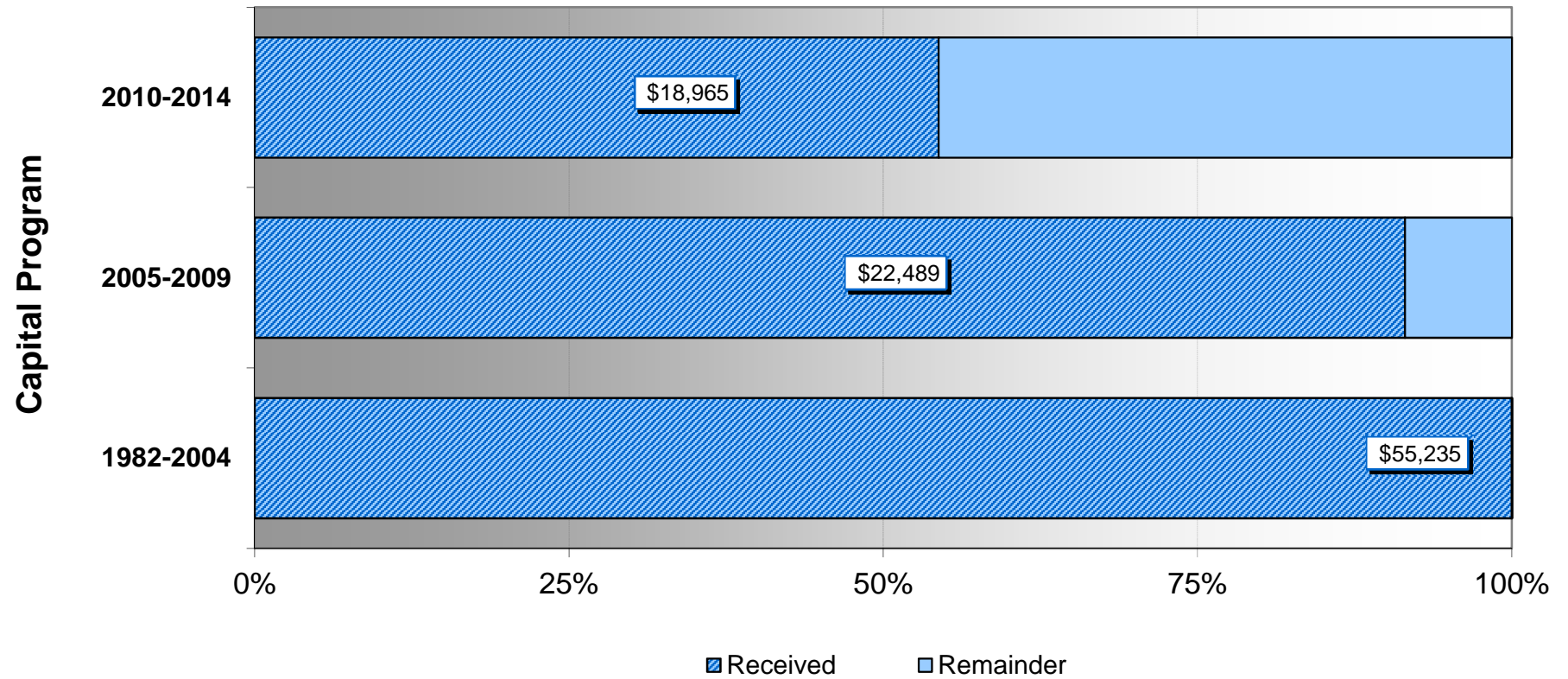
Actual Results Shaded

Project	Completion	Goal	Forecast
6 All-Agency Yellow Completions (3 new this quarter)			
NYCT			
<i>Track & Switches</i>			
Track & Switch Program (19 Projects) - 2nd QTR	Construction	Jun-14 \$193.3M	Mar-15 (A) \$189.1M
2nd Quarter completions had been 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 resulted in delays. The value of the projects delayed beyond 2014 was \$24M of the \$193M goal. \$4M in savings comes mostly from savings in the 2013 Jamaica switches project.			
Track & Switch Program (6 projects) 4th Quarter (New Item)	Construction	Dec-14 \$33.3M	Jul-15 (A) \$33.3M
With the exception of Yard Track and Switch, representing \$3M of the total project cost, the balance of work was completed in 2014. Additional delay due to severe winter weather, which affected work in the Car Wash facilities.			
MNR			
<i>Revenue Cars</i>			
Acceptance of M8 Cars	Procurement	Dec-14 \$77.4M	Jan-15 (A) \$77.4M
Eighty-six of the eighty-eight were accepted in 2014 (\$75.7M). The remaining two cars were accepted in January 2015 (\$1.8M).			
MTA Bus Company			
<i>Depots</i>			
Upgrade Parking Lot: JFK and Baisley Park	Construction	Jul-14 \$9.2M	Jan-15 (A) \$9.2M
Delay was due to requirement from Department of Environmental Protection to reconfigure the connection to the sewer main.			
Relocate Fuel Tanks Eastchester Depot (New Item)	Construction	Sep-14 \$12.9M	Sep-15 (A) \$13.8M
Delay and cost increase attributed to additional scope, inclusive of demolition of bus washer due to unforeseen issue with depot wall. Additional delays due to contractor staffing issues and inclement weather.			

Project	Completion	Goal	Forecast
MTACC			
<i>Fulton Center</i>			
Transit Center Building (4F)	Construction	Jun-14 \$241.7M	Aug-15 (A) \$256.3M
Substantial completion of this contract was delayed due to extended testing and commissioning and subsequent punchlist items. Additional delay and cost increase were due to security camera work added to contract.			

Status of MTA Capital Program Funding

Capital Funding (September 30, 2015)
\$ in millions



Capital Funding Detail (September 30, 2015)

\$ in millions

2005-2009 Program

	Funding Plan	Receipts		
	<u>Current</u>	<u>Thru August</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	2,018	-	2,018
Federal Security	323	262	-	262
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	2,162	6	2,169
MTA Bus Federal and City Match	149	142	-	142
Asset Sales and Program Income	1,186	565	-	565
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	126	(0)	126
Total	24,576	22,483	6	22,489

2010-2014 Program

	Funding Plan	Receipts		
	<u>Current</u>	<u>Thru August</u>	<u>This month</u>	<u>Received to date</u>
Federal Formula, Flexible, Misc	\$5,835	\$5,481	\$ -	\$5,481
Federal High Speed Rail	295	295	-	295
Federal Security	206	100	-	100
Federal RIFF Loan	-	-	-	-
City Capital Funds	778	378	-	378
State Assistance	770	150	-	150
MTA Bus Federal and City Match	132	68	-	68
MTA Bonds (Payroll Mobility Tax)	12,703	6,645	1,091	7,735
Other (Including Operating to Capital)	1,529	585	-	585
B&T Bonds	2,079	835	-	835
Hurricane Sandy Recovery				
Insurance Proceeds/Federal Reimbursement	9,431	3,101	76	3,177
PAYGO	160	160	-	160
Sandy Recovery MTA Bonds	758	-	-	-
Sandy Recovery B&T Bonds	175	-	-	-
Total	34,851	17,798	1,167	18,965