



Metropolitan Transportation Authority

Capital Program Oversight Committee Meeting

January 2016

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, 1/25/2016

1:45 - 2:45 PM ET

1. PUBLIC COMMENTS PERIOD

2. APPROVAL OF MINUTES DECEMBER 14, 2015

- *Minutes from December '15 - Page 3*

3. COMMITTEE WORK PLAN

- *2016 - 2017 CPOC Work Plan - Page 6*

4. NYCT STATIONS DIVISION UPDATE

- *Progress Review on Stations Renewal - Page 8*

- *IEC Project Review on NYCT Sea Beach Station Renewal - Page 49*

5. NYCT SUBWAY CAR PROGRAM UPDATE

- *Project Review on Subway Cars - Page 53*

- *IEC Project Review on NYCT Subway Cars - Page 64*

6. NYCT BUS PROCUREMENT UPDATE

- *Project Review on New Bus Procurement - Page 68*

7. MTACC SECOND AVENUE SUBWAY MONTHLY UPDATE

- *Second Avenue Subway Monthly Update - Page 82*

- *IEC Second Avenue Subway Status Review - Page 85*

8. UPDATE ON MINORITY, WOMEN AND DISADVANTAGED BUSINESS PARTICIPATION

- *MWDBE Participation to CPOC January - December 2015 - Federal - Page 88*

- *MWDBE Participation to CPOC January - December 2015 - State - Page 89*

9. CAPITAL PROGRAM STATUS

- *Commitments, Completions, and Funding Report - Page 90*

10. EAST SIDE ACCESS CONTRACT CM007 RISK ASSESSMENT SUMMARY (for information only)

- *CM007 Risk Assessment Summary - Page 109*

Date of next meeting: Monday, February 22, 2016 at 1:15 PM

**MINUTES OF MEETING
MTA CAPITAL PROGRAM OVERSIGHT COMMITTEE
December 14, 2015
New York, New York
1:45 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. Carl Wortendyke
Hon. Neal Zuckerman

MTA CPOC members not present:

Hon. Alan Cappelli
Hon. James Sedore
Hon. Vincent Tessitore

MTA Board members present:

Hon. Andrew Albert
Hon. Polly Trottenberg

MTA Staff Present:

Craig Stewart
Michael Wetherell

MTACC staff present:

Uday Durg
Bill Goodrich
Michael Horodniceanu
Anil Parikh

Independent Engineering Consultant staff present:

Patrick Askew
Joe DeVito
Gerry Gardvits
Kent Haggas
Philip Stummvoll

* * *

Chairman Prendergast called the December 14, 2015 meeting of the Capital Program Oversight Committee to order at 1:55 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 November 16, 2015.

Committee Work Plan

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

MTACC Report on Second Avenue Subway

Mr. Parikh reported that the project is working with contractors to accelerate critical work activities to ensure that the project will meet the December 2016 Revenue Service Date; in addition, he stated that the project is on budget. In its Project Review, the IEC agreed that the project is on budget, but with respect to schedule, the IEC reported that the following key activities are currently behind schedule: provision of permanent power to 86th Street Station; construction of station entrances and track installation at 72nd Street Station; and installation of communications and traction power equipment. The IEC advised the Project Team to expedite their effort to develop an Integrated Project Schedule in time to fully address the impacts of current delays. The IEC then stated that monthly construction expenditures will need to increase from the current average of \$37 million to \$42 million to support the December 2016 Revenue Service Date. Committee members then requested that MTACC provide monthly updates on the Project, to which Michael Horodniceanu agreed. 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 concerns that on Manhattan North Structures (CM006) the contractor has fallen behind the recovery schedule, and that according to the IEC, Milestone #2, which will provide access for the follow-on contract, will reach completion no earlier than June 2016. With respect to Facilities Systems Package (CS179), the IEC expressed the following concerns: the resource-loaded contractor baseline schedule has not been incorporated into the Integrated Project Schedule (IPS); interim design milestones are not being met; and there are a number of issues with the contractor's schedule, which the IEC has identified. The IEC then recommended that the project revise the IPS to include recently accepted resource-loaded contractor schedules for CS179 and CM014B. 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 and that the project budget remains \$158 million, excluding risk reserve. In its Project Review, the IEC concurred with the budget figure cited by the agency. The IEC then cited its concern that the current budgeted contingency of \$5.2 million is not an adequate amount to support the construction budget of \$101 million, with the project's current risk profile. The IEC also stated that logistical challenges and complexities of the site could pose additional cost and schedule risks. 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. He then stated that agencies committed a total of \$2.5 billion through November, versus a \$2.9 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 \$1.6 billion through November, versus a \$2.1 billion year-to-date goal.

Quarterly Traffic Light Report

Mr. Stewart brought the Committee's attention to the Traffic Light Reports for the 3rd 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 3rd Quarter 2015 and invited Committee Members' questions, of which there was none.

Adjournment

Upon motion duly made and seconded, Chairman Prendergast adjourned the December 14, 2015 meeting of the MTA Capital Program Oversight Committee at 2:55 PM.

Respectfully submitted,
Michael Jew-Geralds
Office of Construction Oversight



2016-2017 CPOC Committee Work Plan

I. Recurring Agenda Items

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

II. Specific Agenda Items

February 2016

B&T Capital Program Update

- RFK Bridge
- Verrazano-Narrows Bridge

LIRR and MNR Update on Positive Train Control (PTC)
MTA Enterprise Asset Management (EAM)

March 2016

Quarterly MTACC Capital Program Update

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

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

June 2016

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

July 2016

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

September 2016

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

October 2016

LIRR and MNR Capital Programs Update
LIRR and MNR Update on Positive Train Control (PTC)

November 2016

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

December 2016

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

January 2017

NYCT Capital Program Update

- Stations Program Update
- Subway Car Program Update
- Bus Procurement Update

Update on Minority, Women and Disadvantaged Business Participation

Stations Division

Capital Program Oversight Committee

Dilip Kumar Patel, P.E.
Program Officer

January 2016



Presentation Includes:

- ***Progress of 2010-14 Stations Capital Program from previous report***
- ***Overall progress by category & summary***
- ***Photos of recently completed projects***
- ***Overview of Sea Beach Line Renewal Project***
- ***Preview of 2015-19 Capital Plan for Stations***



2010-14 Capital Program (Stations)

Category	# of Stations	Budget (\$ M)
I. Component	130	\$ 735
Originally Planned 2010-14	126	
Advanced from 2015-19	10	
Moved to 2015-19 plan	(6)	
II. Renewal	38	\$ 839
III. ADA Accessibility	9	\$ 286
IV. Elevator/Escalator Replacement	13	\$ 84
Total Stations	190	\$1,944



Progress Since Our Last Report

➤ *Awarded Work at 32 Stations*

- **Component work:** **14 Stations**
- **Renewals:** **15 Stations**
Sea Beach (9) **N** & New Lots (6) **3**
- **Elevator / Escalators:** **3 Stations**
125 St, 51 St, Brooklyn Bridge **6**



Progress Since Our Last Report

Completed Construction work at 13 Stations

Component

4 Stations

- 49 Street-Broadway **N Q R**
- Van Cortlandt Park 242 Street-Bway-7th Ave **1**
- Pelham Bay Park-Pelham **6**
- S/B 103 Street -Lexington **6**

Renewal Projects

6 Stations

- 2 Stations Pelham Line **6**
- (Buhre Ave & Zerega Ave)
- 3 Stations Liberty Line **A**
- (88 St, 104 St, Rockaway Blvd)
- Ditmas Avenue Culver Line **F**

Elevator / Escalator Work

3 Stations

- 2 Escalators Roosevelt Ave/QBL **E F M R**
- Street Elevator at 34 St-Herald Sq **B D F**
- Street Elevator at Lexington Ave/63 St **F**









Progress Since Our Last Report




➤ *Small Business Development Program*

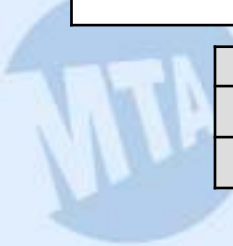
- *Majority of projects consist of refurbishing stairs and installation of Help Points*
 - *Last year, awarded work to refurbish 29 stairs and 28 Help Points*
- *Since inception in 2010:*
 - *Refurbished 72 stairs at 24 locations and installed 94 Help Points at 23 locations*
 - *Every year goals have been achieved*
























I. Overall Progress - Component Projects (130 Stations)

Line	Stations	Status (As of 12/2015)				MTA 3rd Quarter Traffic Light Report Overall Status	
		Design		Construction		Cost	Schedule
		In Design	To Be Awarded	In Construction	Complete		
Various	128	5	22	37	64	 Green	 Green
Bwy-7th	1	0	0	1	0	 Green	 Red
Pelham	1	0	0	0	1	 Red	 Green
Total	130	5	22	38	65		

	Red	Significant impacts that have led to an increase in Project Cost or Overall Project Duration
	Yellow	Previous impacts that have led to Project Cost increases or Schedule delays.
	Green	No Current Impact for Design & Construction. Successful management of major activities



















II. Overall Progress - Renewal Projects (38 Stations)

Line	Stations	Status % Complete (12/2015)		MTA 3rd Quarter Traffic Light Report Status	
		Design	Const	Cost	Schedule
	Hunters Pt. Ave Flushing Line (1)	Complete	Complete	 Green	 Green
	Myrtle Ave Line (5)	Complete	Complete	 Green	 Green
	Pelham Line (4)	Complete	Complete	 Green	 Green
	Liberty Ave Line (6)	Complete	74%	 Green	 Green
	Culver Line (7)	Complete	17%	 Green	 Green
	Sea Beach Line (9)	Complete	7%	 Green	 Green
	New Lots Line (6)	Complete	15%	 Red	 Green











III. Overall Progress – Key ADA Accessibility (9 Stations)

Line	Station	Status % Comp (12/2015)		MTA 3 rd Quarter Traffic Light Report Status	
		Design	Const	Cost	Schedule
1	Dyckman St - Broadway (S/B)	Complete	Complete	 Green	 Green
E F M R	Forest Hills - 71 st Ave - QBL	Complete	Complete	 Green	 Green
A C	Utica Ave - Fulton	Complete	Complete	 Green	 Green
6	Hunts Pt. Ave - Pelham	Complete	Complete	 Green	 Green
B D	Kingsbridge Rd - Concourse	Complete	Complete	 Green	 Green
6	23 St - Lexington	Complete	69%	 Red	 Green
A	Ozone Park Lefferts Blvd- Liberty	Complete	52%	 Green	 Green
N Q R	57 St - 7 th Av - Broadway	85%		TBD	TBD
6	68 St Hunter College - Lex	80%		 Green	 Red



IV. Overall Progress - Elevator/Escalator Replacement Projects (13 Stations)

Stations	Status % Complete (12/2015)		MTA 3 rd Quarter Traffic Light Report Status	
	Design	Const	Cost	Schedule
Replace 3 Escalators – Southern Manhattan (3)	Complete	Complete	 Green	 Green
Replace 2 Escalators – Jackson Hts Roosevelt Ave (1)	Complete	Complete	 Green	 Green
Replace 11 Hydraulic Elevators (6)	Complete	42%	 Green	 Green
Replace 7 Hydraulic Elevators (3)	Complete	11%	 Green	 Green

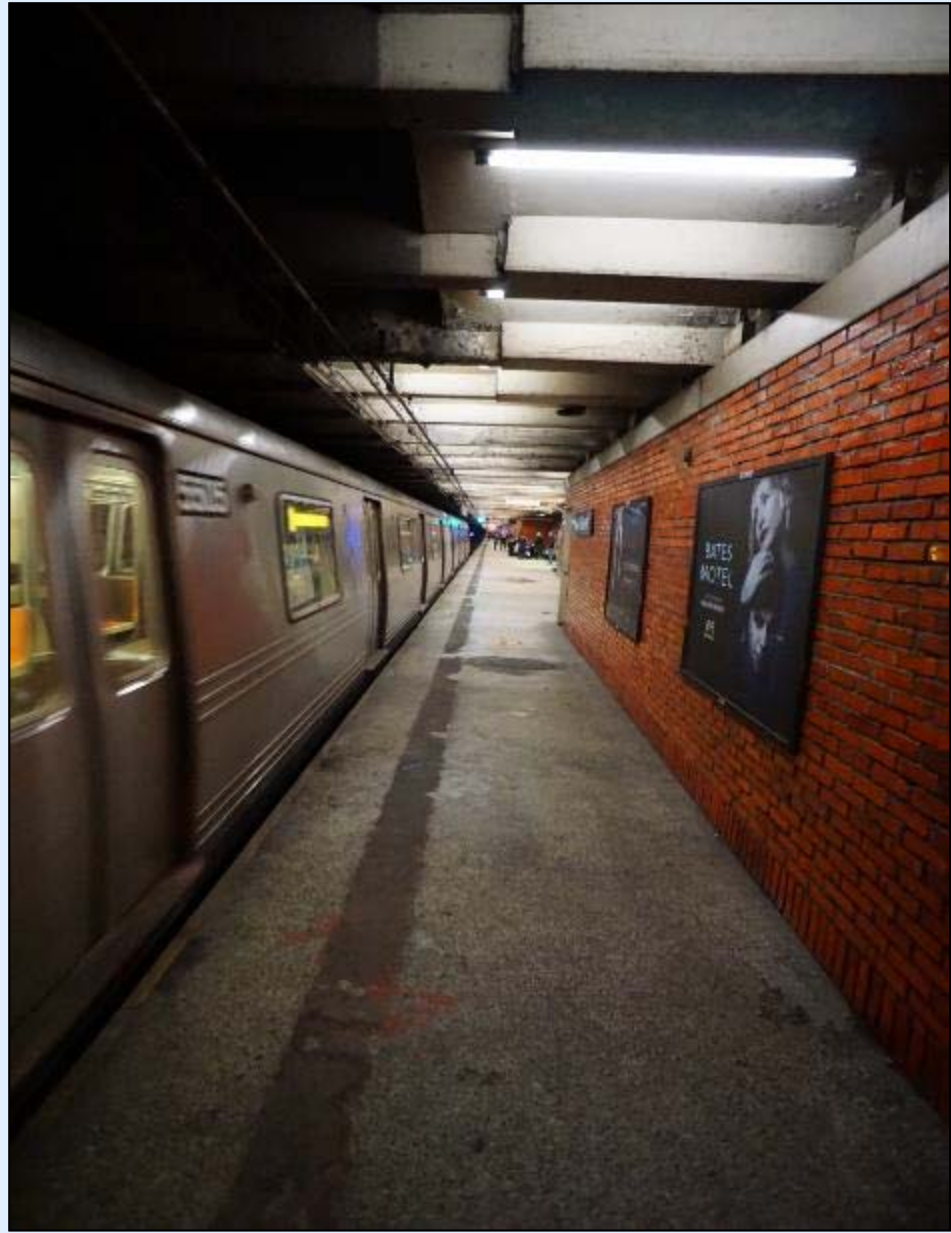


Overall Award Progress of 2010-14 Capital Program (Plan v. Actual) # of Stations

Category	Plan	Actual	Percentage
I. Component	130	103	80%
II. Renewal	38	38	100%
III. ADA Accessibility	9	7	78%
IV. Elevator/Escalator Replacement	13	13	100%
Total	190	161	85%



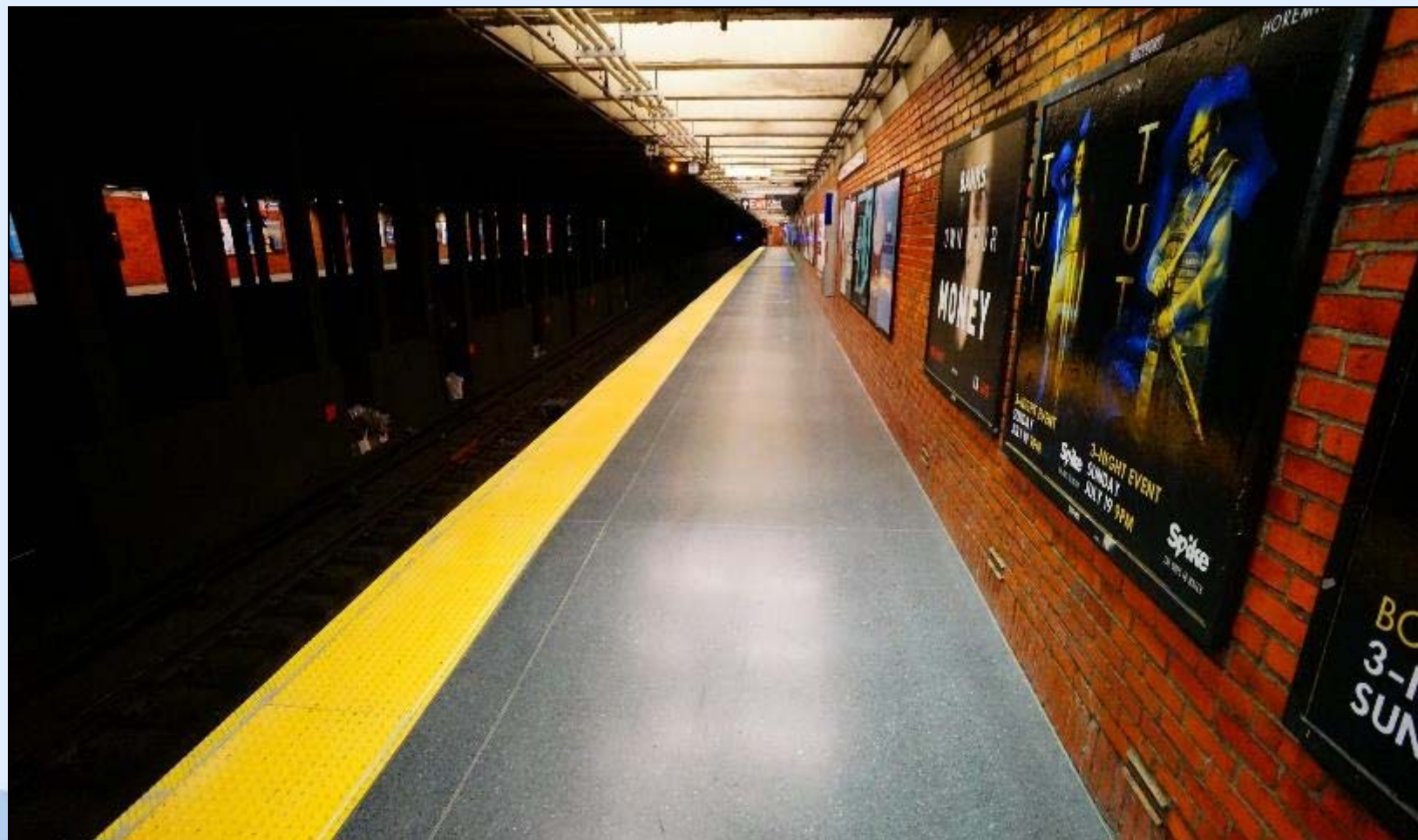
Component Work at 49 Street Station - Broadway **N** **Q** **R**



**Northbound
Platform
Before**



Component Work at **N Q R** 49 St Station- Broadway



Northbound Platform After



Component Work at Van Cortlandt Park-242 Street - Bwy-7th Ave 1 Southbound Platform

Before



After



Renewal Zerega Avenue – Pelham Line Northbound Platform

6



Before



After



Renewal Zerega Avenue Northbound Platform – Pelham Line 6



Southbound 111 Street Platform - Liberty Line A



Before



Southbound 111 Street Platform – Liberty Line A



After



Northbound Platform Artwork 88 Street – Liberty Line



Southbound 80 Street Platform – Liberty Line **A** - First Train



Ditmas Avenue – Culver Line Northbound Platform



After



Avenue X – Culver Line Northbound Platform



Replacement of 2 Escalators at Roosevelt Ave Station - QBL



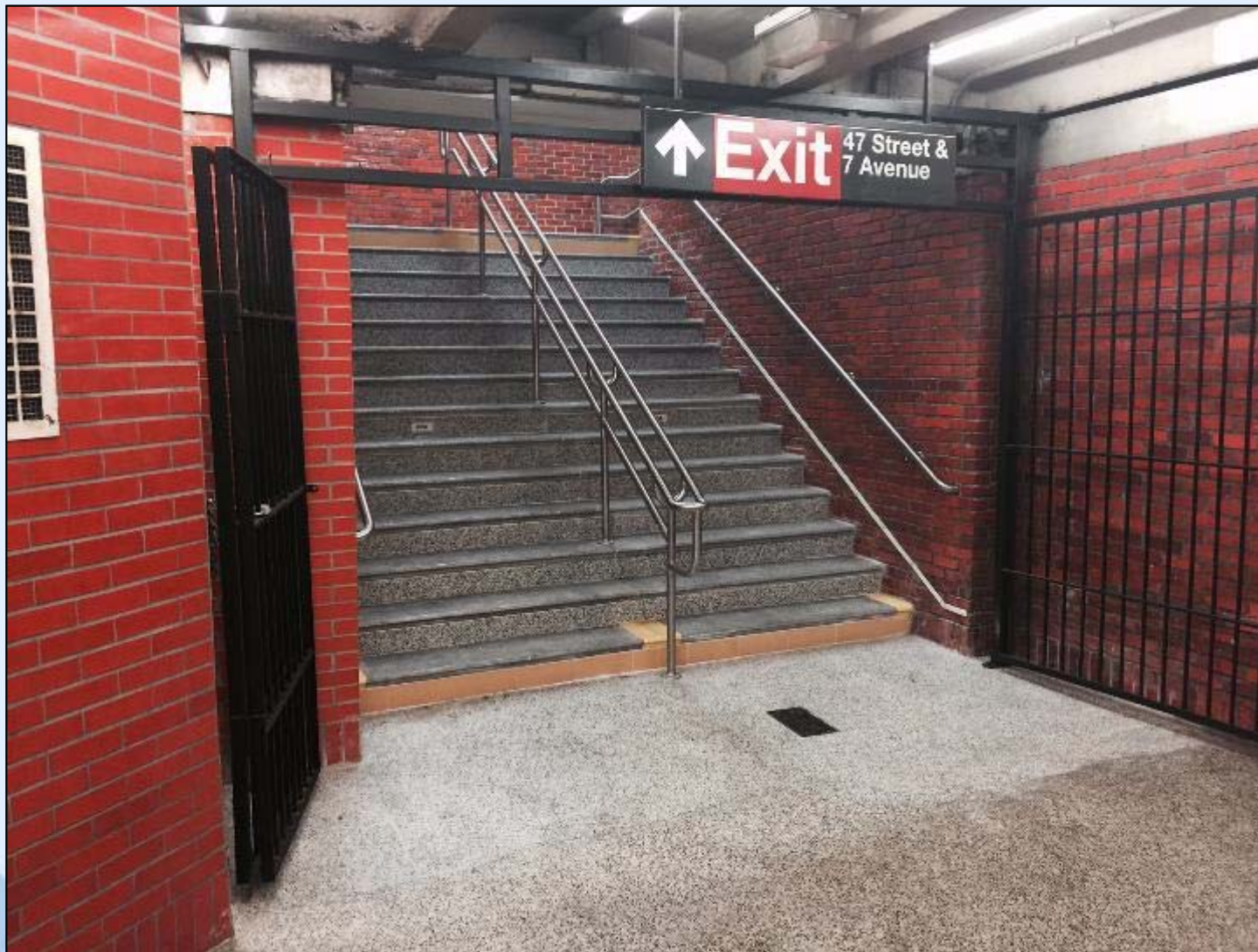
Replacement of Elevator at 34 Street-Herald Square



Passageway to PATH
open daily Sun-Sun
Other lines enter at
32 Street & Greeley St



Street Stair – 49 Street Station (SBMP) R



Street Stair – Ditmars Blvd – Astoria (SBMP) **N** **Q**



Help Point

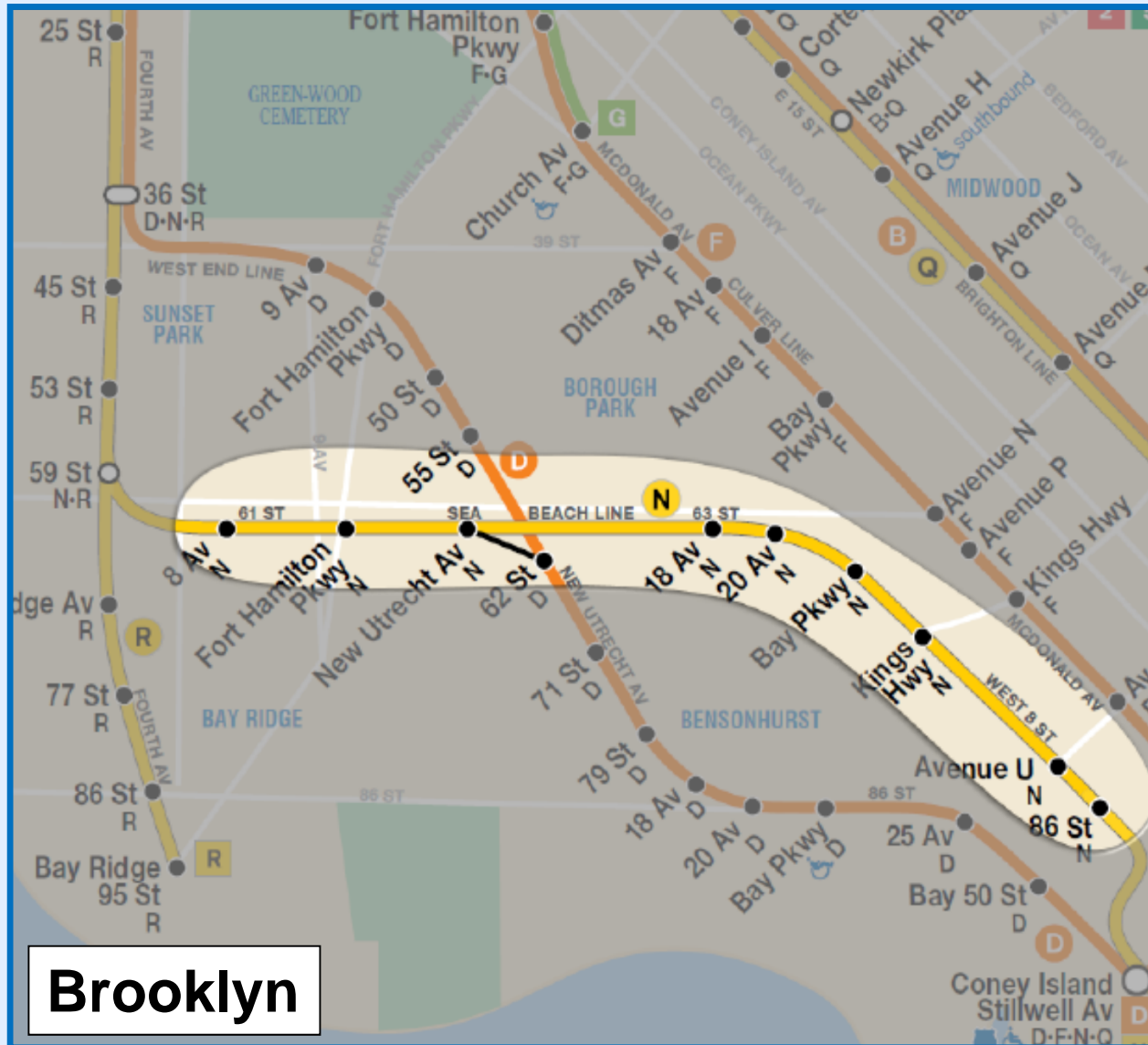
Whitehall St.- South Ferry (SBMP) **R** **1**



Renewal Work at 9 Open Cut Stations on Sea Beach Line



Station Locations



N Project Limits: approximately 4.5 Miles

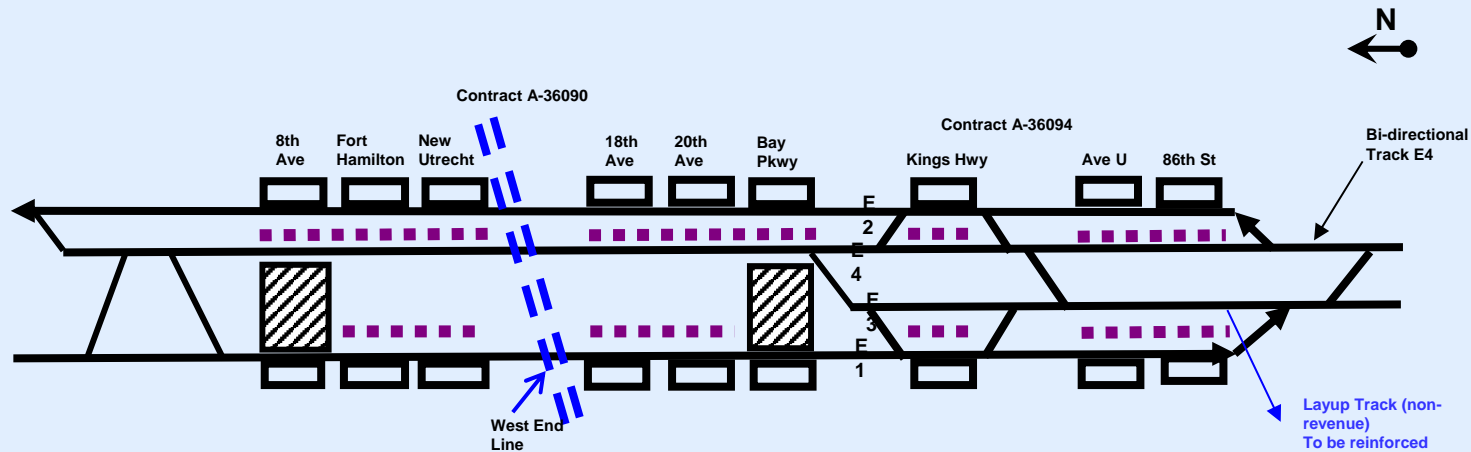


Project Data

Contract #	A36090 (6 Stations)	A36094 (3 Stations)
Advertise	Sept 2014	Sept 2014
Award	Dec 30, 2014 (A)	Jan 15, 2015 (A)
Construction Duration	48 Months	46 Months
Bid Cost	\$ 188.8 M	\$ 79.9 M
Total Project Cost	\$ 273.3 M	\$ 119.5 M
Contractor	John P. Picone	Skanska



Preliminary Phase – 12 Months – Completed

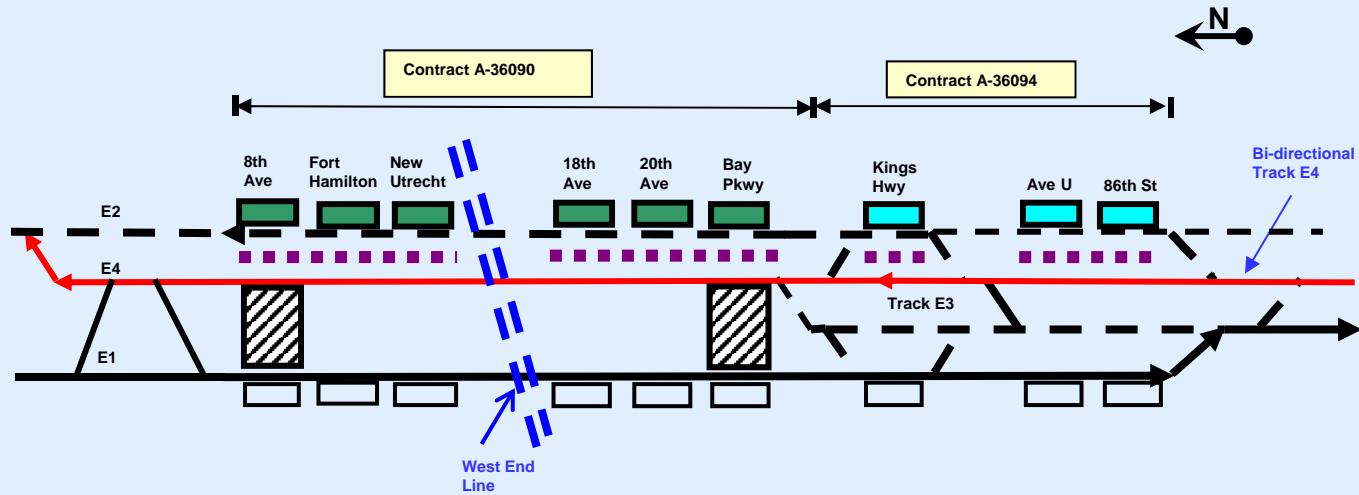


Legend:

- Temporary Platform Open to Public 
- Existing Platform Open to Public 
- Track Out of Service 
- Temporary Barricade 



Phase I (N/B out of service) 14 Months- Starting 1/18/2016

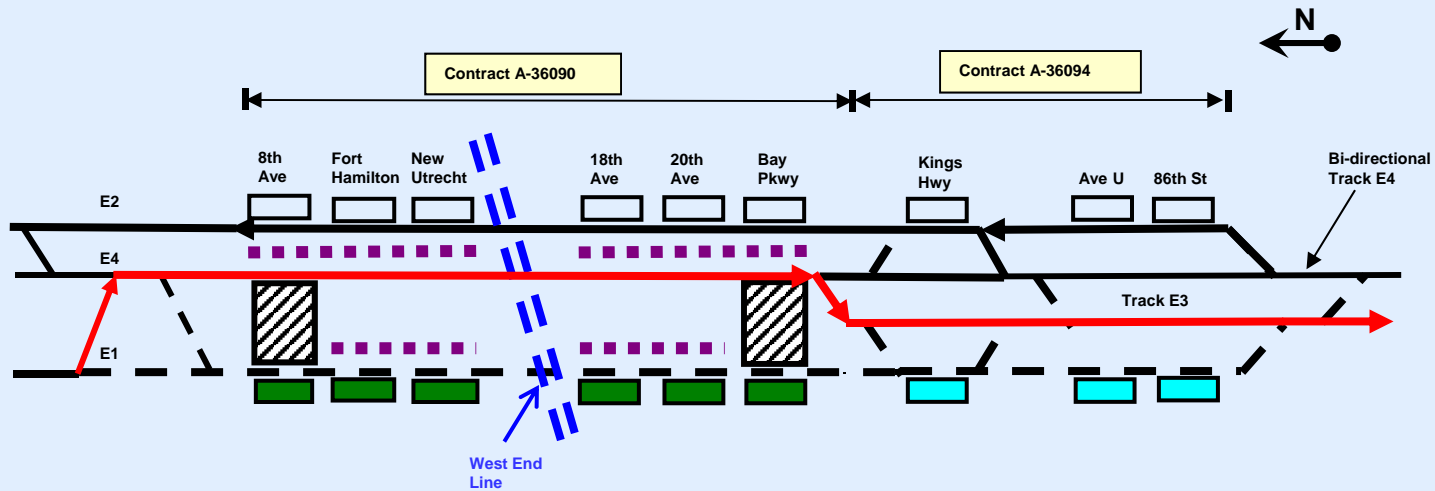


Legend:

Train Operation	
Temporary Platform Open to Public	
Existing Platform Open to Public	
Closed Platforms	



Phase II (S/B out of service) 14 Months- Starting 7/2017



Legend:

Train Operation	
Temporary Platform Open to Public	
Existing Platform Open to Public	
Closed Platforms	



Parapet Wall

Tunnel Arches

Passageway

Platform Canopy



Platform

Major Scope Items at Typical Station



Typical Platform - 18 Ave



Replace Platform Floor & Install Panels



GFRC
Panels



After (Rendering)



8 Avenue (Looking North - Manhattan)



**Temporary Platform with access from control area
to perform Ph I & Ph II work**



Bay Parkway (Looking North - Manhattan)



Temporary Platform





**Will use High Rail Equipment to save labor costs
which will run on out of service track**



Project Risks

Risks	Mitigations
1. Underside of 8 Ave station over LIRR tracks is deteriorated. Opportunity to fix under Sea Beach Project.	<ul style="list-style-type: none">• NYCT MOW will continue to maintain.• A separate capital project will be initiated, if condition necessitates.
2. Unforeseen structural deterioration of the existing station elements may increase cost.	<ul style="list-style-type: none">• Condition Survey of platforms is completed. Condition survey for all other elements to be performed during track outages.
3. Additional communication work may increase cost.	<ul style="list-style-type: none">• Drawings are being prepared.
4. Adjacent private property owners may not provide access for construction work.	<ul style="list-style-type: none">• Notifications were sent to property owners to provide access.



2015-19 Capital Program (Stations)

- *Work planned at 222 different stations*
- *Total budgeted cost is \$2.2 B*
- *Customer Access Improvements work at Grand Central 42 St Station is included (Funded by developers)*



January 2016 CPOC IEC Project Review



Sea Beach Line – Renewal of Nine Stations

January 25, 2016



Schedule & Budget Review

Sea Beach Line – The Renewal of Nine Stations

Schedule:

- The project is currently on schedule.
- This month the Preliminary Phase concluded and Phase I started on schedule with the closure of the North Bound local track.
- Substantial Completion is forecast for December 2018.

Budget:

- The project is currently on budget.



IEC Observations

The IEC is projecting the potential for a negative impact to the budget and schedule based upon the project risks identified in NYCT's presentation. The IEC concurs with NYCT's risk mitigations developed to date.

- **Budget:** Based on our review of available contingency and reserves, there exists the potential for a significant impact to the project contingency. During the Preliminary Phase, the Estimate At Completion has increased.
- **Schedule:** There are no contractual interim milestones associated with the contractor's schedule and unforeseen conditions may have a major impact on substantial completion.



IEC Recommendations

- In the absence of contractual interim milestone dates, the IEC recommends the project team concentrate on monitoring the status of intermediate return to service dates, inspection and acceptance dates and key beneficial use dates to gauge contractor performance and to mitigate project risks and issues.



NYCT Subway Car Program Progress Update to CPOC

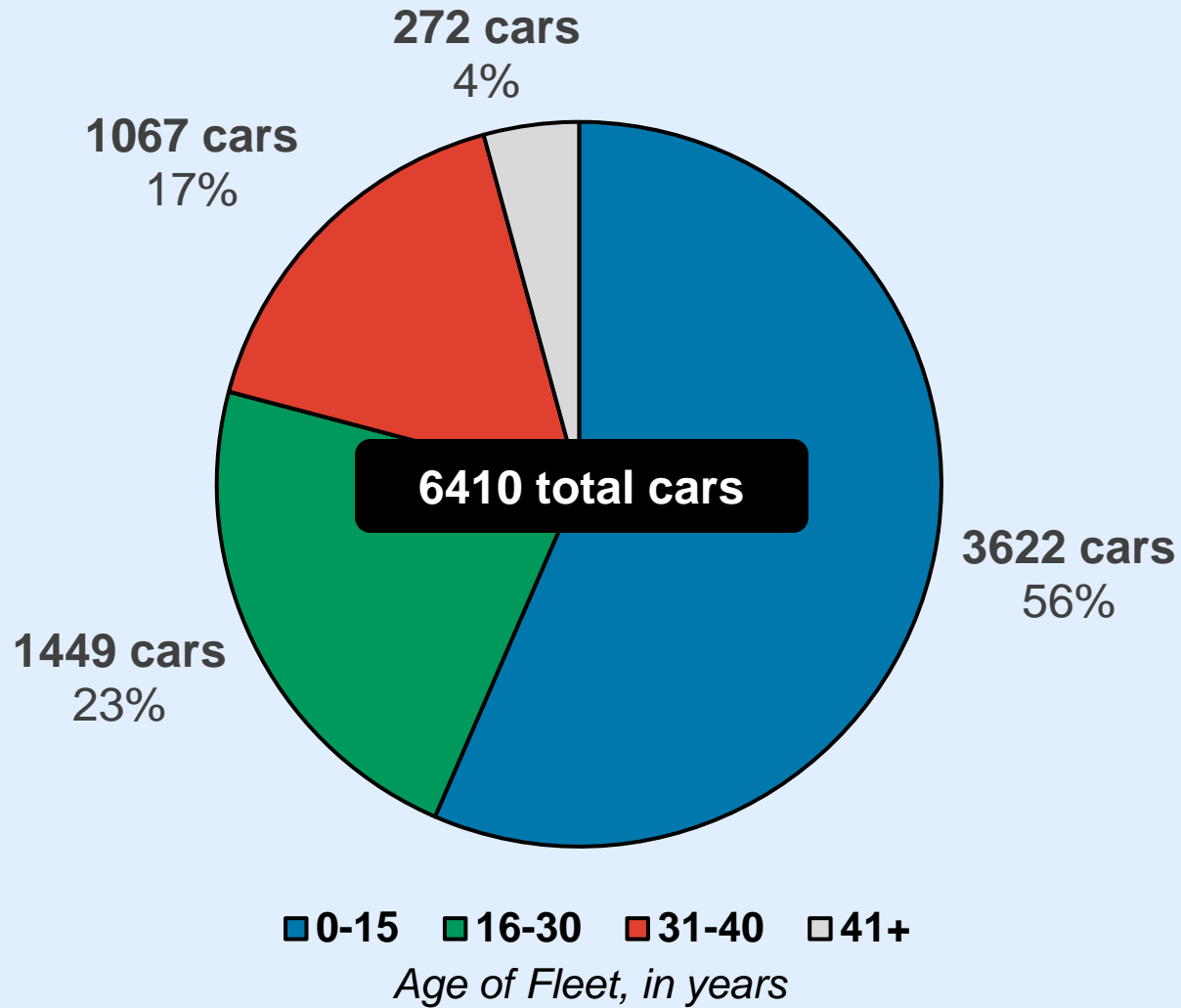
Marva Brown

Vice President & Chief Officer
Capital Programs - Department of Subways

January 25, 2016



NYCT Subway Car Fleet Overview



As of January 2016; excludes SIR R44 cars, future R179 / R211 fleets, and 8 additional new R188 cars not yet delivered to NYCT



R188 | Project Overview

Scope

126 new 'A' Division cars + 380 converted R142A cars (506 total cars)

- Base Order: 3 trains (23 new cars + 10 converted R142A cars)
- Option Order: 43 trains (103 new cars + 370 converted R142A cars)
- 46 trains for Flushing CBTC / 7 Line Extension service

Schedule

Base Contract Awarded: 5/28/2010

Option Contract Awarded: 12/30/2011

Delivery Completion (forecast): 7/30/2016

Budget

Base: \$116.5 million

Option: \$497.2 million

Total: \$613.7 million

Highlights

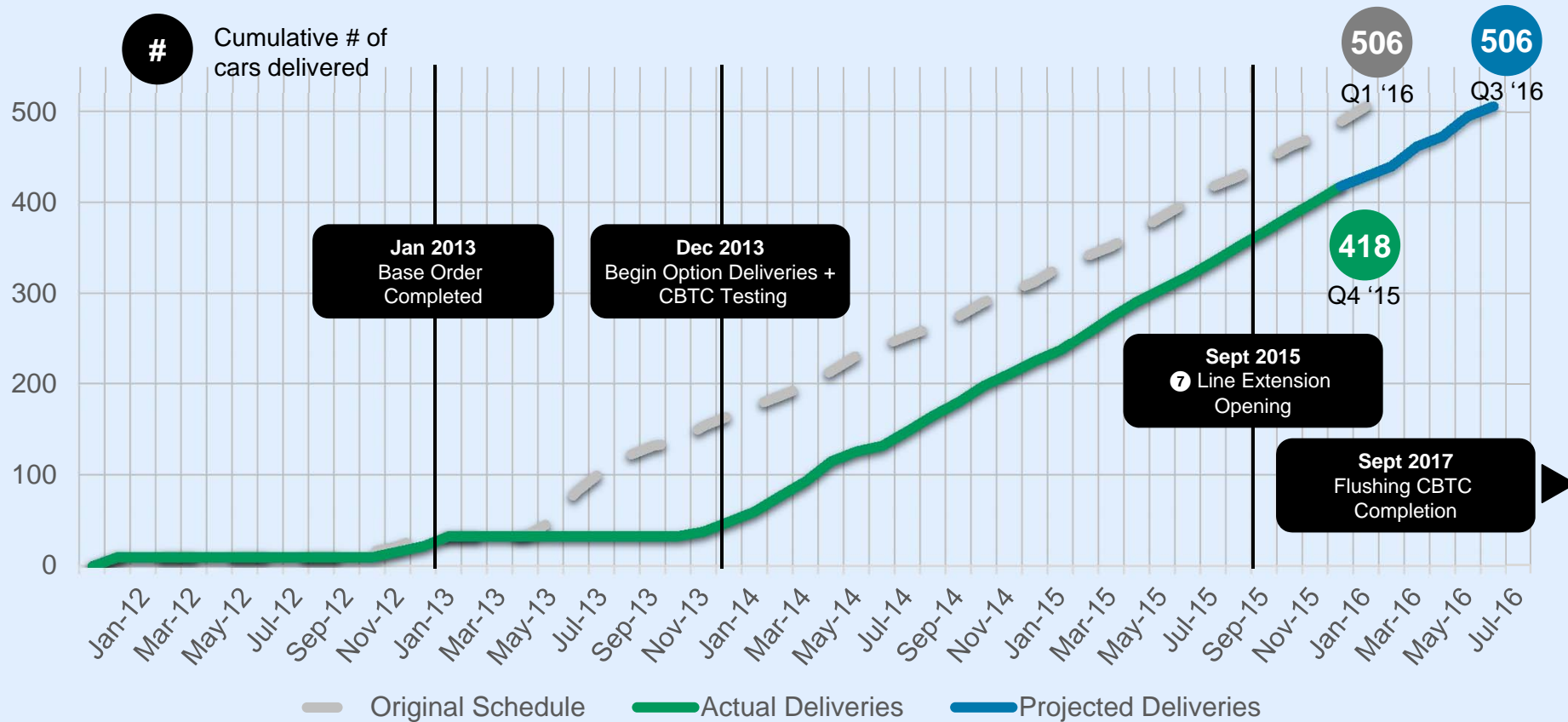
Progress

- Base Order deliveries completed in January 2013
- Through January 18, 2016:
 - 8 new trains + 30 converted trains delivered to NYCT (418 total cars)
 - 8 new trains + 29 converted trains placed in service (407 total cars)
 - Overall project budget currently 77% expended

180-Day Look Ahead

- Delivery of remaining 8 converted trains anticipated by July 2016

R188 | Delivery Schedule



R188 | Current Production Activities



New R188 Car in Yonkers Kawasaki Plant



R142A Undergoing Conversion to R188



Interior Outfitting of New R188 Car



R188 in Service at 34 St-Hudson Yards

R179 | Project Overview

Scope

300 60-foot 'B' Division cars
– 36 ½ trains (configured into 65 4-car units and 8 5-car units)

Schedule

Contract Awarded: 6/4/2012
Delivery of prototype test train (forecast): June 2016
Delivery of first production train (forecast): Feb 2017
Delivery Completion (forecast): July 2018

Budget

\$735.6 million

Highlights

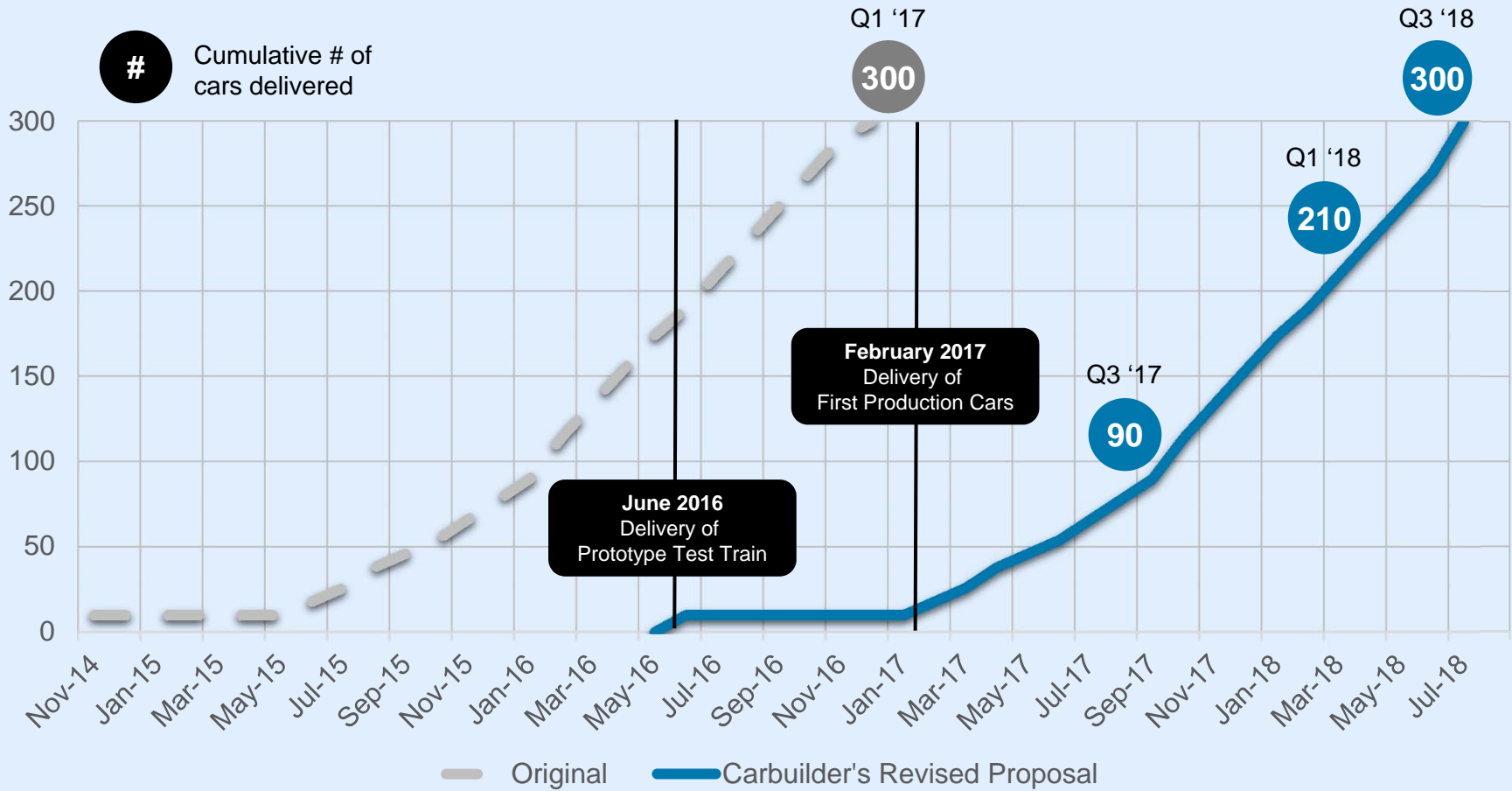
Progress

- Additional 4-6 month delay estimated due to truck casting imperfections & testing
- Qualification testing ongoing

180-Day Look Ahead

- Complete qualification testing
- Continue assembly of Prototype Test Train

R179 | Delivery Schedule



R179 | Challenges + Mitigations

1

Schedule Impacts

- Revised Bombardier schedule proposal under evaluation by NYCT
- NYCT to increase presence in Plattsburgh
- NYCT to conduct additional audits of activities in Plattsburgh

2

Transfer of Production Sites

- Continued oversight by NYCT and consultant
- Inspection plan developed for additional production sites
- Additional carsets of material to mitigate risk

3

Overlapping of Initial Deliveries & Testing

- Bombardier plans to address any required modifications to initial deliveries
- Bombardier will group cars for parallel modifications, if necessary

4

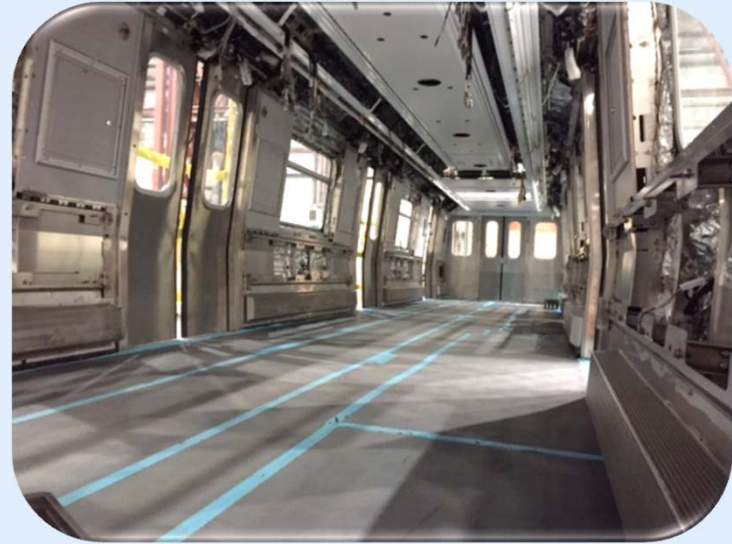
Outfitting of Cars with CCTV

- Bombardier submitted proposal to NYCT
- Currently under review

R179 | Engineering + Testing



R179 car undergoing Vertical Load Jacking Tests



Installation of flooring and interior panels



Completed R179 interior



Completed R179 exterior

R211 | Project Overview

Scope

- 940 60-foot 'B' Division cars
- 75 Staten Island Railway cars
- 10 Open Gangway prototype cars
- Additional cars for fleet growth (to be funded in future capital program)

Schedule

Design Start: December 2012
Design Completion (forecast): Early 2016
Contract Award (forecast): Early 2017

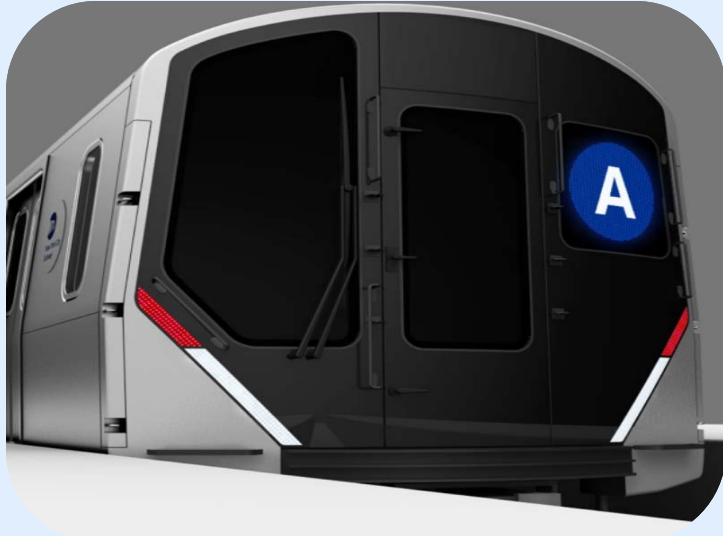
Budget

\$3.2 billion

Design Objectives

- **Expand Capacity**
 - Open gangway prototype; optimized interior configuration
- **Increase Safety and Reliability**
 - In-car CCTV cameras; updated Crash Energy Management
- **Enhance Communications**
 - Digital video screens; wireless maintenance diagnostics; customer wireless; charging stations
- **Improve Energy Efficiency**
 - Intelligent heating/cooling; LED lighting; energy-efficient electronics; upgraded regenerative braking

R211 | Design Concepts



Conceptual rendering – R211 Bonnet



Conceptual rendering – digital video screen



R-car, 54" doorway, 12" niche, 38 seats, bi-parting end door 6/4/2013 anto

Conceptual rendering – R211 interior



R-car, 51" doorway, 6" niche, 44 seats, open gangway 6/4/2013 anto

Conceptual rendering – R211 open gangway configuration

January 2016 CPOC IEC Project Review



Subway Car Procurements



January 25, 2016

Schedule & Budget Review

R188 Procurement:

- **Schedule:** The project schedule has been maintained over the 18 months since our last report in July 2014. The final deliveries support the scheduled completion date for the CBTC Flushing project.
- **Budget:** The project is on budget however the IEC is concerned that the remaining cost contingency may not cover pending changes to the contract.



Schedule & Budget Review

R179 Procurement:

- **Schedule:** The carbuilder's schedule has slipped an additional 6 months in the 18 months since our last report in July 2014.
- **Budget:** The project is on budget however the IEC is concerned that the remaining cost contingency may not cover proposed changes including complete CCTV installation on all cars.



Risks

The IEC will closely monitor several issues with the R179 program in the coming year including:

- The carbuilder plans to complete the first 20 production cars prior to completion of pilot car testing this year. This assumes any changes produced by the testing program can be retrofitted without impact to the scheduled production of the remaining cars.
- The manufacturing processes developed at the carbuilder's engineering center need to be efficiently transferred to their production facilities.



Bus Procurement Update

Capital Program Oversight Committee
January 2016

John Higgins
Chief Maintenance Officer
Bus Operations



Agenda

- Bus Buy Goals
- Bus Fleet Purchase Plan and Mix
- Buses Delivered
- Upcoming Bus Awards
- Bus Technology Update



Current Bus Fleet

	NYCT DOB	MTA Bus	TOTAL
Standard 40'			
Diesel	1,367	136	1,503
CNG	534	213	747
Hybrid	1,285	387	1,672
Std Subtotal	3,186	736	3,922
Articulated 60'	769	32	801
Express 45'	534	504	1,038
TOTAL:	4,489	1,272	5,761

Based on Winter 2016 fleet assignment



Goals of our Procurement Program

- Plan for a 12-year useful life for buses.
- Procure the most reliable, environmentally friendly, and cost effective bus to meet service needs and customer expectations.
- Increase competition among bus manufacturers for future bus procurements.
- Continually make improvements to reduce emissions.



Bus Procurements Summary

Fleet	Type	Agency	Total Order	# Delivered (as of 12/29/15)	Status	Capital Program
New Flyer 40-ft Clean Diesel (FTA)	Standard	MTA	45	45	Complete	2010-2014
Nova 40-ft Clean Diesel*	Standard	DOB	414	216	In Construction	2010-2014
New Flyer 40-ft Clean Diesel	Standard	DOB	276	275	In Construction	2010-2014
New Flyer 40-ft Clean Diesel (Option Order)	Standard	DOB	72	71	In Construction	2010-2014
New Flyer 40-ft CNG	Standard	DOB	138	0	In Award Stage	2015-2019
40-ft Clean Diesel	Standard	DOB	628	0	To be Solicited	2015-2019
40-ft Clean Diesel	Standard	DOB	200	0	To be Solicited	2015-2019
40-ft Hybrid	Standard	DOB	75	0	To be Solicited	2015-2019
Standard Total			1,848	607		
Prevost 45-ft Coach	Express	DOB	300	210	In Construction	2010-2014
45-ft Coach	Express	DOB	50	0	To be Solicited	2015-2019
45-ft Coach	Express	MTA	292	0	To be Solicited	2015-2019
Express Total			642	210		
New Flyer 60-ft Artic (FTA)	Artic	MTA	75	1	In Construction	2010-2014
New Flyer 60-ft Artic	Artic	DOB	139	0	At OSC	2010-2014
Nova 60-ft Artic	Artic	DOB	92	0	At OSC	2010-2014
60-ft Clean Diesel Artics	Artic	DOB	190	0	To be Solicited	2015-2019
60-ft CNG Artics	Artic	DOB	110	0	To be Solicited	2015-2019
60-ft Clean Diesel Artics	Artic	MTA	53	0	To be Solicited	2015-2019
Artic Total			659	1		
Grand Total			3,149	818		

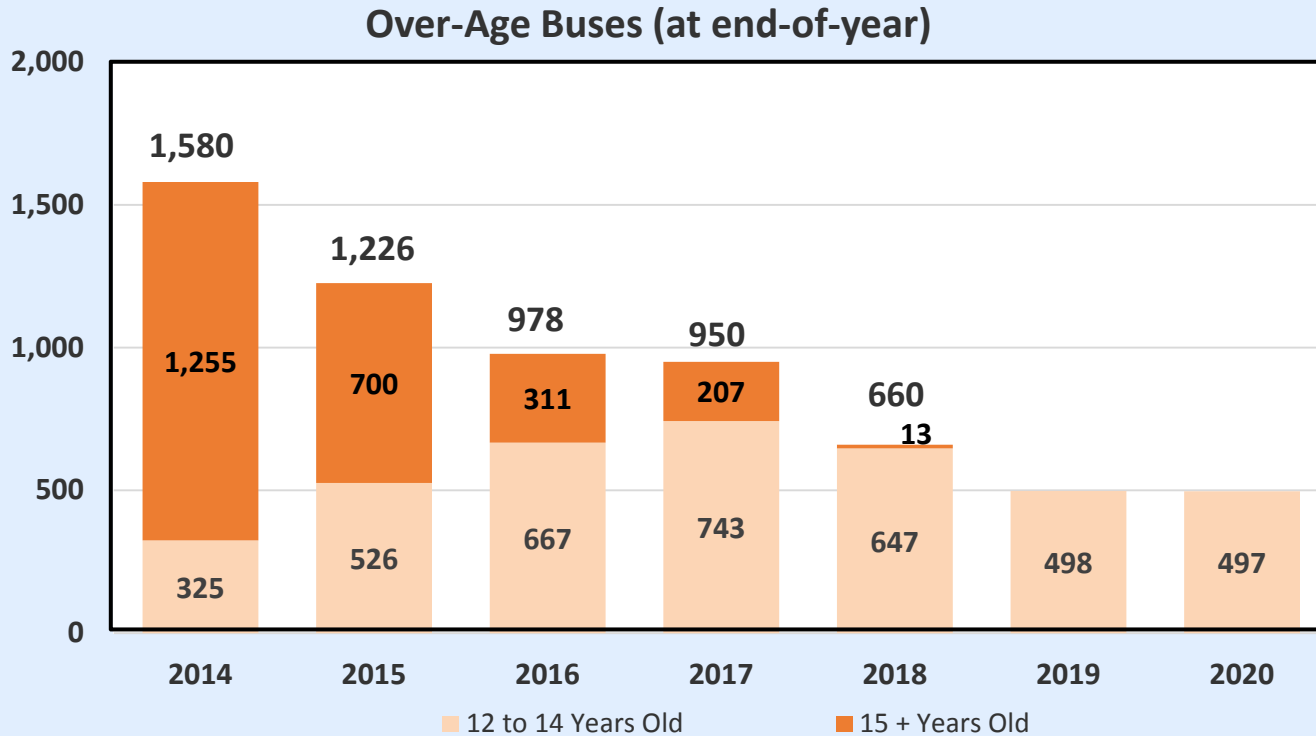
* 90 of 414 Nova standards funded from the 2005-2009 Capital Program.

OSC = Office of State Controller



Bus Fleet Dynamics

2015-2019 Capital Program



- A large number of buses were procured in the 1997-2001 period of rapid ridership increase due to MetroCard fare policy.
- Spikes in bus procurements cause operational and fiscal challenges.
- A level buying plan for our fleet of 5,761 buses would require approximately 480 buses annually.
- By 2020, with buses approved under the 2015-2019 Capital Program delivered, we will still have almost 500 over-age buses.



Current Bus Deliveries

300 Express (NYCT-DOB)

Overall Status

Item	Comments
Scope	300 Express Coaches from Prevest
Schedule	Awarded November 2013 Production buses began delivery in December 2014 210 buses delivered as of 12/29/2015
Budget	\$188.9 Million

Highlights

- Final assembly takes place at Prevest facility in Plattsburgh, NY
- Allows retirement of most of Transit's 1999-2002 coaches (up to 15 years old)



Current Bus Deliveries

690 + 72 Standard buses (NYCT-DOB)

Overall Status

Item	Comments
Scope	414 buses from Nova 276 buses from New Flyer + 72 buses Option Order from New Flyer
Schedule	Base contracts awarded December 2013 (Nova) and January 2014 (New Flyer); Option order for New Flyer awarded March 2015 Bus deliveries began in November 2014 (NF) & July 2015 (Nova) 216 Nova buses and 346 NF buses delivered as of 12/29/15
Budget	\$407.4 Million

Highlights

- Dual award to 2 vendors allows for an accelerated delivery timeline
- Award of remaining 628 of 700 option buses in 2016 will improve over-age bus situation



Current Bus Deliveries

45 Standard buses (MTA Bus)

Overall Status

Item	Comments
Scope	45 Standard Clean Diesel buses from New Flyer
Schedule	Awarded in December 2014 Delivery completed in August 2015
Budget	\$23.8 Million



Current Bus Deliveries

75 Artic buses (MTA Bus)

Overall Status

Item	Comments
Scope	75 Artic buses from New Flyer
Schedule	Awarded December 2014 Pilot Bus delivered in July 2015 Deliveries scheduled for January 2016 to August 2016
Budget	\$61.6 Million

Highlights

- In addition to replacing over-age artic buses, will convert high volume standard bus routes to artics



Recent Bus Award

- 138 New Flyer CNG 40-ft Buses (NYCT-DOB)
 - Board approved on December 16, 2015
 - Awarded in January 14, 2016
 - Replaces over-age CNG buses
 - Deliveries expected between March 2017 and September 2017



Upcoming Bus Awards

- 139 New Flyer Artics (NYCT-DOB)
 - Board approved on November 18, 2015
 - Award expected at end of 1st Qtr. 2016
 - Replaces the existing artic fleet at the end of their useful life
 - Deliveries expected between January 2017 and November 2017
- 92 Nova Artics (NYCT-DOB)
 - Board approved on November 18, 2015
 - Award expected at end of 1st Qtr. 2016
 - Replaces the existing fleet at the end of their useful life
 - Deliveries expected between November 2017 and March 2018



Future 2015-2019 Bus Procurements

- 190 Clean Diesel 60-ft Artic buses
- 110 CNG 60-ft Artic buses
- 628 Clean Diesel 40-ft buses
- 200 Clean Diesel 40-ft buses
- 75 Hybrid 40-ft buses
- 50 Clean Diesel Coach buses
- 292 Clean Diesel Coach buses
- 53 Clean Diesel 60-ft Artic buses



Propulsion Technology

- Continue to research technologies that provide the most cost effective solutions to reduce GHG emissions while maintaining fleet resiliency
 - New buses have improved emissions profile due in part to:
 - Move from hydraulic to electric subsystems
 - Redesigned transmission features and shift schedules
 - Redefined air conditioning parameters
 - Test the latest generation hybrids to guide future purchases
 - Test All Electric Buses (AEB)



Second Avenue Subway Update to CPOC

January 25, 2016



SAS Status

- Project team initiated the following measures to ensure meeting the December 2016 RSD:

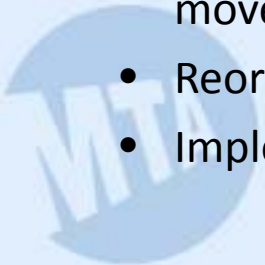
Actions

External

- Met with and directed all contractors to develop an acceleration schedule to meet the December 2016 RSD, which we expect to bring to the Board in February
- Ongoing negotiations with the contractors to finalize acceleration scope and cost

Internal

- NYCT staff will be fully integrated with project team to accelerate Testing & Commissioning
- Dedicated NYCT Testing and Commissioning staff has been assigned and is ready for move into an on-site location today (January 25, 2016).
- Reorganized the Testing & Commissioning process
- Implemented Lessons Learned from No. 7 Line extension and Fulton Center



Issue/Milestone (as cited in December 2015 CPOC)	Date Needed (as of Dec. 2015 CPOC)	Current Forecast/Actual Date	Potential Impact on Revenue Service Date
Permanent Power			
96 th St energized	1/4/2016	2/8/2016	The delay in permanent power will not impact December 2016 RSD because temporary power will be used to perform initial phase of testing.
86 th St complete all wire installation and 3 rd Party Testing	2/20/2016	2/20/2016	Completion of permanent power by 4/26/16 supports December 2016 RSD
72 nd St complete all wire installation and 3 rd Party Testing	2/15/2016	2/15/2016	Completion of permanent power by 4/15/16 supports December 2016 RSD
72nd St Finish Contract			
Entrance 1 MEP & Cavern Finishes	3/16/2016	3/16/2016	Supports December 2016 RSD
Progress of construction of Entrance 2	6/30/2016	6/30/2016	Supports December 2016 RSD
Systems Contract			
Trackwork in Zone 8 (Crossover North of 72 nd Street Station)	1/30/2016	1/30/2016	Supports December 2016 RSD
Status of Integrated Acceleration Schedule			
Contractor acceleration schedules accepted	2/28/2016	2/28/2016	Contractor submitted draft acceleration plan. Started acceleration work based on the plan. Schedules in the process of being reviewed.
Additional testing and inspection personnel plan (NYCT)	1/25/2016	1/25/2016	Supports December 2016 RSD

January 2016 CPOC IEC Status Review



Second Avenue Subway

January 25, 2016



SAS Status Review

Although the Project Team has high-level commitments from its contractors that support a December 2016 Revenue Service Date, the IEC has observed that several key activities slipped their scheduled completion dates in the six weeks since the December 2015 CPOC report. In particular, delays to provision of permanent power at 86th St and 96th Streets are of most concern as they could potentially impact the start of testing and commissioning. The Project Team intends to initiate testing with temporary power to mitigate these delays. The project's newly accelerated schedule needs to be completed before the IEC can fully examine the potential impact of delays.

The project remains with a moderate risk of delay to completion in December 2016. The top schedule risk which was identified last September – continuing design & scope changes during construction – has not been mitigated. In fact, there were new change orders identified in December, adding to a significant backlog of outstanding change orders.



Recommendations

Schedule:

- The Project Team should expedite their efforts to complete the new integrated project schedule by integrating the communications testing with the accelerated testing of station equipment installations. This schedule should then be detailed with weekly checkpoints in order to properly status key activities and identify critical delays for mitigation and recovery.

Management:

- The Project Team should complete implementation of an augmented staffing plan for construction management as soon as practical. This is needed to complement the assignment of dedicated NYCT staff and to expedite resolution of outstanding change orders, oversee second shift and weekend work and provide additional cost control.



DBE AWARDS ON MTA CAPITAL PROJECTS with GOALS
 JANUARY - DECEMBER 2015
 FEDERALLY FUNDED

FEDERALLY FUNDED	FIRST QUARTER (JANUARY-MARCH) (in millions)			SECOND QUARTER (APRIL-JUNE) (in millions)			THIRD QUARTER (JULY-SEPTEMBER) (in millions)			FOURTH QUARTER (OCT.-DEC) (in millions)			2015 TOTALS (JANUARY-DECEMBER 2015) (in millions)		
	Total Awards	Total DBE Awards	DBE Participation (%)	Total Awards	Total DBE Awards	DBE Participation (%)	Total Awards	Total DBE Awards	DBE Participation (%)	Total Awards	Total DBE Awards	DBE Participation (%)	Total Awards	Total DBE Awards	DBE Participation (%)
DBE Participation Goal: 17%															
Construction	\$ 461	\$ 83	18%	\$ 166	\$ 40	24%	\$ 46	\$ 18	40%	\$ 112	\$ 17	15%	\$ 786	\$ 158	20%
Professional Services	\$ -	\$ -	0%	\$ -	\$ -	0%	\$ -	\$ -	0%	\$ -	\$ -	0%	\$ -	\$ -	0%
Other															
TOTAL	\$ 461	\$ 83	18%	\$ 166	\$ 40	24%	\$ 46	\$ 18	40%	\$ 112	\$ 17	15%	\$ 786	\$ 158	20%
Additional MWBE Participation:	Total Awards	Total MWBE Awards		Total Awards	Total MWBE Awards		Total Awards	Total MWBE Awards		Total Awards	Total MWBE Awards		Total Awards	Total MWBE Awards	
Construction	\$ 461	\$ 57		\$ 166	\$ 34		\$ 46	\$ 18		\$ 111	\$ 11		\$ 784	\$ 120	
Professional Services	\$ -	\$ -		\$ -	\$ -		\$ -	\$ -		\$ -	\$ -		\$ -	\$ -	
Other	\$ -	\$ -		\$ -	\$ -		\$ -	\$ -		\$ -	\$ -		\$ -	\$ -	
Total	\$ 461	\$ 57		\$ 166	\$ 34		\$ 46	\$ 18		\$ 111	\$ 11		\$ 784	\$ 120	

**MWBE AWARDS ON MTA CAPITAL PROJECTS with GOALS
JANUARY 2015 - DECEMBER 2015
STATE FUNDED**

STATE FUNDED	FIRST QUARTER (JANUARY-MARCH) (in millions)			SECOND QUARTER (APRIL-JUNE) (in millions)			THIRD QUARTER (JULY-SEPTEMBER) (in millions)			FOURTH QUARTER (OCTOBER-DECEMBER) (in millions)			2015 TOTALS (JANUARY-DECEMBER 2015) (in millions)		
	Total Awards	Total MBE Awards	MBE Participation (%)	Total Awards	Total MBE Awards	MBE Participation (%)	Total Awards	Total MBE Awards	MBE Participation (%)	Total Awards	Total MBE Awards	MBE Participation (%)	Total Awards	Total MBE Awards	MBE Participation (%)
MBE Participation Goal: 15%*															
Construction	\$ 17	\$ 4	23%	\$ 45	\$ 8	18%	\$ 60	\$ 7	12%	\$ 274	\$ 24	9%	\$ 396	\$ 43	11%
Professional Services	\$ 2	\$ 0.3	13%	\$ 2	\$ 0.3	14%	\$ -	\$ -	0%	\$ -	\$ -	0%	\$ 5	\$ 0.6	13%
Other	\$ -	\$ -	0%	\$ -	\$ -	0%	\$ -	\$ -	0%	\$ -	\$ -	0%	\$ -	\$ -	0%
MBE Participation on FTA-funded projects															
TOTAL	\$ 20	\$ 4	22%	\$ 47	\$ 8	18%	\$ 60	\$ 7	12%	\$ 274	\$ 24	9%	\$ 400	\$ 44	11%
WBE Participation Goal: 15%*															
Construction	\$ 17	\$ 2	14%	\$ 45	\$ 4	9%	\$ 60	\$ 7	11%	\$ 274	\$ 25	0%	\$ 396	\$ 38	10%
Professional Services	\$ 2	\$ 1	25%	\$ 2	\$ 0.2	10%	\$ -	\$ -	0%	\$ -	\$ -	0%	\$ 5	\$ 1	18%
Other	\$ -	\$ -	0%	\$ -	\$ -	0%	\$ -	\$ -	0%	\$ -	\$ -	0%	\$ -	\$ -	0%
WBE Participation on FTA-funded projects															
TOTAL	\$ 20	\$ 3	15%	\$ 47	\$ 4	9%	\$ 60	\$ 7	11%	\$ 274	\$ 25	9%	\$ 400	\$ 39	10%
Additional DBE Participation:															
Construction	\$ 17	\$ 7		\$ 45	\$ 4		\$ 60	\$ 7		\$ 274	\$ 26		\$ 396	\$ 44	
Professional Services	\$ -	\$ -		\$ 0.5	\$ 0.1		\$ -	\$ -		\$ -	\$ -		\$ 1	\$ 0.1	
Other	\$ -	\$ -		\$ -	\$ -		\$ -	\$ -		\$ -	\$ -		\$ -	\$ -	
Additional DBE Participation Total	\$ 17	\$ 7		\$ 46	\$ 4		\$ 60	\$ 7		\$ 274	\$ 26		\$ 397	\$ 44	

*30% MWBE goals effective April 1, 2015. The previous goal was 20%.

MTA Capital Program Commitments & Completions

**through
December 31st, 2015**

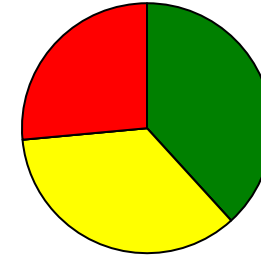
Capital Projects – Major Commitments – December 2015

34 major commitments were planned for 2015, totaling \$3.1 billion. Only projects funded in approved capital plans were included.

In 2015, 34 major commitments were reported. 13 commitments were made on time, 12 projects were delayed, but have since been awarded, and nine projects slipped out of 2015. Altogether, 74% of major commitments were made in 2015.

Agencies committed \$2.9 billion or 91% versus the \$3.1 billion annual goal. The shortfall was predominantly due to the aforementioned slips and was partly offset by unplanned commitments and the impact of higher bids and estimates.

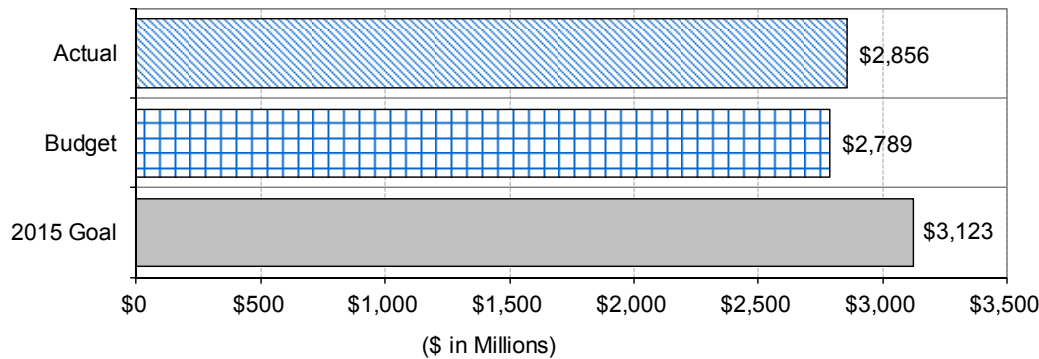
Year-to-Date Major Commitments



	Count	Percent	Change from Prior Month
GREEN = Commitments made/forecast within Goal	13	38%	-
YELLOW = Commitments delayed beyond Goal (already achieved)	12	35%	↑ 6
RED = Commitments delayed beyond Goal (not yet achieved)	9	26%	↓ 4
Total	34	100%	↑ 2

Budget Analysis

2015 Annual Goal	\$3,123	(\$ in millions)
2015 Actual	91%	of Annual Goal
Forecast left to Commit	0%	\$0



Year-to-Date Agency Breakdown

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

Capital Projects – Major Commitments – December 2015 – Schedule Variances
Actual Results Shaded

Project	Commitment	Goal	Forecast
9 All-Agency Red Commitments (2 new this month)			
NYCT			
<i>Signals & Communications</i>			
ISIM- B Module 2 - Flushing Line (New Item)	Construction Award	Dec-15 \$43.7M	Sep-16 \$64.2M
Award re-scheduled to September 2016 due to funding constraints. This project was not considered for priority funding in the first half of 2016. Project initially split into 2 contracts, is now combined with award schedule in June 2016. Cost increase mainly due to added PS LAN scope not originally included in the budget.			
<i>Bus Depots</i>			
Bus Radio System - NYCT	Construction Award	Aug-15 \$215.0M	Feb-16 \$214.5M
Proposals are being evaluated by the Technical Committee. A Post-Proposal Addendum was issued to the vendors in October, revising the optional maintenance agreement, spare parts requirement and the price schedule. Award delayed due to protracted procurement duration.			
<i>Service Vehicles</i>			
Work Train and Special Equipment: 54 Flat Cars (New Item)	Construction Award	Dec-15 \$33.5M	Dec-16 \$33.5M
Continued delay due to review of technical specifications and resolution of authorization of RFP process.			
<i>Sandy Recovery and Resiliency</i>			
Sidewalk Vent Grating - 8 Stations	Construction Award	Jul-15 \$70.4M	May-16 \$44.3M
Award was recently re-scheduled to May 2016 reflecting a delay in advertisement. The cost decrease reflects the prioritization of the resiliency program, limiting the number of the critical facilities hardening to communication and signal rooms only.			
Power Cable Replacement - 148th & 207th St Yards	Construction Award	Nov-15 \$135.1M	Jul-16 \$135.1M
The award has been delayed to accommodate property acquisitions by MTA Real Estate. Design had been delayed in order to incorporate additional resiliency standards based on 500 year storm standards.			

Project	Commitment	Goal	Forecast
LIRR			
<i>Main Line Corridor Improvements</i>			
MLC - Hicksville Siding	Construction Award	Sep-15 \$25.7M	Mar-16 \$25.7M
Construction award delayed due to additional scope review during the design process, extended RFP process, including BAFO review.			
MLC - Hicksville Station	Construction Award	Oct-15 \$42.2M	Mar-16 \$42.2M
Construction award delayed due to additional scope review during the design process, extended RFP process, including BAFO review.			
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.			
MTA Bus			
<i>Bus Projects</i>			
Bus Radio System - MTA Bus	Construction Award	Aug-15 \$58.5M	Feb-16 \$58.5M
Proposals are being evaluated by the Technical Committee. A Post-Proposal Addendum was issued to the vendors in October, revising the optional maintenance agreement, spare parts requirement and the price schedule. Award delayed due to protracted procurement duration.			

Capital Projects – Major Commitments – December 2015 – Schedule Variances
Actual Results Shaded

Project	Commitment	Goal	Forecast
12 All-Agency Yellow Commitments (6 new this month)			
NYCT			
<i>Track & Switches</i>			
2015 Track & Switch Program (11 Projects) - 1st Qtr	Construction Award	Feb-15 \$180.4M	May-15 (A) \$180.4M
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.			
<i>Signals & Communications</i>			
CBTC: Queens Boulevard Phase 1	Construction Award	Apr-15 \$213.6M	Aug-15 (A) \$235.7M
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	Construction Award	Apr-15 \$38.4M	Sep-15 (A) \$18.9M
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.			
ISIMB- Div: Module 1	Construction Award	Jun-15 \$43.2M	Nov-15 (A) \$55.5M
Award was delayed pending a budget modification approval of increased cost. Design completion was delayed because during the review of the final engineer's estimate, it was discovered that additional features which were not needed for Module 1 were included in the design. These features were removed. Cost increase reflecting a longer duration from 25 to 37 months and unfavorable bids received.			
<i>Sandy Recovery and Resiliency</i>			
Long Beach Substation Replacement (<i>New Item</i>)	Construction Award	Jun-15 \$18.7M	Dec-15 (A) \$17.4M
\$10.7M of the project was committed in March for in-house work. Commitment of the 3rd party construction (\$8M) was delayed due to a design change.			
Long Beach Signal System (<i>New Item</i>)	Construction Award	Oct-15 \$9.0M	Dec-15 (A) \$9.3M
The two month delay was due to extensive negotiations with the contractor.			

Project	Commitment	Goal	Forecast
MNR			
<i>Structures</i>			
Replace/Repair Undergrade Bridges	Construction Award	Apr-15 \$10.1M	May-15 (A) \$9.9M
Full award was delayed due to timing of the force account commitment.			
<i>Grand Central Terminal</i>			
GCT Utilities (<i>New Item</i>)	Construction Award	Nov-15 \$21.3M	Dec-15 (A) \$38.0M
Bids for construction services were received on October 30, 2015 and an award was executed on December 30, 2015. The budget increase reflects a high bid.			
MTACC			
<i>Cortlandt Station</i>			
Cortlandt Station Reconstruction	Construction Award	Mar-15 \$110.0M	Apr-15 (A) \$116.0M
Budget increase reflects additional contingency for known additional work orders.			
B&T			
<i>Marine Parkway Bridge</i>			
Miscellaneous Steel Repairs & Structural Rehab - Marine Parkway (<i>New Item</i>)	Construction Award	Jun-15 \$21.8M	Dec-15 (A) \$22.9M
MPX- B was bid as one contract. Thus, more time was required to prepare procurement documents. Bids have been received. Forecast values were adjusted to include contingency and match bid results.			
Roadway Structures Painting (<i>New Item</i>)	Construction Award	Jun-15 \$17.0M	Dec-15 (A) \$22.7M
MPX- C was bid as one contract. Thus, more time was required to prepare procurement documents. Bids have been received. Forecast values were adjusted to include scope advanced from the 2015- 19 plan.			
Rehab of Programmable Logic Controller & Mechanical System (<i>New Item</i>)	Construction Award	Jun-15 \$24.3M	Dec-15 (A) \$32.0M
MPX- A was bid as one contract. Thus, more time was required to prepare procurement documents. Bids have been received. Forecast values were adjusted to match high bid results.			

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

Actual Results Shaded

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

Project	Commitment	Goal	Forecast
7 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

Queens Midtown Tunnel

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.			

MNR

Sandy Recovery and Resiliency

Power/C & S Infrastructure Restoration Phase 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.			

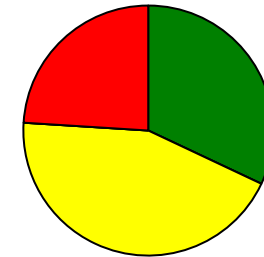
Project	Commitment	Goal	Forecast
LIRR			
<i>Track</i>			
2015 Track Program	Construction Award	Mar-15 \$25.0M	Mar-15 (A) \$65.0M
The goal assumed only a first half track commitment, but an additional \$40M was committed for the second half of 2015.			

Capital Projects – Major Completions – December 2015

25 major completions were planned for 2015. Eight completions were made on time, 11 projects were late, but have now been completed, and six projects slipped beyond 2015. Altogether, 76% of major completions were achieved during 2015.

At year end, the MTA completed \$2.1 billion (83%) of its \$2.6 billion goal. The shortfall was mainly due to the six late completions now forecast beyond 2015. The shortfall was partly offset by unplanned project completions.

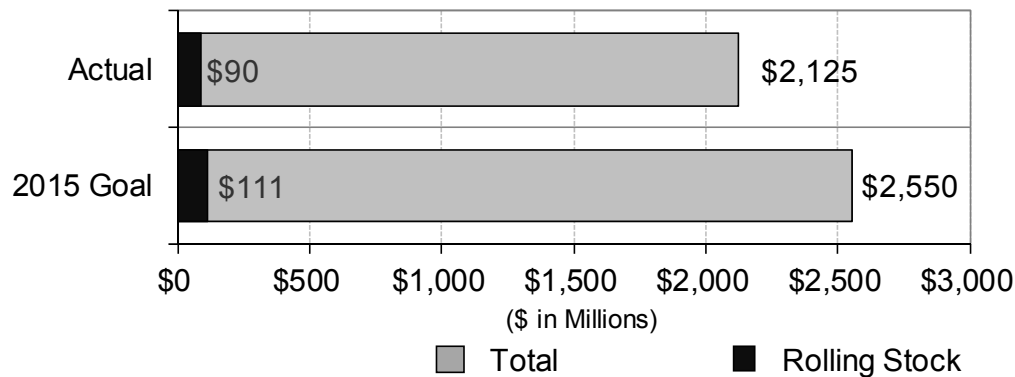
Year-to-Date Major Completions



	Count	Percent	Change from Prior Month
GREEN = Completions made/forecast w within Goal	8	32%	↑ 2
YELLOW = Completions delayed beyond Goal (already achieved)	11	44%	↑ 3
RED = Completions delayed beyond Goal (not yet achieved)	6	24%	-
Total	25	100%	↑ 5

Budget Analysis

2015 Annual Goal \$2,550 (\$ in millions)
 2015 Actual 83% of Annual Goal
 Forecast left to Complete 0% (\$1)



Year-to-Date Agency Breakdown

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

Capital Projects – Major Completions – December 2015 – Schedule Variances
Actual Results Shaded

Project	Completion	Goal	Forecast
6 All-Agency Red Completions (3 new this month)			
NYCT			
<i>Buses & Depots</i>			
72 Diesel Buses (New Item)	Construction	Dec-15 \$41.8M	Mar-16 \$39.2M
All but one bus have been delivered and accepted. The last bus was damaged during transport and is being repaired. Project cost decreased due to lower negotiated price.			
<i>Security</i>			
Electronic Security - Under River Tunnel Ph 2	Construction	May-15 \$31.0M	Mar-16 \$27.5M
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. Due to restricted train parked area, the remaining work in Montague Tunnel can only be completed under GO.			
<i>Signals & Communications</i>			
PA/CIS at 45 Stations - Install Cable (New Item)		Dec-15 \$56.1M	Dec-17 \$56.1M
Project delayed to 2017 due to slow progress of work. In-house forces were diverted to address other safety sensitive projects.			
LIRR			
<i>Signals & Communications</i>			
Centralized Train Control	Construction	Jun-15 \$12.9M	May-17 \$12.9M
As a result of a re-evaluation of the Theater Operations, it was determined that a re-design of the Theater is necessary.			

Project	Completion	Goal	Forecast
MNR			
<i>Power</i>			
Harlem River Lift Bridge Cable/Breaker House /Controls	Construction	Aug-15 \$25.4M	Jun-16 \$25.4M
Due to elevator subcontractor performance issues, the project completion date has slipped again and is now forecasted for June 2016.			
MTACC			
<i>Second Avenue Subway</i>			
63rd St. Station Upgrade (C3) (New Item)	Construction	Dec-15 \$208.9M	Mar-16 \$225.3M
Delay is due to contractor productivity rate. Additional contingency was added to the construction contract based on analysis of current and future additional work order needs associated with field conditions and design revisions.			

Capital Projects – Major Completions – December 2015 – Schedule Variances
Actual Results Shaded

Project	Completion	Goal	Forecast
11 All-Agency Yellow Completions (3 new this month)			
NYCT			
<i>Buses & Depots</i>			
Bus Time Customer Information System (New Item)	Construction	Apr-15 \$48.8M	Dec-15 (A) \$47.4M
Contract extended to facilitate the transition of bus time from capital funded maintenance to operating maintenance under NYCT EMD when the contractual O&M for the on-board bus hardware runs out on December 31, 2015.			
<i>Track & Switches</i>			
2015 Track & Switch Program (13 Projects) - 2nd Qtr (New Item)	Construction	Jun-15 \$149.6M	Dec-15 (A) \$164.2M
Overall 2nd Qtr. Track work delayed but completed in December 2015 due to re-scheduled work at Lexington Ave & 42 Shuttle because of track access and availability of Go's			
<i>Signals & Communications</i>			
Duct Rehabilitation and Negative Cable - Steinway Tube	Construction	Jul-15 \$49.7M	Sep-15 (A) \$51.8M
Delay was due to limited availability of general orders in the Steinway Tube. Increased cost reflects the extended project duration.			
CBTC Test Track Pilot - Culver Line (New Item)	Construction	Jul-15 \$97.5M	Dec-15 (A) \$97.5M
Project completion postponed by 3 months but completed in December due to delay in IOP (interoperability) testing and delay in delivery of Digimove software. Because of evolution of software development for Digimove train, there were 7 different releases from Sept '14 thru June '15. First Digimove train for mature software was released on July 1st.			
<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.			

Project	Completion	Goal	Forecast
LIRR			
<i>Power</i>			
Replace Hillside & Kew Gardens Substations	Construction	Jun-15 \$25.5M	Oct-15 (A) \$25.5M
The delay was due to scheduling conflicts between Con Ed and LIRR.			
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.			
<i>Stations</i>			
North White Plains Parking Garage	Construction	Jun-15 \$41.8M	Oct-15 (A) \$41.8M
The delay was due to subcontractor performance issues.			
B&T			
<i>Marine Parkway Bridge</i>			
Substructure & Underwater Scour Protection	Construction	Jul-15 \$26.5M	Oct-15 (A) \$26.5M
Delay was due to unforeseen field conditions experienced during construction.			
<i>Bronx Whitestone Bridge</i>			
Necklace Lighting	Construction	Jul-15 \$12.5M	Nov-15 (A) \$12.5M
Delay was due to severe winter weather conditions and facility coordination and access issues.			
MTACC			
<i>East Side Access</i>			
55th Street Vent Plant (CM013A)	Construction	Apr-15 \$58.9M	Nov-15 (A) \$58.9M
Initially 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 – December 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) \$201.4M
Decrease in forecasted cost was due to the early completion of the contract. Savings realized as part of the closeout process.			

MTA Capital Program Commitments & Completions Quarterly Report of 2014 Delays

2014 Major Commitments – Quarterly Update – December 2015

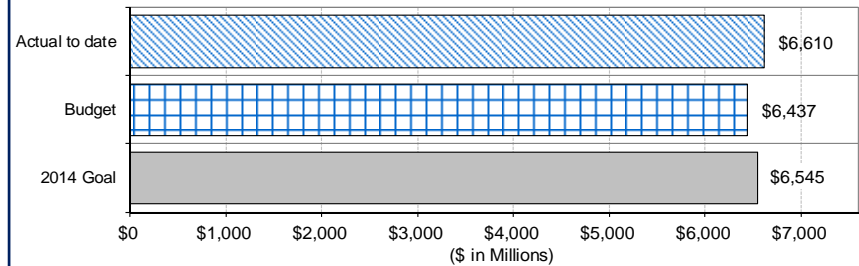
Major goals delayed beyond 2014 continue to be tracked until committed. The status of these 2014 major commitments are reported on a quarterly basis. All variances are discussed on the following pages.

In 2014 agencies set a goal of 55 major commitments. Within 2014, \$5.8B was committed, including 39 of the major commitments. The remaining 16 major commitments slipped beyond year-end, representing a total value of \$1.3 billion.

Through 2015, eight of the 16 projects have been committed. The remaining eight commitments have a combined goal value of nearly \$700 million. All but two of these will have been committed by the end of 2016: NYCT's ADA Phase 2 at 57th Street and the Rutgers Tube restoration project.

Budget Analysis

Forecast \$7,352
 2014 Goal \$6,545 (\$ in millions)
 Left to Commit 10% (\$742)



Actual Goal	MTA-wide 2014 Major Commitments																								Post 2015
	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	
Total 2014	55																								8
Jan-14	2	2																							
Feb-14	4		1	1	1	1																			
Mar-14	5		1	2	2																				
Apr-14	3				2			1																	
May-14	2				2																				
Jun-14	6					1	1			1		1													2
Jul-14	6									1	2	1			1			1							
Aug-14	4																	2					1		1
Sep-14	3											1	2												
Oct-14	5												3					1							1
Nov-14	8												5	1		1									1
Dec-14	7											4													3

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

GREEN = Commitments made/forecast within Goal

RED = Commitments delayed beyond Goal (not yet achieved)

YELLOW = Commitments delayed beyond Goal (already achieved)

Prior Year Major Commitments – December 2015 – Schedule Variances
Actual Results Shaded

Project	Commitment	Goal	Forecast
8 All-Agency Red Commitments			
NYCT			
Stations			
ADA: Phase 2; 57th Street/7th Ave	Construction Award	Nov-14 \$35.9M	May-17 \$66.8M
Project schedule slipped again due to existing ducts in the vicinity of excavation which impact design completion schedule. The design team has been directed to relocate one of the elevators in order to accommodate the duct bank containing 14 ducts. The design schedule was delayed further due to the need to study alternatives. Design of new scheme started in September 2015. Project cost increased reflecting estimates of the new design scheme.			
Station Components: 4 Stations (Jamaica)	Construction Award	Dec-14 \$37.8M	Mar-16 \$66.0M
This project originally included 6 stations, but was reduced to 4 during design. The cost increase and initial delay were 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 were due to new scope for painting and a more recent delay caused by the rescheduling of the bid opening to late January, 2016.			
Facilities			
HVAC Repair and Maint. for DCE Facilities Phase 2	Construction Award	Dec-14 \$53.6M	Dec-16 \$53.6M
Project is split to accommodate multiple equipment purchases. 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 Dec 2016 from Dec 2015.			
Bus Replacement			
Purchase 231 Articulated Buses	Purchase Award	Jun-14 \$245.5M	Mar-16 \$202.0M
Procurement Staff Summary approved by the MTA Board in November. Contract award is subject to State Comptroller review which can last up to 90 days. The number of Articulated buses was reduced from 256 to 231 in order to fund the purchase of 72 standard buses. Cost decrease reflects the reduced number of buses.			

Project	Commitment	Goal	Forecast
Sandy Restoration			
Clark Street Tube Restoration	Construction Award	Aug-14 \$77.4M	May-16 \$124.1M
Clark St Tube award delayed due to schedule adjustments on other tube projects as a result of coordination with Operations Planning based on service and community impact as well as constructability and programmatic concerns. Project cost increased reflecting RTA estimate.			
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.			
MNR			
Sandy Restoration			
Power Infrastructure Restoration: 4 Substations	Construction Award	Oct-14 \$48.5M	Jun-16 \$49.2M
Delay due to prioritization of design work on Harlem River Lift Bridge facility houses over design of substations. The additional delay is due to extended negotiation with NYSEG regarding remaining scope of work and that final commitment is now planned for early 2016. 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	Jun-16 \$15.0M
Delay due to additional time needed for compilation of technical design specifications and necessary compliance reviews. Additional delays are due to the resolution of finalizing EACs. Reduction in budget reflects a revision in the scope of work for the bus washer relocation.			

Prior Year Major Commitments – December 2015 – Schedule Variances
Actual Results Shaded

Project	Commitment	Goal	Forecast
8 All-Agency Yellow Commitments (1 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 Street 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 the remainder was committed in 2015.			

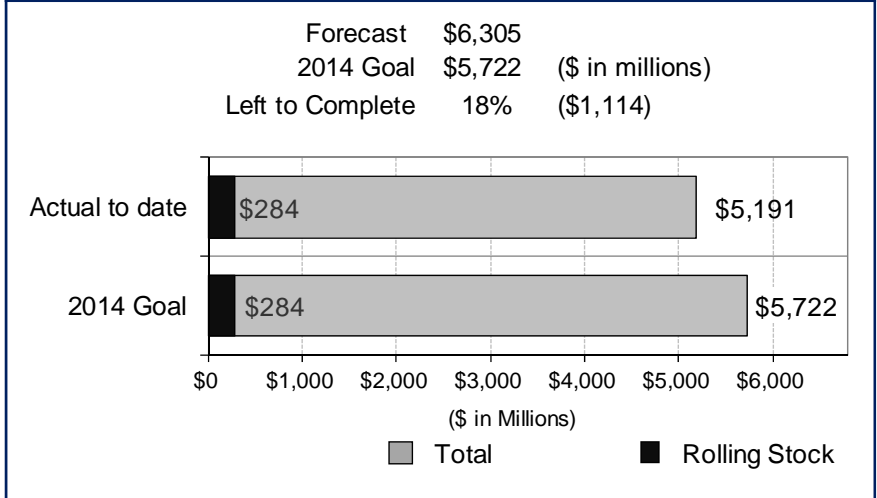
Project	Commitment	Goal	Forecast
MTA Bus			
Depots			
Bus Command Center	Construction Award	Aug-14 \$8.7M	Jun-15 (A) \$17.1M
The project award was delayed due to additional scope added to the contract, such as ADA compliance and electrical work, which require additional drawings and specifications. Final 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
Procurement methodology has shifted to an RFP process which affords the MTA the opportunity to work through access, coordination and other perceived risks with each contractor in an effort to achieve the lowest price possible. The decision was also made not to have a large option, but include major work in the base contract. Forecast award date was shifted from Dec 2014 to Feb 2015 as a result of ongoing negotiations. Actual reflects award value including contingency.			
Harold Structures Part 3D (CH057) (New Item)	Construction Award	Aug-14 \$106.5M	Dec-15 (A) \$58.7M
Award date was delayed due to adjustments to the overall Harold schedule and the completion of the predecessor work and resource availability in Harold. The budget change was the result of a favorable bid and repackaging of work. There will be approximately \$29M in options to be awarded in the future, of which \$16M is funded through the 2015- 2019 capital program.			
MTA Police Department			
PD Communications			
MTA Police Radio Project	Design- Build Award	Jul-14 \$90.3M	Jun-15 (A) \$71.0M
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 initial support costs.			

2014 Major Completions – Quarterly Update – December 2015

Major goals delayed beyond year-end continue to be tracked until substantially complete. The status of these 2014 major completions are reported on a quarterly basis. Variances are discussed on the following pages.

In 2014 agencies set a goal of 46 major completions. Within 2014, \$4.5B was completed, including 28 major completions. The remaining 18 major completions slipped beyond year-end, representing a total value of \$1.8 billion. Of these projects, nine projects were completed in 2015. Eight of the nine remaining delays are forecast for completion in 2016 with one delay, the LIRR's F Circuit Breaker House, now forecast for completion in 2017.

Budget Analysis



Actual Goal	MTA-wide 2014 Major Completions																								Post 2015
	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	
Total 2014 46	4	3	1	2	1	1	2	4	2	3	2	3	2	0	1	0	0	0	1	1	1	0	1	2	9
Jan-14	4																								
Feb-14		3									1														
Mar-14			1									1													
Apr-14				1																					1
May-14					1						1														
Jun-14						1						1				1				1			1		
Jul-14				1									1											1	2
Aug-14							1	1			1														1
Sep-14									2												1				1
Oct-14								1		1													1		2
Nov-14								2			1														1
Dec-14											2	1							1						1

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

GREEN = Completions made/forecast within Goal

RED = Completions delayed beyond Goal (not yet achieved)

YELLOW = Completions delayed beyond Goal (already achieved)

Prior Year Major Completions – December 2015 – Schedule Variances
Actual Results Shaded

Project	Completion	Goal	Forecast
9 All-Agency Red Completions			
NYCT			
<i>Track</i>			
Track & Switch Program (4 projects) 3rd Quarter	Construction	Sep-14 \$33.7M	Jan-16 \$36.5M
Remaining work at SSI Bergen I/H Track Wrap-up. Project completion pending track access needed to complete the work. No GOs are currently scheduled.			
<i>Stations</i>			
Station Rehab: Smith-9th St & 4th Ave	Construction	Jul-14 \$40.7M	Feb-16 \$44.2M
Project now delayed to February 2016. Project was assigned to Surety in September 2013. The Surety was unable to submit the required deliverables by the end of March 2015. Completion is postponed further due to delay in completing as-built drawings and punch list work and surety has yet to commence the required repairs on the broken drain lines and water service. Project costs are being evaluated due to extended contract duration.			
<i>Buses</i>			
AVLM: Paratransit Vehicles	Procurement	Dec-14 \$35.8M	Jun-16 \$37.7M
The substantial completion has to be delayed to accommodate deployment of new servers. A prior delay of 12 months and a cost increase of \$2 million were due to the need to pre-wire additional 433 Paratransit vehicle.			
LIRR			
<i>Power</i>			
F Circuit Breaker House	Construction	Oct-14 \$7.2M	Feb-17 \$7.2M
Continued delay due to a re-evaluation of the project's need to be informed by a power load study. Forecast has slipped to 2017.			
<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
MTACC			
<i>East Side Access</i>			
GCT Concourse Finishes Early Work, CM014A	Construction	Apr-14 \$56.7M	Feb-16 \$58.0M
Delay due to substantial SCADA (supervisory control and data acquisition) redesign work. Delays in the delivery of the medium voltage switchgear has delayed forecasted substantial completion. Additionally, a facility control room leak has developed and mitigation is required. Current month delay due to productivity being lower than expected.			
Harold Structures - Part 1 (CH053)	Construction	Aug-14 \$326.1M	Feb-16 \$311.5M
Delays to cutover of the new ductbank continues to impact CH053 as well as resource issues are pushing out substantial completion to 2015. AMTRAK has requested additional time for a bum-in period for the new feeders. Budget adjustment reflects revised estimate to complete.			
<i>#7 Extension</i>			
Systems, Finishes, and Core & Shell of Site A (Vent Building)	Construction	Oct-14 \$580.1M	Feb-16 \$596.3M
Revenue Service began September 13, 2015. There are punchlist items, while not required for opening, which are required for substantial completion.			
MTAPD			
K-9 Training Facility	Construction	Jul-14 \$15.0M	Mar-16 \$15.5M
Delays for this Metro-North managed project have been due to unforeseen field conditions at the construction site, which also increased the forecast value.			

Prior Year Major Completions – December 2015 – Schedule Variances
Actual Results Shaded

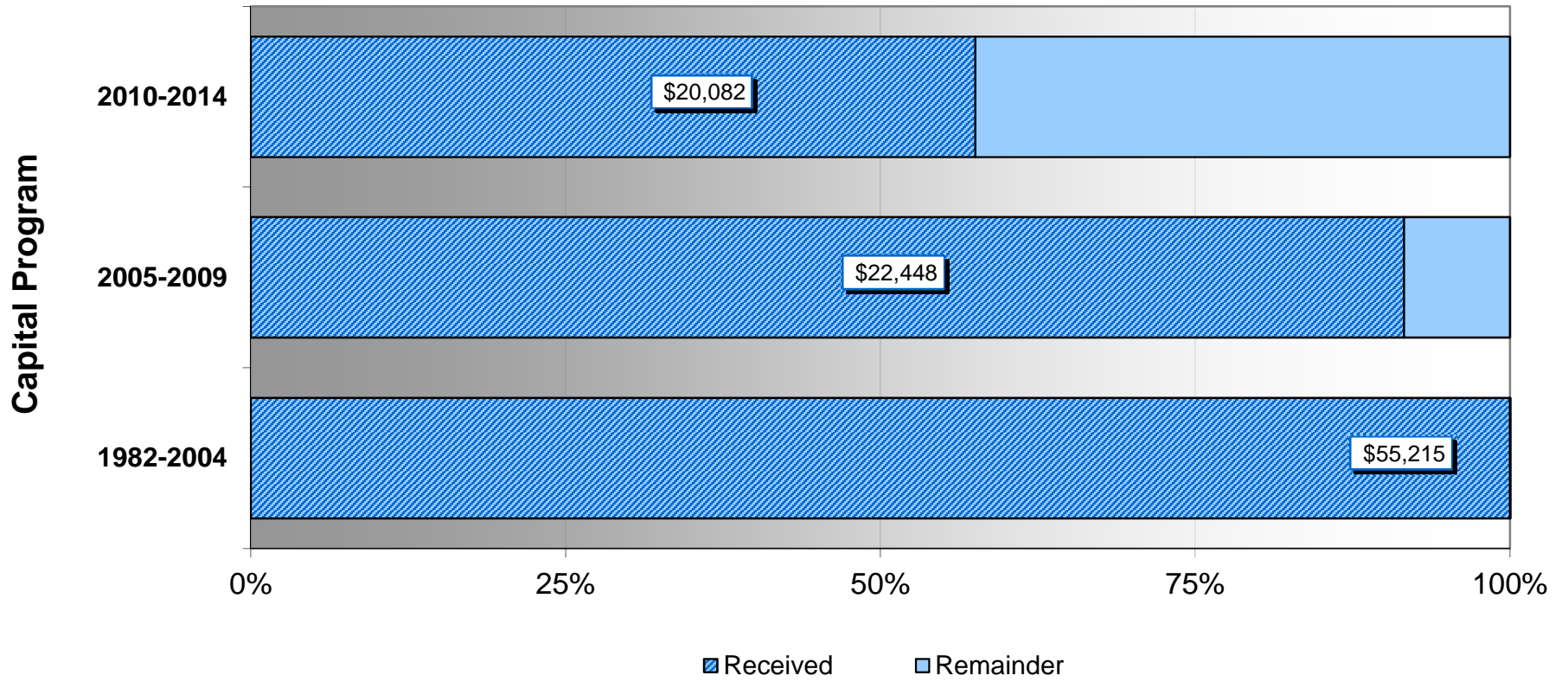
Project	Completion	Goal	Forecast
9 All-Agency Yellow Completions (3 new this quarter)			
NYCT			
<i>Track & Switches</i>			
Track & Switch Program (19 Projects) - 2nd Quarter	Construction	Jun-14 \$193.3M	Mar-15 (A) \$189.1M
2nd Quarter completions had been impacted by scheduling conflicts, particularly 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	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.			
<i>Line Structures</i>			
Culver Viaduct Rehab Ph 3 (New Item)	Construction	Oct-14 \$49.8M	Dec-15 (A) \$63.0M
Project schedule slipped due to additional repair quantities and site access issues including private property and delay in completing the Smith- 9th Streets Station project.			
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).			
<i>West of Hudson</i>			
West of Hudson Track Program (New Item)	Construction	Jul-14 \$21.2M	Dec-15 (A) \$17.7M
Work on this project was delayed due to the re- deployment of resources for other MNR priority projects. Budget decrease reflects a revised cost to complete.			

Project	Completion	Goal	Forecast
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	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.			
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.			
<i>East Side Access</i>			
Harold Structures Part 2 A (CH054 A) (New Item)	Construction	Jun-14 \$80.0M	Nov-15 (A) \$61.1M
Delay was initially due to the re- design of the 12 kV feeder ductbank and on- going resolution of change order work for storm sewer construction. The contract completion was further delayed by Relay Transmission Unit and Snow Melter Unit completion. Budget adjustment reflects revised estimate to complete.			

Status of MTA Capital Program Funding

Capital Funding (December 31, 2015)

\$ in millions



Capital Funding Detail (December 31, 2015)

\$ in millions

	Funding Plan	Receipts		
	Current	Thru November	This month	Received to date
2005-2009 Program				
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	2,195	-	2,195
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	1,153	1,153	-	1,153
Bonds from New Sources	5,624	5,624	-	5,624
Other (Including Operating to Capital)	138	126	-	126
Total	24,508	22,448	-	22,448

	Funding Plan	Receipts		
	Current	Thru November	This month	Received to date
2010-2014 Program				
Federal Formula, Flexible, Misc	\$5,839	\$5,614	\$ -	\$5,614
Federal High Speed Rail	295	295	-	295
Federal Security	206	100	-	100
Federal RIFF Loan	-	-	-	-
City Capital Funds	778	558	-	558
State Assistance	770	150	-	150
MTA Bus Federal and City Match	132	69	-	69
MTA Bonds (Payroll Mobility Tax)	12,703	7,735	612	8,347
Other (Including Operating to Capital)	1,529	625	-	625
B&T Bonds	2,111	867	64	931
Hurricane Sandy Recovery				
<i>Insurance Proceeds/Federal Reimbursement</i>	9,376	3,177	-	3,177
PAYGO	160	160	-	160
<i>Sandy Recovery MTA Bonds</i>	758	-	-	-
<i>Sandy Recovery B&T Bonds</i>	230	55	-	55
Total	34,887	19,407	676	20,082

Risk Assessment Brief

East Side Access

CM007- Grand Central Terminal Station Caverns and Tracks

January 25, 2016



MTA Agency: MTA Capital Construction

Risk Assessment Report Date: May 2015

Project: East Side Access
 CM007- Grand Central Terminal Station Caverns and Tracks

Status of Project (at time of assessment): In Procurement

Project Description

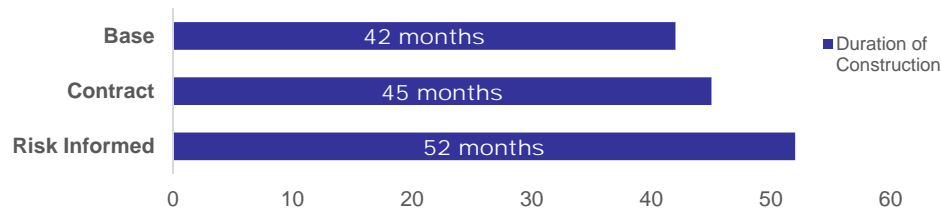
The Grand Central Terminal (GCT) is the final station for the East Side Access project. The work activities of this Contract cover architectural, structural, mechanical, plumbing, and electrical. The work of this Contract includes the construction of permanent structural concrete lining, interior structures, and fit-out of the GCT Caverns previously excavated by others beneath the existing Grand Central Terminal located in Manhattan. The Work also includes installation of track, special track work and third rail along the Project alignment.

Risk Assessment Preliminary Draft Findings

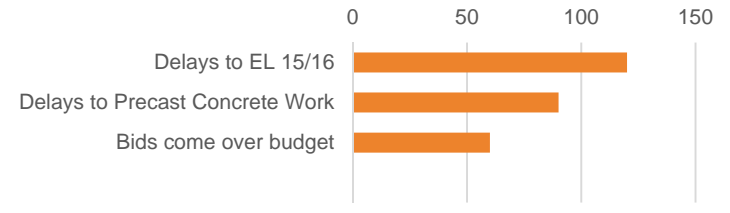
The information presented within this report is based upon preliminary risk simulation results. The project team will refine the risk assessment following award of the contract. The simulation results at the 80% Confidence Level show a potential duration of 52 months prior to mitigation, adding 10 months to the project baseline schedule duration of 42 months. Mitigations actions, which include increasing the contract duration to 45 months, have been implemented to reduce the schedule risk. The project estimate used for the risk assessment was \$768 million, which includes 5% Pre-Bid and 7.5% Post-Bid contingency. The Risk Informed cost results at the 80% Confidence Level were significantly higher than the project estimate. This was primarily driven by a large market risk factor which contributed approximately 75% of the total cost exposure. Favorable market conditions and the Project Teams mitigation measures have resulted in much more favorable Bid Results. The associated market risk has not been realized and the project is expected to be awarded within the current budget.

Preliminary Risk Informed Cost and Schedule Results – Prior to Mitigation

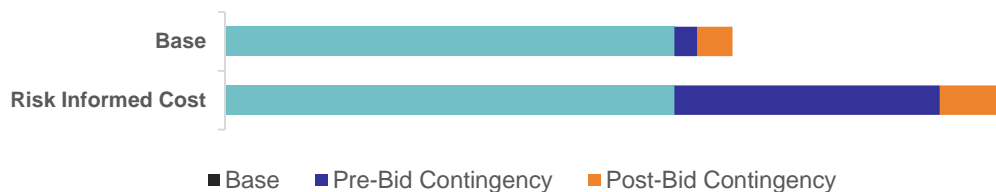
Risk Informed Schedule @ 80 % vs. Baseline Schedule



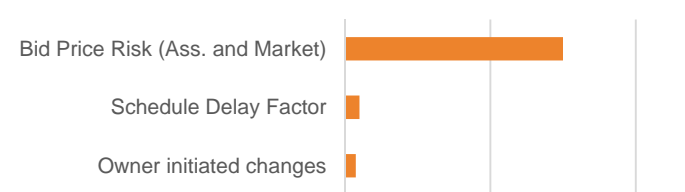
Top Schedule Risks (Relative Contribution)



Overall Project Cost @ 80% Risk Informed Project Costs



Top Cost Risks (Relative Contribution)





Summary of Major Schedule Risks & Mitigations

Risks	Mitigation Measure	Actions	Time Frame for Mitigation
Top Schedule Risks			
Delays to Elevator 15 & 16 Installation due to utility interferences, commissioning problems, excavation, and MNR Restrictions	EL 15/16 is not a requirement for Revenue Service or a core work element of this package. The risk analysis demonstrated that inclusion of this non-essential work would likely cause delays to completion. The project team decided to remove this work from CM007.	Mitigated	Complete
Delays to Pre-Cast Concrete Delivery (i.e. late submittals, mock-up and quality on-site issues)	The fabrication and installation of pre-cast concrete elements are critical to the contract work and seen as a significant schedule risk. As a mitigation, the project team has extended the duration of the contract by 3 months. This will enable the contractor more time to fabricate the first pre-cast concrete prior to their access to site. In addition, the color specification and tolerances were relaxed to avoid potential quality issues.	Mitigated	Complete
Bids come over the budget resulting in extended procurement	At the time of the risk workshops in April of 2015, the team was greatly concerned with market conditions, lack of adequate bidders, and recent past experience on large procurements where bids had significantly exceeded established budgets. This risk did not occur as the project experienced a good and competitive procurement for this package.	Not Realized	Complete



Summary of Major Cost Risks & Mitigations

Risks	Mitigation Measure	Actions	Time Frame for Mitigation
Top Cost Risks			
Market Risk and Estimating Uncertainty	<p>There was significant concern that bids and specifically the electrical cost would be very high. The recent CM014B bid had very high electrical costs and past experience with the cavern fit out had resulted in very high bids that were rejected when this work was packaged as CM012.</p> <p>In addition, the project was undergoing a cost reconciliation exercise with an independent estimator on the track work. The preliminary estimate was \$45m above what Project was carrying. Due to the large discrepancy and the uncertainty with the reconciliation process, the workshop agreed to place a large risk on this category.</p>	Not Realized – favorable bids were received	Complete
Schedule Delay Factor	The majority of the potential cost exposure is due to extended overheads associated with project delays coming from schedule risks and uncertainty. Accordingly, the Project Team will focus primarily on schedule risks which drive cost growth. In addition the contract duration was extended by 3 months reducing risk of delays to SC.	Partially Mitigated - Project Duration was extended.	Ongoing
Owner Initiated Design Changes	This includes the direct cost of design changes as well as the potential cost of delays coming from the time necessary to implement such changes. The project team will be working to minimize changes.	Mitigation Required throughout project duration	Ongoing