



Metropolitan Transportation Authority

Capital Program Oversight Committee Meeting

November 2016

Committee Members

T. Prendergast, Chair

F. Ferrer

S. Metzger

J. Molloy

M. Pally

J. Samuelsen

L. Schwartz

P. Trottenberg

J. Vitiello

P. Ward

C. Wortendyke

N. Zuckerman

Capital Program Oversight Committee Meeting

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

**Monday, 11/14/2016
1:45 - 2:45 PM ET**

1. PUBLIC COMMENTS PERIOD

2. APPROVAL OF MINUTES OCTOBER 26, 2016

- Minutes from October '16 - Page 3

3. COMMITTEE WORK PLAN

- 2016-2017 CPOC Committee Work Plan - Page 6

4. MTACC MONTHLY SECOND AVENUE SUBWAY UPDATE (materials to be distributed at meeting)

5. MTA NEW FARE PAYMENT SYSTEM UPDATE

- New Fare Payment System Update - Page 8

- IEC Project Review on New Fare Payment System - Page 19

6. NYCT CAPITAL PROGRAM UPDATE

- Progress Report on Stations Division - Page 24

- IEC Project Review on Sea Beach Line Renewal Project - Page 55

7. CAPITAL PROGRAM STATUS

- Commitments, Completions, and Funding Report - Page 59

8. EXECUTIVE SESSION

Date of next meeting: Monday, December 12, 2016 at 1:15 PM

MINUTES OF MEETING
MTA CAPITAL PROGRAM OVERSIGHT COMMITTEE
October 26, 2016
New York, New York
1:15 P.M.

MTA CPOC members present:

Hon. Thomas Prendergast
Hon. Fernando Ferrer
Hon. Susan Metzger
Hon. John Molloy
Hon. Mitchell Pally
Hon. Carl Wortendyke
Hon. Neal Zuckerman

MTA CPOC members not present:

Hon. John Samuelsen
Hon. Lawrence Schwartz
Hon. Polly Trottenberg
Hon. James Vitiello
Hon. Peter Ward

MTA Board members present:

Hon. Andrew Albert
Hon. Veronica Vanterpool

MTA Staff Present:

Craig Stewart
Michael Wetherell

MTACC Staff Present:

Michael Horodniceanu
Anil Parikh

LIRR Staff Present

Jim Allen
Debbie Chin
Rich Oakley

MNR Staff Present

Anthony Forcina
John Kennard

Independent Engineering Consultant Staff Present:

Joe DeVito
Mark Cosmedy
Nabil Ghaly
Calvin Gordon
Kent Haggas
Mohammad Mohammadinia

* * *

Chairman Prendergast called the October 26, 2016 meeting of the Capital Program Oversight Committee to order at 2:30 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 September 26, 2016.

Committee Work Plan

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

MTACC Monthly Update on Second Avenue Subway

Mr. Parikh reviewed the status of a number of Critical Milestones and Issues and then reported that NYCT started running trains for Train Crew Training on October 17, 2016, that contractors have added dedicated resources to complete building code requirements, and that while some of the testing has not progressed as scheduled, contractors have agreed to a recovery schedule, which will allow the completion of testing for Revenue Service in December 2016. In its Project Review, the IEC cited the following with respect to station completions: Lexington Avenue/63rd Street Station is expected to be ready for operation in November 2016; 96th Street Station is tracking for completion by the end of December 2016; test completion for all elevators and escalators at the 86th Street Station has slipped 30 days since the IEC's September report, and the integration of all elevators and escalators into the station fire alarm system is now planned for mid-December; and at the 72nd Street Station the test completion date for all elevators and escalators is now November 28, which includes their integration into the fire alarm system. With respect to systems testing, the IEC cited the following: tests are not being completed at the rate required to finish testing of all key systems by the end of December; as of October 21st, key tests were being completed at a rate of 14 per week over the last 5 weeks; and the rate of key test completions needs to increase to an average of over 40 per week to finish by mid-December. With respect to Building Code Verification, the IEC stated that NYCT has completed initial inspections of essentially all of the rooms and spaces in the project, and that the major compliance items necessary for final finish of station rooms have been reduced by 20% since the last IEC report, however, a large number of code deficiencies remain to be addressed by the end of December. Further details of the presentations, and Committee Members' comments and questions with respect thereto are included in the video recording of the meeting maintained in MTA's records.

LIRR Capital Program Update

Mr. Oakley provided an overview of LIRR's 2016 Capital Program Goals, including commitment, start, completion and closeout goals. He then cited several active construction projects, the Cyclical Track renewal Program, and provided details on Jamaica Capacity Improvements and the Main Line Double Track Project. In its Project Review of the Jamaica Capacity Improvements Phase I, the IEC reported that the project is on budget, that it concurs with the progress reported by the agency, and that to date the IEC is satisfied with LIRR's continuous risk mitigation efforts. However, the IEC expressed concern that Force Account labor availability is a risk that could be realized as LIRR projects continue to compete for common services and have similar substantial completion dates. In its Project Review of the Main Line Double Track, the IEC reported that the project is on budget, and while reporting that the project is on schedule, the IEC stated that the revised schedule, in which Phase 1 and Phase 2 activities overlap, is aggressive and has very little float. The IEC then cited its observations that the Force Account availability for signal, communication and third rail installation may be an issue into 2017 and 2018, and that the revised schedule shows aggressive signal delivery and contains cost and schedule risk. Finally, the IEC noted that, consistent with a previous IEC Recommendation, the LIRR has incorporated several milestones in the revised project schedule. Further details of the presentations, and Committee Members' comments and questions with respect thereto are included in the video recording of the meeting maintained in MTA's records.

MNR Capital Program Update

Mr. Kennard gave an overview of MNR's 2016 Capital Program Goals, and then provided details on the Superstorm Sandy Restoration/Resiliency Projects, as well as the Harmon Shop Replacement Design-Build Phase V – Stage I and Stage II Project. In its Project Review of the Hudson Line Sandy Restoration, the IEC agreed with MNR that the schedule for both phases of the project needs to be extended. Further, the IEC noted that the first continuous track outage was completed approximately seven months late, and that to date the contractor has not achieved the production rates planned in the schedule, and that recovery schedules are contingent upon the number of flaggers available. As to the budget, the IEC noted that the existing budget is not sufficient to cover the expected costs of both phases. Finally, the IEC stated that it agrees with MNR's efforts in mitigating the impacts to the schedule and budget, but the IEC also observed that there are still risks to achieving the projected production rate, including the availability of resources. In its Project Review of the Harmon Consist Shop Replacement, Phase V, Stage 1, the IEC agrees with MNR's assessment of the schedule, and that the project is within budget, with remaining contingency sufficient to reach substantial completion. Further details of the presentations, and Committee Members' comments and questions with respect thereto are included in the video recording of the meeting maintained in MTA's records.

LIRR AND MNR JOINT UPDATE ON ROLLING STOCK

Mr. Allen updated the Committee on LIRR's and MNR's M-9 car procurements, including Key Milestones, and the M-9A car procurement, including Key Milestones and Customer Amenity Enhancements. In its Project Review of the M-9 cars, the IEC concurred with LIRR's report on the status of the project, and then cited the following observations, including that several risks that were identified in the 2015 CPOC report, including car weight, schedule and CCTV, are being addressed in the Technical Issues and Resolution Agreement. Further details of the presentations, and Committee Members' comments and questions with respect thereto are included in the video recording of the meeting maintained in MTA's records.

LIRR and MNR Update on Positive Train Control

Ms. Chin reported on progress on the Positive Train Control (PTC) initiative since the last report to CPOC in June, 2016. She stated that the Railroads' current estimated project cost remains \$968M. With respect to schedule, Ms. Chin reported that the contractor's project schedule meets the December 2018 deadline. In its Project Review, the IEC reported that the budget remains at \$968M as last reported in June 2016 and that the latest schedule indicates that the project remains on schedule. Further details of the presentations, and Committee Members' comments and questions with respect thereto are included in the video recording of the meeting maintained in MTA's records.

MTA Capital Program Commitments & Completions and Funding

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

Adjournment

Upon motion duly made and seconded, Chairman Prendergast adjourned the October 26, 2016 meeting of the MTA Capital Program Oversight Committee at 4:00 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

December 2016

Quarterly MTACC Capital Program Update

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

Quarterly Change Order Report

Quarterly Traffic Light Reports

January 2017

NYCT Capital Program Update

- Sandy Recovery and Resiliency Update
- Subway Car Prog
- ram Update
- Bus Procurement Update

February 2017

B&T Capital Program Update

LIRR and MNR Update on Positive Train Control (PTC)

Update on Minority, Women and Disadvantaged Business Participation

March 2017

Quarterly MTACC Capital Program Update

Quarterly Change Order Report

Quarterly Traffic Light Reports

April 2017

NYCT Capital Program Update

NYCT, LIRR, MNR Update on New Fare Payment System

Update on Capital Program Security Projects (in Exec Session)

May 2017

LIRR and MNR Capital Programs Update

June 2017

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

July 2017

NYCT Capital Program Update

September 2017

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

October 2017

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

November 2017

NYCT Capital Program Update

Capital Program Oversight Committee
November 14, 2016

New Fare Payment System Update

Metropolitan Transportation Authority
New York City Transit
Long Island Rail Road
Metro-North Railroad
Bridges and Tunnels



Today's Presentation

Update on Agency Plans and Progress

- Update to our joint presentation to CPOC in April 2016
- Status on current/planned next generation fare payment system-related initiatives:

LIRR/MNR – Mobile Ticketing (MTA eTix™)
– Long Term Strategy Study

NYC Transit – Replacement for MetroCard System
(ongoing procurement)



MTA New Fare Payment System Program Overview

- An **integrated, reliable, and convenient** system
 - Adoptable by MTA agencies & other transit systems in the NY region
 - Based on open standards and open architecture
- A **new interoperable, centralized MTA backend system** that supports business, reporting, operations and other back-office functions
- Focus on a “**bring your own media**” approach to contactless and mobile fare payments
 - Customers benefit from the convenience/security of “open payments” technology
 - Agency-issued media to serve those without their own
- **Expanded sales/service channels:** convenient and accessible “anytime, anywhere”
 - Web, mobile, IVR, and call center support; comprehensive retail network
- A **best-in-class digital experience** (mobile and web)
 - Supports a “One MTA” experience



MTA New Fare Payment System Enhanced Customer Experience



- Common app across agencies
- Ticketing/Fare Payment
- Account management
- Trip planning
- Real-time arrivals and status
- Elevator/escalator status
- Regional integration support
- Variety of other non-payment functions

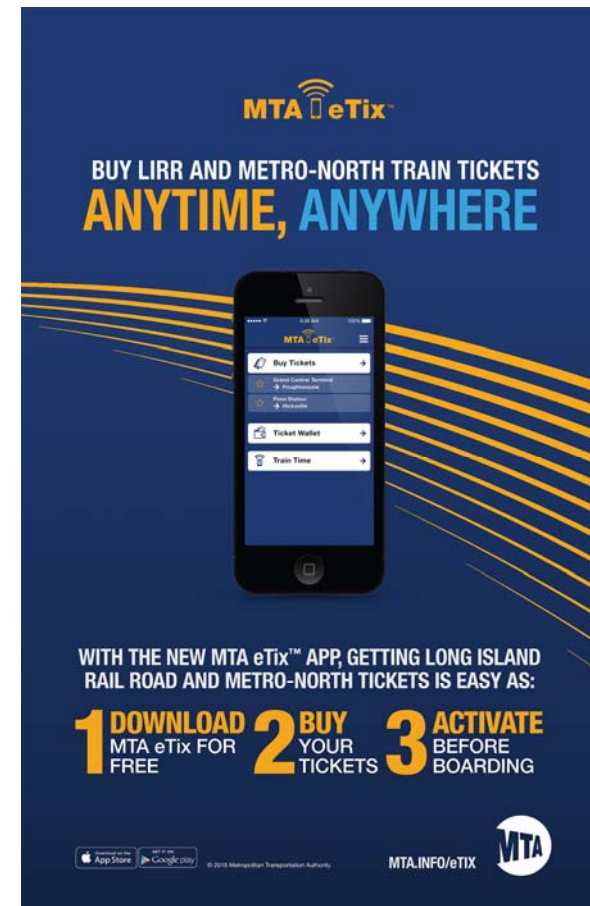


MTA Commuter Railroads Mobile Ticketing (MTA eTix™)

- eTix App rolled out during Summer 2016; Systemwide deployment completed August 22nd
- As of October 30th, 962,000 eTix had been sold, generating \$25 million
- Customer reaction has been favorable, with eTix accounting for 8% of all tickets sold in October (exceeding expectations of 5% after one year)
- eTix represented 9% of all monthly tickets and 15% of all weekly tickets in October
- App updated to support ticket purchase via Apple Pay and MasterPass

Next steps:

- Commence electronic validation (2017)



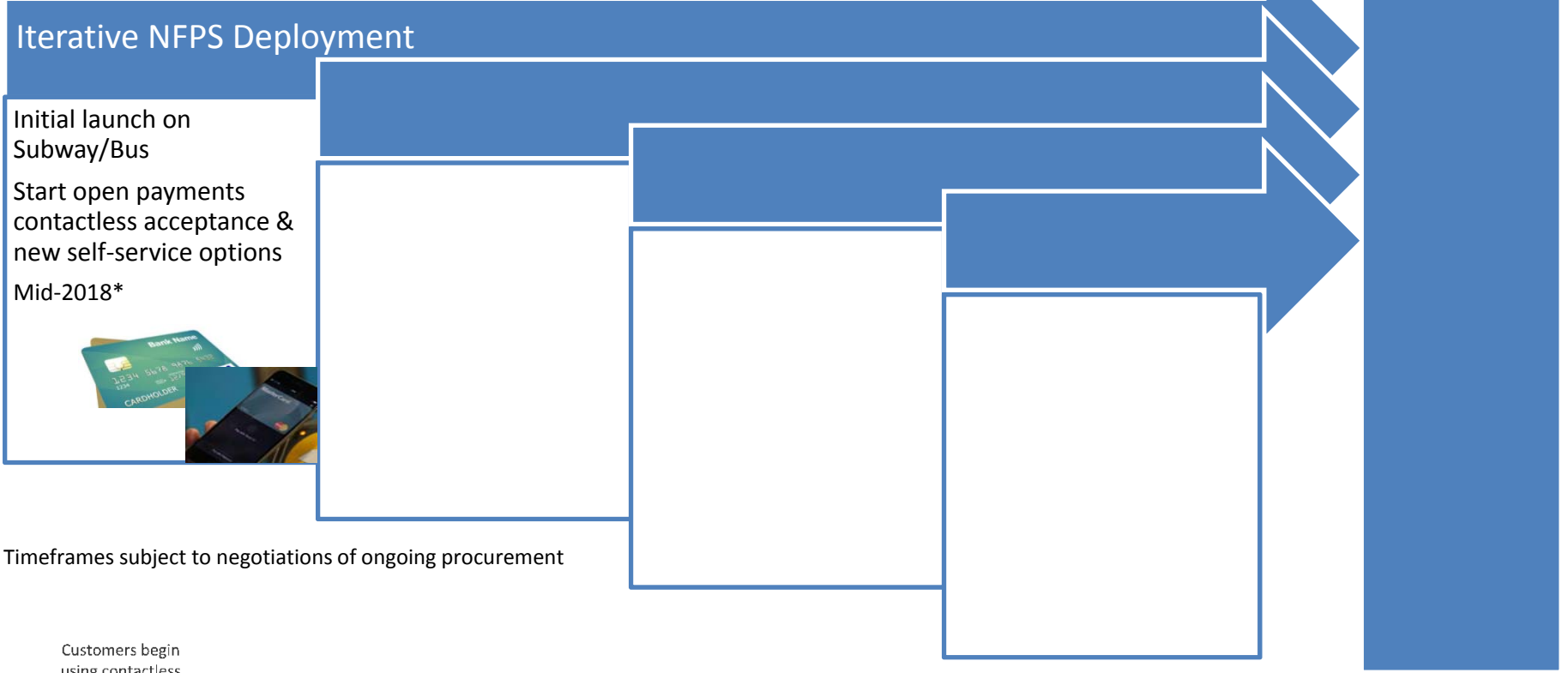
MTA Commuter Railroads

Long Term Strategy Study

- In 2015 the railroads engaged a consultant to assist in the development of a long term fare payment strategy which was completed in April 2016
- Strategy will serve as the foundation for the RR's future system and will shape upcoming capital investments in new ticket selling infrastructure
- Strategy included the following key components which are part of the ongoing joint procurement with NYCT
 - Creation of a Single MTA Customer Account and Travel Interoperability
 - Replacement of End-of-Life Ticket Selling Machines
 - Introduction of a Common “Backend”



NFPS RFP/Procurement Phased Approach



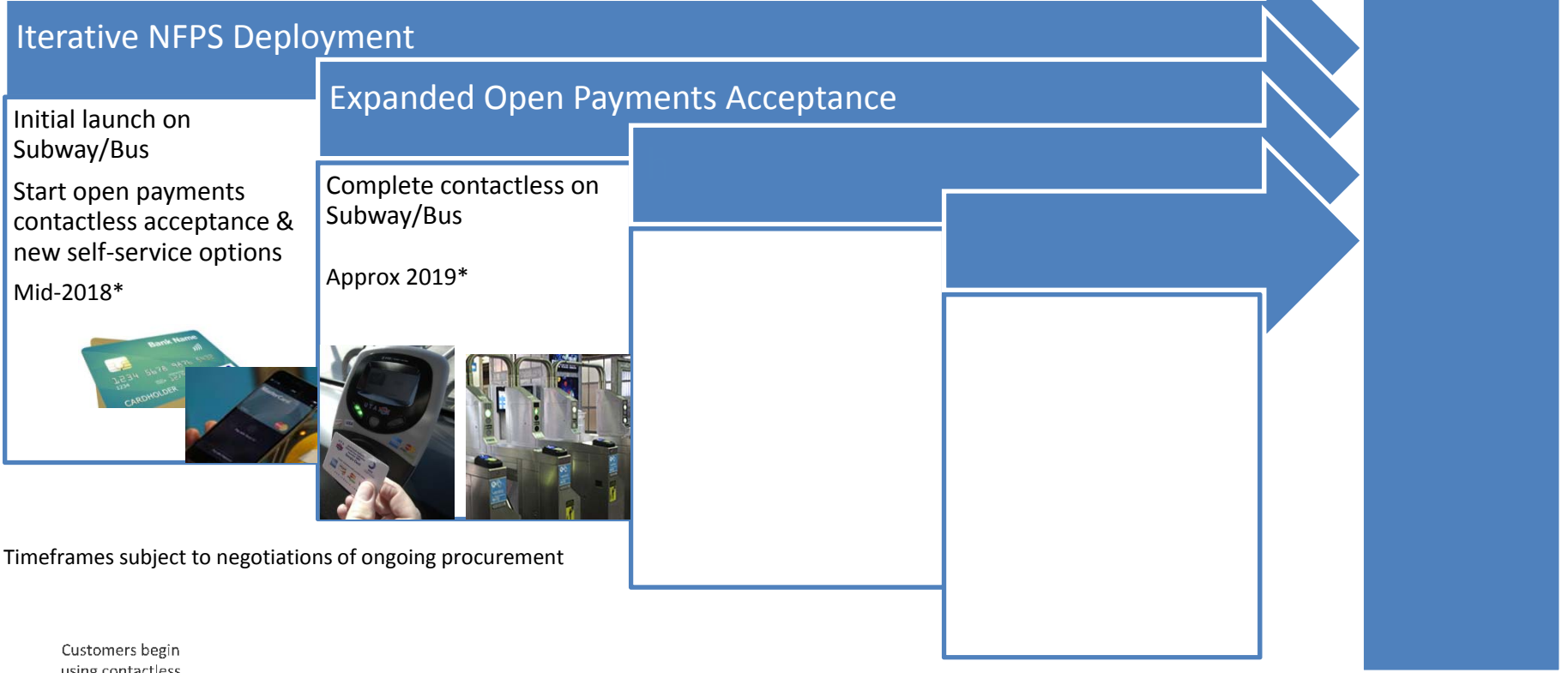
Customers begin using contactless media

Continued adoption of eTix; Iterative NFPS Phase-in & MetroCard Phase-out

Upon completion, retire MetroCard & current LIRR/MNR system



NFPS RFP/Procurement Phased Approach



* Timeframes subject to negotiations of ongoing procurement

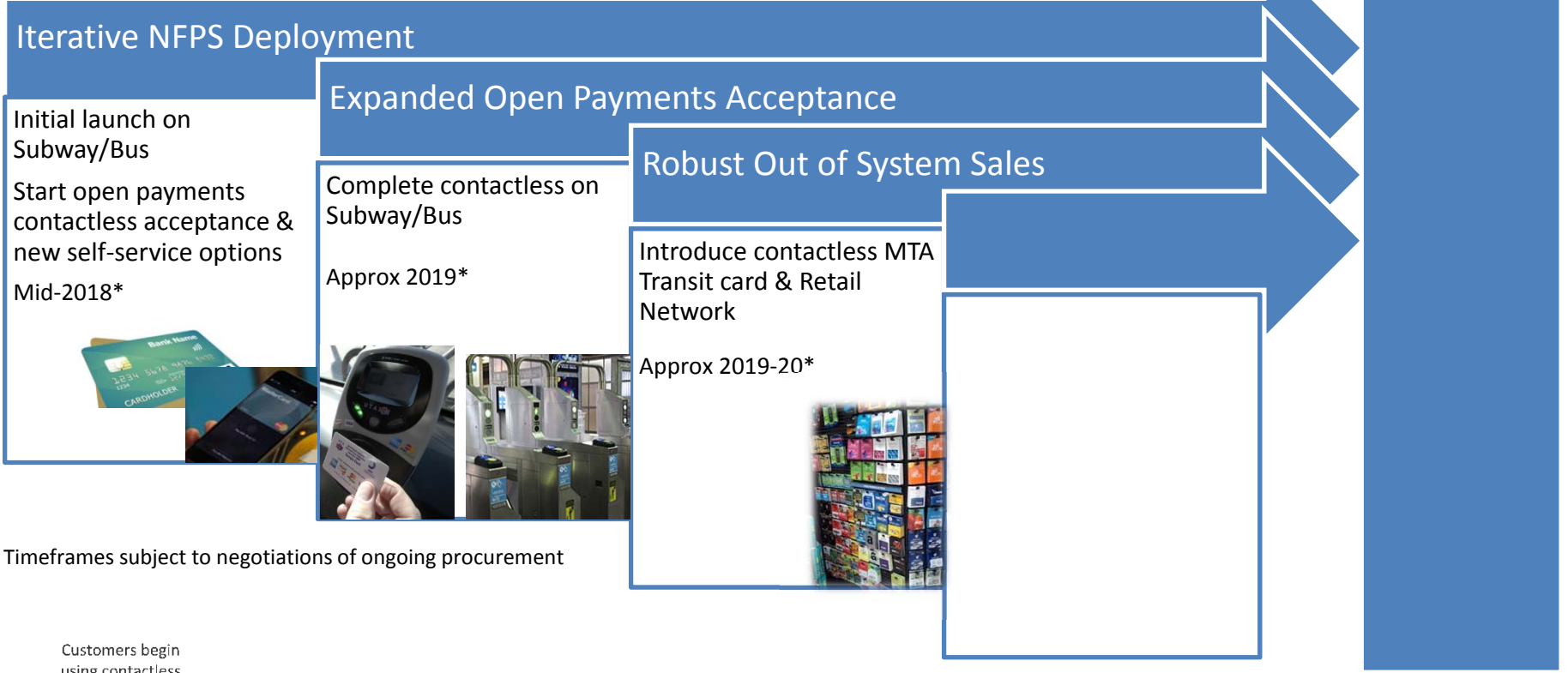
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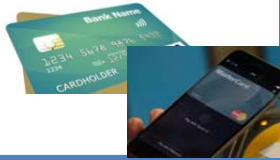
Upon completion, retire MetroCard & current LIRR/MNR system



NFPS RFP/Procurement Phased Approach

Iterative NFPS Deployment

Initial launch on Subway/Bus
Start open payments contactless acceptance & new self-service options
Mid-2018*



Expanded Open Payments Acceptance

Complete contactless on Subway/Bus
Approx 2019*



Robust Out of System Sales

Introduce contactless MTA Transit card & Retail Network
Approx 2019-20*



In-system Sales

New vending machines Deployed across NYCT, MNR and LIRR
Approx 2021-22*



NFPS Completion 2022

* Timeframes subject to negotiations of ongoing procurement

Customers begin using contactless media

Continued adoption of eTix; Iterative NFPS Phase-in & MetroCard Phase-out

Upon completion, retire MetroCard & current LIRR/MNR system

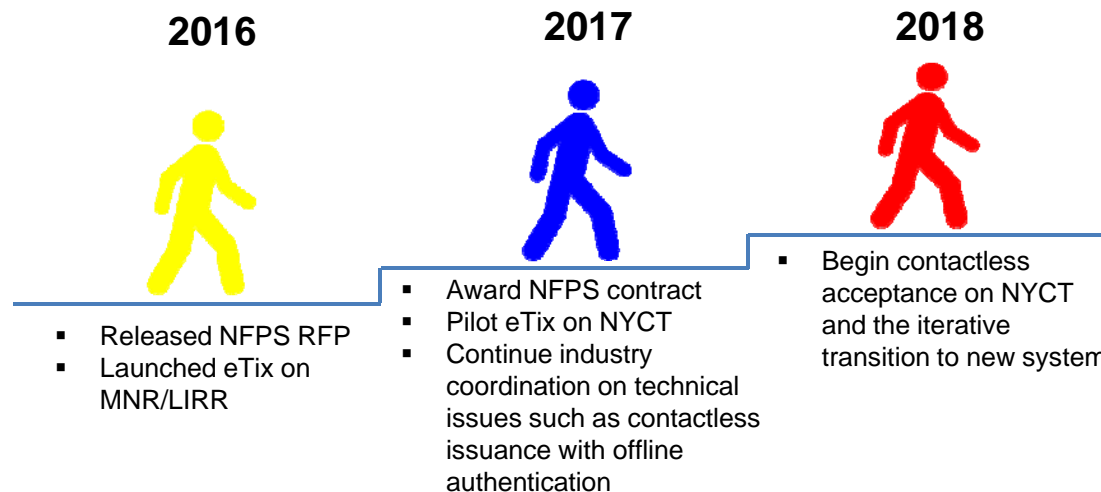


MTA New Fare Payment System Program Status

Accelerated Introduction of the New Fare Payment System & Mobile Ticketing Initiatives

- Completed Mobile Ticketing launch on LIRR & MNR in August 2016; pilot on NYCT in 2017
- Initial rollout of NFPS for NYCT remains in mid-2018; earlier plans had rollout in mid-2020

Near-term Activities:



November 2016 CPOC IEC Project Review



New Fare Payment Systems (NFPS)



November 14, 2016

Strategic Review

- The IEC finds the NFPS RFP and documented requirements are well-suited for a modern fare payment system.
- A preliminary risk assessment has been conducted with the NFPS team. Activities are ongoing to develop the formal risk register inclusive of mitigations.
- NFPS plans for early interoperability testing/piloting with eTix between the commuter railroads and subway will provide valuable insight to help define the NFPS project user experiences and MTA operations. This is seen as good practice.



Schedule Review

- NFPS RFP/procurement and system integrator (SI) contract award are major milestones, with timeline identified in the risk assessment as high risk:
 - The procurement has an aggressive contract award schedule. Procurement & negotiation timelines are typically 12-15 months for high tech projects of this nature.
 - 18 months from contract award to initial deployment is an aggressive timeline. Programs with this complexity typically take 2 years or more for development, test and deployment. A phased development & test plan negotiated with the SI (as called for in the RFP) will be critical.
- Deployment of NFPS is dependent upon Passenger Station Local Area Network (PSLAN) availability by Dec 2017 – recent status indicates PSLAN will be complete on the majority of stations by this date, consistent with initial deployment of NFPS.



Budget Review

- Initial risk assessment results (unmitigated) indicate that the overall project budget of \$450M may be a challenge when full deployment and escalation timeframes are considered
 - The risk assessment is preliminary at this time. IEC and NFPS staff are working to identify risk mitigations to satisfy current budget constraints.
 - SI negotiations may refine the SI work scope & schedule, also creating uncertainty in budget estimates*

*This is expected given where MTA is in the SI procurement process



Railroads – LIRR & MNR

- eTix launched and operational. IEC staff personal experiences have been favorable; good mobile app interface; trained conductors
- Long term interoperability with NFPS could come in many forms, but most important is the consistent and integrated experience that MTA customers will get:
 - e.g. One account, one media, one set of customer service tools for all transportation modes.
 - Indications from staff reinforces this as a high priority.
- No final decision on how eTix and NFPS back office systems will be integrated. Open architecture as required in both eTix and NFPS provide various integration options. One back office, with one fare engine, one mobile app, and one customer service/account management system likely to be more operationally efficient for MTA.



Stations Division

Capital Program Oversight Committee

Dilip Kumar Patel, P.E.
Program Officer
NYCT

November 2016



Presentation Includes:

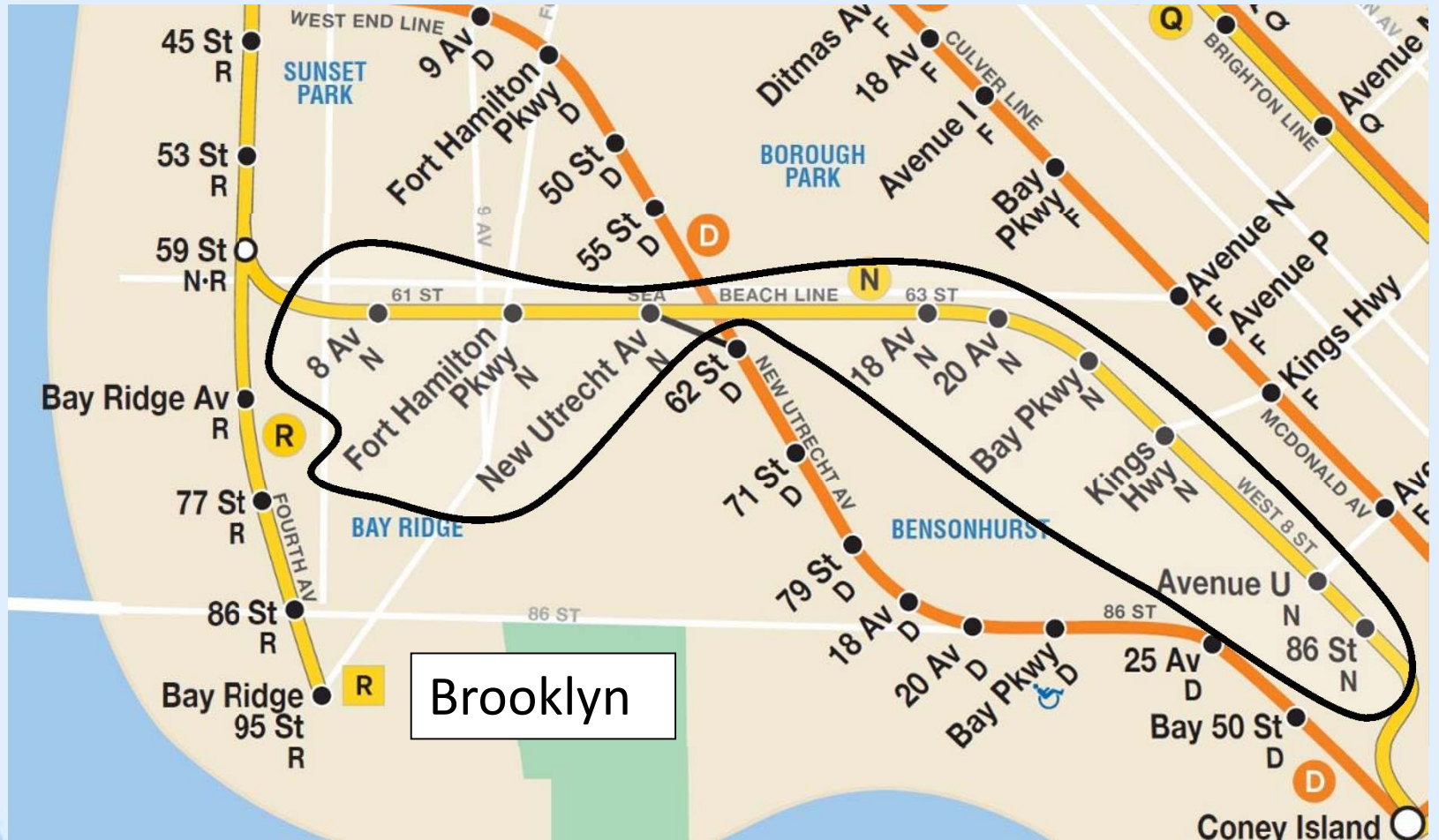
- ▣ Overview of Sea Beach Line Renewal project
- ▣ Overview of 2010-14 & 2015-19 Programs
- ▣ Progress since January 2016 CPOC report
- ▣ Photos of recently completed projects
- ▣ Enhanced Station Initiative (ESI)



OVERVIEW OF SEA BEACH LINE RENEWAL PROJECT



Station Locations



Project Limits approximately 4.5 Miles



Major Scope Items at Typical Station

Parapet Wall

Tunnel Barrel Arches

Control House

Platform Canopy

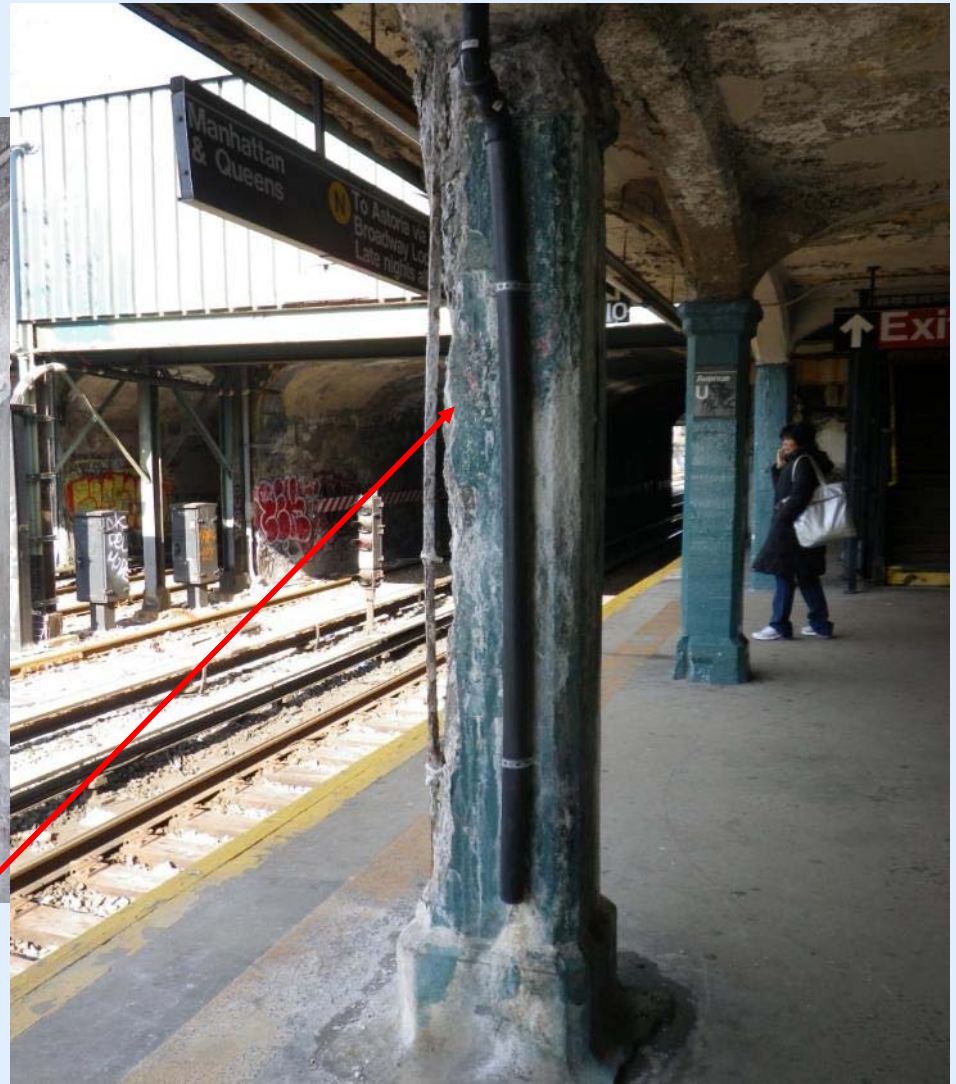


Replace
Platform
Floor



Major Scope Items at Typical Station

New Glass Fiber Reinforced Concrete (GFRC) Panels



Replace Stairs

Replace Columns



ADA Elevators



**Proposed
Elevator**

(8 Ave Station N/B)



ADA Elevators



Project Phases

- ❖ Project has **5 phases** with **48 months** duration:

Phase 1 and 2 12 months

- Mobilization and Preliminary

Phase 3 14 months

- N/B platforms are out of service

Transition between phase 3 and 4 4 months

Phase 4 14 months

- S/B platforms are out of service

Phase 5 4 months

- Final

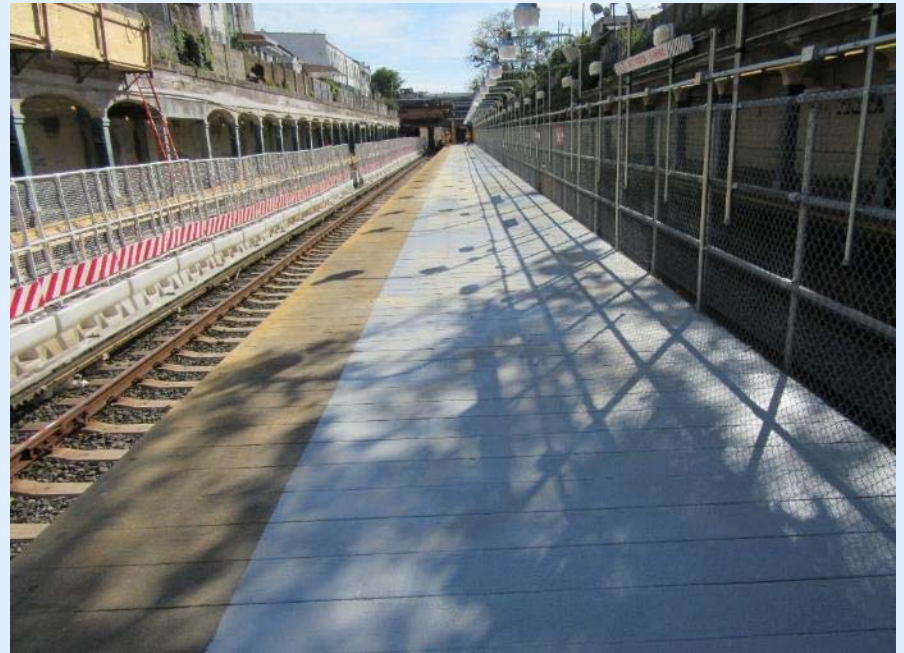
- ❖ Project was awarded in two separate contracts with a total project cost of \$393M.



Phase 1 & 2 (Mobilization and Preliminary Phase) - Completed



8 Ave

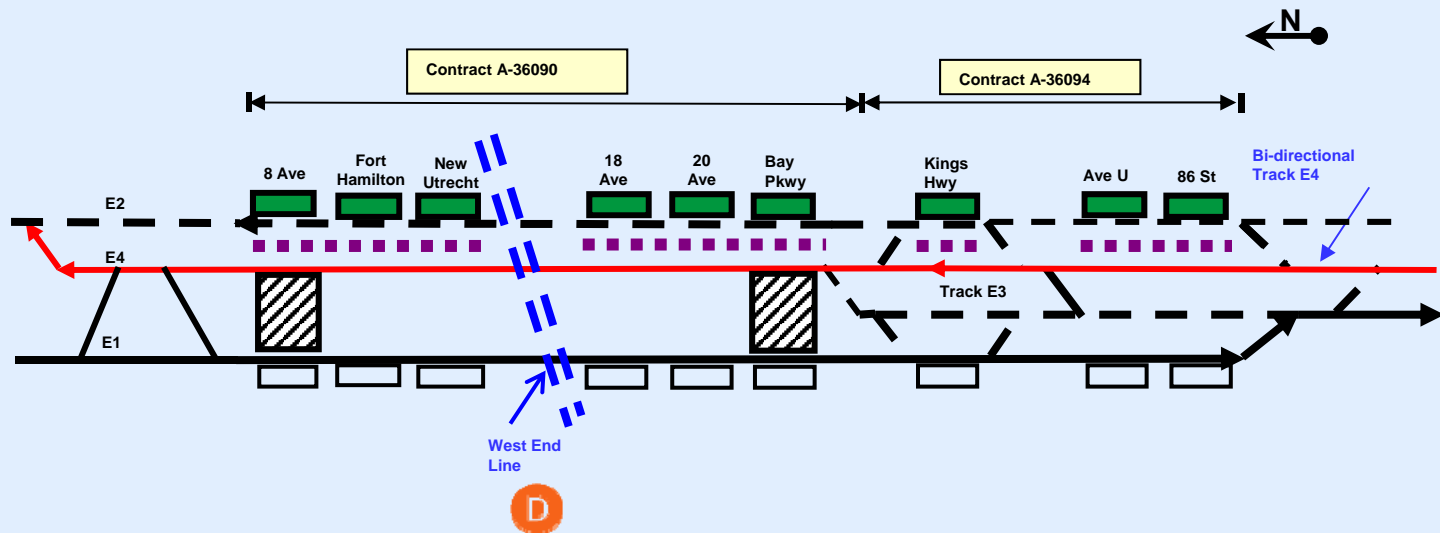


Bay Parkway

Temporary Platforms and Barriers



Phase 3 (N/B out of service) 14 Months- Started Jan 2016



Legend:

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



Phase 3 Construction Progress (North Bound)

- Six (6) platforms are poured
- **10 out of 11** barrel arches are restored
- Glass Fiber Reinforced Concrete (GFRC) panels are released for fabrication
- New Utrecht Station elevator #1 shaft is 60% complete and elevator #2 shaft is 25% complete
- 8th Ave Station N/B elevator design is complete and RFP is issued for S/B elevator
- Platform steel stairs are in fabrication
- Replaced **140** deteriorated concrete platform columns
- Rehab of control houses is ongoing (**6 unmanned and 9 manned**)
- Spalled concrete repair on the line structure is approximately 75% complete

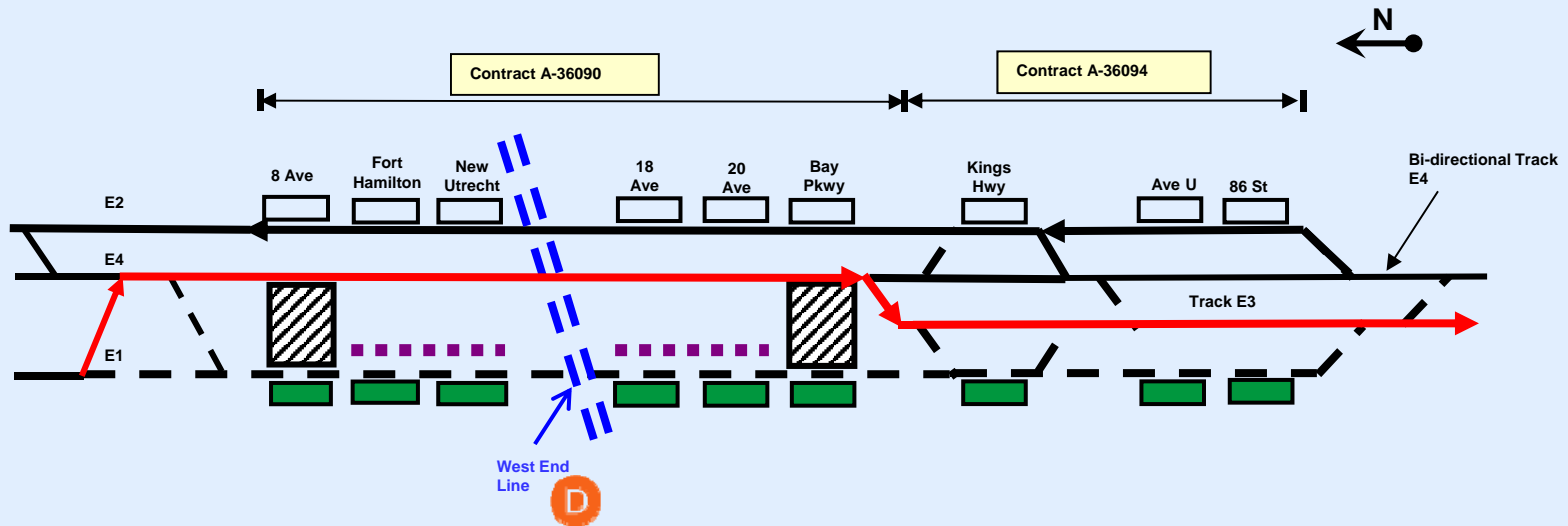


Schedule Status

- **Phase 1 and 2 completed on January 2016**
- **Phase 3 (N/B out of service) started on January 18, 2016. Current completion forecast is first week of May 2017.**
 - **This delay of approximately 4-6 weeks is due to:**
 - **Tamping of the tracks**
 - **Late delivery of steel stairs**
 - **Approval of underpinning system**
- **Phase 4 (S/B out of service) 3rd quarter of 2017 (F)**



Phase 4 (S/B out of service) 14 Months- Starting 3rd Qtr 2017



Legend:

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



Project Risks

Risks	Mitigations
1. Underside of 8 Ave station over LIRR tracks is deteriorated. Opportunity to fix under Sea Beach Project. This added work may negatively impact cost and substantial completion date.	<ul style="list-style-type: none">• RFP for priority work has been issued.
2. Unforeseen structural deterioration may increase cost.	<ul style="list-style-type: none">• For N/B Platforms, RFP was issued and funding is available in project contingencies.
3. Additional communication work may increase cost.	<ul style="list-style-type: none">• Drawings were prepared and RFP was issued for additional work.
4. Installation of 2 new ADA Elevators at 8 Ave Station was added to the project which may negatively impact cost and substantial completion date.	<ul style="list-style-type: none">• RFP for N/B elevator is issued. S/B elevator cost is funded separately. Work is planned to be completed in packages.



OVERVIEW OF 2010-14 & 2015-19 PROGRAMS



Overview of 2010-14 & 2015-19 Programs

Category	# of Stations	Budget (\$ M)	# of Stations	Budget (\$ M)
	2010-2014 Program		2015-2019 Program	
I. Component/SBMP	130	\$ 735	Over 150	\$ 503
II. Renewal	38	\$ 839	20	\$ 408
III. ADA Accessibility	9	\$ 286	16	\$ 740
IV. Elevator/Escalator Replacement	13	\$ 84	33	\$ 334
V. Station Reconstruction	-	\$ -	3	\$ 270
VI. Other Projects	N/A	N/A	N/A	\$ 790 *
Total	190	\$1.9 B	222	\$3.0 B

* Includes order of magnitude cost at conceptual design for Willets Point and \$145M from private developer for GCT Improvement Projects.



PROGRESS SINCE JANUARY 2016 CPOC REPORT



Progress Since Last CPOC Report

Awarded Work at : 5 Stations

- Component work at 4 Stations **J Z**
 - 121 St, 111 St, 104 St, Myrtle Ave. – Jamaica Line
- Access Improvements at Grand Central 42 St. Station **4 5 6**
 - P-10 Stair
 - Mobil Passageway



Completed Construction work at 20 Stations

- **Component** 4 Stations
 - 157 St, 168 St, 181 St – Bway 7th Ave 1
 - 103 St, 59 St, 51 St, Astor Place – Lexington 6
 - Wilson Ave, Atlantic Ave – Canarsie L
 - 5 Ave, 7 Ave – QBL E M F
 - 50 St – 8th Ave E
 - 9 St, 59 St – 4th Ave D N R
- **Renewal Projects** 2 Stations
 - 88 St, 104 St – Liberty A
(all 5 renewals are completed)
- **Elevator Replacement Work** 3 Stations
 - 2 Elevators at Simpson St – White Plains Road 2 5
 - 2 Elevators at Pelham Bay Pk - Pelham 6
 - 2 Elevators at 125 St – Lexington Ave 6
- **Station Reconstruction** 1 Station
 - New P-16 Stair at Grand Central 42 St. 4 5 6



Small Business Mentoring Program (SBMP)

Majority of projects consist of refurbishing stairs and installation of Help Points



















- This year, awarded work to refurbish 5 stairs and install 60 Help Points at 14 stations




Since inception in 2010:

- Refurbished 105 stairs at 37 locations and installed 129 Help Points at 30 locations



Ongoing Projects

Line	Stations	% Complete (10/2016)		Traffic Light Report	
		Design	Const	Cost	Schedule
Renewals:					
N	Sea Beach Line (9)	Complete	31%	 Green	 Green
F	Culver Line (7)	Complete	47%	 Green	 Green
3	New Lots Line (6)	Complete	57%	 Yellow	 Green
Elevator & Escalator:					
	Replace 11 Hydraulic Elevators (6)	Complete	84%	 Red	 Green
	Replace 7 Hydraulic Elevators (3)	Complete	40%	 Green	 Green
ADA Access (Key):					
6	23 St - LEX	Complete	98%	 Yellow	 Yellow
A	Ozone Park -Lefferts -LIB	Complete	68%	 Green	 Red
N Q R W	57 St - 7th Av - BWY	90%	2nd Qtr 2017 (F)	 Green	 Green
6	68 St - Hunter College-LEX	Complete	1st Qtr 2017 (F)	 Green	 Red

	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

* Potential cost increase identified; under review for validation and resolution



Stations Division Enhanced Station Initiative



Overview

THE STATIONS

BROOKLYN

Prospect Av	R
Bay Ridge Av	R
53 St	R
Flushing Av	G
Classon Av	G
Clinton-Washington Avs	C
Van Siclen Av	C
Kingston-Throop Avs	C

BRONX

174-175 Sts	B D
167 St	B D
Westchester Sq-East Tremont Av	6
3 Av-138 St	6
Brook Av	6
Hunts Point Av	6
Pelham Pkwy	5

STATEN ISLAND

Richmond Valley	SIR
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MANHATTAN

163 St-Amsterdam Av	C
Cathedral Pkwy (110 St)	B C
86 St	B C
72 St	B C
23 St	F M
57 St	F
145 St	3
28 St	6

QUEENS

30 Av	N W
Broadway	N W
36 Av	N W
39 Av	N W
Parsons Blvd	F
67 Av	M R
Northern Blvd	M R



Scope & Key Elements

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



Canopy and Entrance Totem



A Positive Street Presence



Dashboard



Consolidated Information Zone



Glass or Mesh Barriers at Fare Array



Clear Sight Lines



Improved Finishes



Encourage a Positive Civic Space



LED Lighting



Highlights Legacy of System



Process & Progress

- Station Design Guidelines
 - Grimshaw Architects as architect with Arup as best-practices consultant
 - Work started January 2016, conceptual design submitted May 2016
- Package 1
 - Award anticipated November 30, 2016
 - 3 Stations, 4th Ave Line, Brooklyn (Prospect Ave, 53rd St, Bay Ridge Ave)
- Up to 7 additional packages



November 2016 CPOC IEC Project Review



Sea Beach Line – Renewal of Nine Stations

November 14, 2016



Schedule & Budget Review

Schedule:

- Original Substantial Completion date: December 30, 2018.
- Original Phase 3 Completion date: March 8, 2017.
- The latest approved schedule and subsequent updates show Phase 3 turnover date has slipped from March to May 10, 2017.
- The project team is working to return the newly rebuilt northbound platforms to service, minimizing customer impact.
- A Recovery Schedule is warranted to address unmitigated schedule slips.

Budget:

- Increased budget and material quantity allowances added to the project in 2012 will minimize cost impacts from the risks and delays but may not fully eliminate them.



Project Risks

The IEC recognizes the significant station improvements and upgrades that have been accomplished to date however, the following risks may negatively impact the cost and the overall substantial completion date of December 2018.

- The unforeseen priority structural steel repairs and replacement work under 8th Avenue Station added to the project scope.
- The addition of new ADA compliant elevators at 8th Avenue Station added to the project scope.



IEC Recommendations

- The IEC recommends that the project team work toward approving a Recovery Schedule, incorporating all additional scope, potential time extensions and address major activity slips to provide an accurate assessment of the current project status and identify any negative impacts to the reopening of the Northbound Station Platforms and the overall Substantial Completion date.
- The IEC recommends that the project team concentrate on monitoring intermediate return to service dates, inspections and key beneficial use dates to gauge contractor performance and to mitigate project risks and issues impacting the schedule.



MTA Capital Program Commitments & Completions

through October 31, 2016

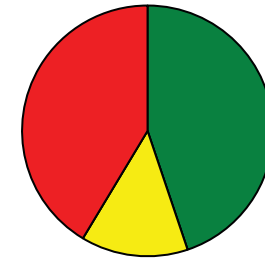
Capital Projects – Major Commitments – October 2016

Through October, 29 major commitments were planned and 17 were achieved. Seven were on time, four were late but have since been committed, and six were committed early; 12 remain delayed. All delayed projects are explained on the following pages.

Year to date, agencies have committed \$3.3 billion versus a \$4.6 billion goal. The shortfall versus goal is mainly due to the delayed commitments, which includes NYCT’s CBTC Queens Boulevard West: Phase 2, Bushwick Cut/Myrtle Bridge, and Sandy: 207th Yard Perimeter Protection & Power Cable.

By year-end, the MTA forecasts meeting 99% of its \$6.6 billion goal, but doing so is reliant upon agencies making their 4th quarter forecasts.

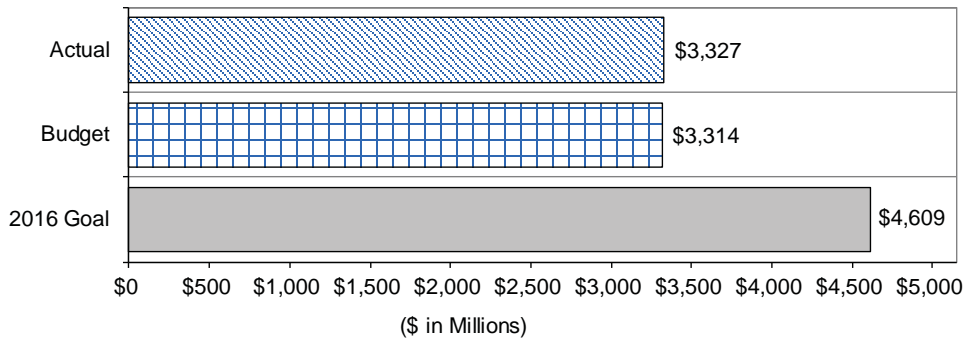
Year-to-Date Major Commitments



	Count	Percent	Change from Prior Month
GREEN = Commitments made/forecast within Goal	13	45%	-
YELLOW = Commitments delayed beyond Goal (already achieved)	4	14%	↑ 1
RED = Commitments delayed beyond Goal (not yet achieved)	12	41%	-
Total	29	100%	↑ 1

Budget Analysis

2016 Annual Goal	\$6,578	(\$ in millions)
2016 Forecast	99%	of Annual Goal
Forecast left to Commit	49%	(\$3,154)



Year-to-Date Agency Breakdown

2016 Goals	Prior month variance		
	GREEN	YELLOW	RED
New York City Transit			
5 GREEN, 2 YELLOW, 8 RED	----	+1 YELLOW	----
Long Island Rail Road			
7 GREEN, 1 YELLOW	----	----	----
Metro-North Railroad			
1 RED	----	----	----
Bridges and Tunnels			
1 GREEN	----	----	----
Capital Construction Company			
1 GREEN, 3 RED	----	----	----
MTA Bus Company			
	----	----	----
MTA Police Department			
	----	----	----

Capital Projects – Major Commitments – October 2016 – Schedule Variances
Actual Results Shaded

Project	Commitment	Goal	Forecast	Project	Commitment	Goal	Forecast
12 All-Agency Red Commitments (1 new this month)				NYCT			
NYCT				Signals & Communications			
<i>Miscellaneous/Emergency</i>				CBTC Queens Boulevard West - 50 St to Union Tpke: Phase 2			
Power Upgrade: RCC, PCC	Construction Award	Jul-16 \$50.2M	Nov-16 \$50.2M	Construction Award	Jun-16 \$143.7M	Nov-16 \$408.8M	
Project delayed to November due to late advertisement approval.				Contract award is forecast in November pending approval of budget modification due to unfavorable bid. Earlier delays due to several bid opening postponements. Bids received and exceed allocated budget. The current estimate reflects the full cost of the project including support costs for the duration of the contract and higher costs from bids received. The goal budget assumed only partial support costs due to limited funding prior to program approval.			
<i>Line Structures & Track</i>				Stations			
Bushwick Cut / MYR Bridge Over Atlantic	Construction Award	Sep-16 \$70.9M	Nov-16 \$150.2M	ADA: 68 St-Hunter College / Lexington	Construction Award	Sep-16 \$66.8M	Jan-17 \$66.8M
The award was delayed due to redesign work for additional scope: new bridge seat, longer bridge, substructure replacement, track work, property acquisitions, and a temporary car inspection facility for shuttle operations.				Most recent delay due to revisited constructability for possible reduction in duration. Previous project schedule delayed pending FTA Finding of No Significant Impact (FONSI) and resolution of property acquisition of the Imperial House property.			
<i>Sandy Recovery & Mitigation</i>				MNR			
Sandy Mitigation: 7 Stations (Manhattan/Queens/Bronx Initiative)	Construction Award	May-16 \$96.3M	Jan-17 \$51.7M	Track			
Delay in advertisement postponed the award. Authorization to advertise approved with bids expected in December. Prior delays include pending design drawings approvals, finalization of specs and contract documents, and issuance of notice to proceed for CCM to start constructability review, and revised mitigation solution for a staircase at 155 St on the Concourse Line due to maintainability concerns.				Cyclical Track Program			
				Construction Award	Aug-16 \$22.0M	Dec-16 \$22.0M	
				Due to the reprioritization of track maintenance projects, some planned 2016 cyclical track work has been delayed until December 2016.			
Sandy Mitigation: 13 Fan Plants, Long-Term - 5 Locations	Construction Award	Jun-16 \$46.2M	Nov-16 \$41.6M	MTACC			
Project award delayed due to extended advertisement period. Further delay due to postponements of the bid. Recent estimate is based on refined drawings and reflects reductions of bid and support costs.				<i>East Side Access</i>			
Sandy Mitigation: 9 Stations (Brooklyn/Queens Initiative)	Construction Award	Jun-16 \$100.7M	Jan-17 \$56.2M	Harold Tunnel A Construction (CH061A)	Construction Award	Jul-16 \$56.6M	Jan-17 \$56.6M
Delay in advertisement postponed the award. Bid opening scheduled in November. Earlier delay pending design drawings approvals, finalization of specs and contract documents. Project cost decreased reflecting RTA estimate.				Additional time required for extended review processes prior to advertisement and in procurement. Due to resource issues in the Harold Interlocking the award of this contract has been delayed.			
Sandy: 207th Yard Perimeter Protection & Power Cable (New Item)	Construction Award	Oct-16 \$222.7M	Jun-17 \$222.7M	<i>Second Avenue Subway Ph. 2</i>			
Project award slipped to June 2017 due to ongoing NYC DEP issues regarding existing sewer relocation and the need for further coordination.				Environmental Assessment	Construction Award	Jul-16 \$10.0M	Nov-16 \$10.0M
				Pending identification of funding, outreach consultant, design and environmental issues resulted in a delay of the award.			

Capital Projects – Major Commitments – October 2016 – Schedule Variances
Actual Results Shaded

Project	Commitment	Goal	Forecast	Project	Commitment	Goal	Forecast								
<u>Second Avenue Subway Ph. 2</u>				4 All-Agency Yellow Commitments (1 new this month)											
PE Design Contract	Construction Award	Jul-16	Nov-16	NYCT											
		\$100.0M	\$100.0M	<u>Signals & Communications</u>											
Additional review, outreach consultant, design and environmental issues have resulted in a delay in the award. Final negotiations are still ongoing.				<table border="1"> <tr> <td>Passenger Station LAN: 188 Stations</td> <td>Construction Award</td> <td>Feb-16</td> <td>Mar-16 (A)</td> </tr> <tr> <td></td> <td></td> <td>\$50.0M</td> <td>\$50.0M</td> </tr> </table> <p>Award was delayed because of additional time required to secure necessary approvals for budget changes and authorizations to approve the commitment.</p>				Passenger Station LAN: 188 Stations	Construction Award	Feb-16	Mar-16 (A)			\$50.0M	\$50.0M
Passenger Station LAN: 188 Stations	Construction Award	Feb-16	Mar-16 (A)												
		\$50.0M	\$50.0M												
				<table border="1"> <tr> <td>Kings Hwy Interlocking / Culver (New Item)</td> <td>Construction Award</td> <td>Jun-16</td> <td>Oct-16 (A)</td> </tr> <tr> <td></td> <td></td> <td>\$150.0M</td> <td>\$177.2M</td> </tr> </table> <p>Award was delayed due to bid postponements from 'bidders' questions, budget modifications to address increased costs from an unfavorable bid and additional scope related to Church Ave Interlocking. The current estimate reflects the full cost, while the goal budget reflected limited funding availability prior to capital plan approval.</p>				Kings Hwy Interlocking / Culver (New Item)	Construction Award	Jun-16	Oct-16 (A)			\$150.0M	\$177.2M
Kings Hwy Interlocking / Culver (New Item)	Construction Award	Jun-16	Oct-16 (A)												
		\$150.0M	\$177.2M												
				LIRR											
				<u>Track</u>											
				<table border="1"> <tr> <td>Amtrak Territory Projects</td> <td>Construction Award</td> <td>Jun-16</td> <td>Jul-16 (A)</td> </tr> <tr> <td></td> <td></td> <td>\$17.0M</td> <td>\$32.5M</td> </tr> </table> <p>Award delayed due to additional time required by the Procurement Department to perform audit of the bidders.</p>				Amtrak Territory Projects	Construction Award	Jun-16	Jul-16 (A)			\$17.0M	\$32.5M
Amtrak Territory Projects	Construction Award	Jun-16	Jul-16 (A)												
		\$17.0M	\$32.5M												
				MTACC											
				<u>East Side Access</u>											
				<table border="1"> <tr> <td>Grand Central Terminal Station Caverns & Track</td> <td>Construction Award</td> <td>Feb-16</td> <td>Apr-16 (A)</td> </tr> <tr> <td></td> <td></td> <td>\$777.4M</td> <td>\$712.0M</td> </tr> </table> <p>The delay was due to MTACC finalizing open issues prior to issuing a notice to proceed, which was issued in April. The award value reflects a favorable bid.</p>				Grand Central Terminal Station Caverns & Track	Construction Award	Feb-16	Apr-16 (A)			\$777.4M	\$712.0M
Grand Central Terminal Station Caverns & Track	Construction Award	Feb-16	Apr-16 (A)												
		\$777.4M	\$712.0M												

Capital Projects – Major Commitments – October 2016 – Budget Only* Variances
Actual Results Shaded
**for variances of more than \$5 million or 10%*

Project	Commitment	Goal	Forecast
4 All-Agency Budget Only Commitments (0 new this month)			
NYCT			
<i>Sandy Resiliency & Restoration</i>			
Sandy Mitigation: 17 Fan Plants & Adjacent Tunnels	Construction Award	Jul-16 \$45.7M	May-16 (A) \$39.2M
Awarded in May 2016.			
<i>Track</i>			
Mainline Track Replacement 2016 / 63rd St	Construction Award	Mar-16 \$40.0M	Feb-16 (A) \$29.2M
Awarded in February with savings reflecting a favorable bid.			
LIRR			
<i>Track</i>			
2016 Track Program	Construction Award	Mar-16 \$17.8M	Feb-16 (A) \$59.7M
Originally committed in February 2016. The actual value was increased in June following the approval of the 2015-19 Capital Plan.			
Jamaica Capacity Improvements Phase I	Construction Award	Sep-16 \$82.1M	Sep-16 (A) \$68.3M
Savings reflect a good bid for the Platform F contract.			

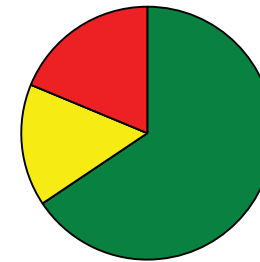
Capital Projects – Major Completions – October 2016

Through October, 32 major completions were planned and 26 were achieved. 12 were on time, five were delayed but have since been completed, and nine were completed early; six remain delayed. All delayed projects are reported on the following pages.

To date, the MTA has completed \$2.1 billion of its \$2.6 billion year-to-date goal. The shortfall is due to the delayed completion of the East Side Access Manhattan South Structures contract and other delays which are expected to be achieved later in 2016.

By year-end, the MTA forecasts meeting its \$4.6 billion goal, but doing so is reliant upon agencies making their 4th quarter forecasts.

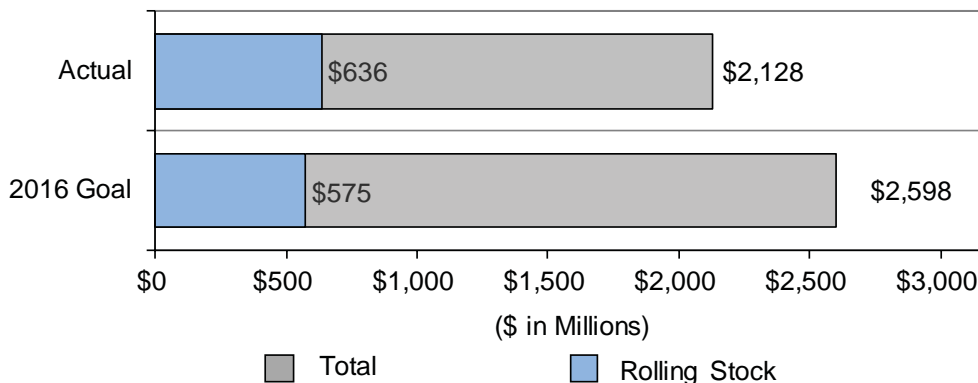
Year-to-Date Major Completions



	Count	Percent	Change from Prior Month
GREEN = Completions made/forecast w within Goal	21	66%	↑ 1
YELLOW = Completions delayed beyond Goal (already achieved)	5	16%	↑ 1
RED = Completions delayed beyond Goal (not yet achieved)	6	19%	-
Total	32	100%	↑ 2

Budget Analysis

2016 Annual Goal	\$4,629	(\$ in millions)
2016 Forecast	100%	of Annual Goal
Forecast left to Complete	54%	(\$2,519)



Year-to-Date Agency Breakdown

2016 Goals	Prior month variance		
	GREEN	YELLOW	RED
New York City Transit	8	2	4
Long Island Rail Road	3	1	1
Metro-North Railroad	3	1	1
Bridges and Tunnels	4	1	1
Capital Construction Company	1	1	1
MTA Bus Company	3	1	1
MTA Police Department	3	1	1

Capital Projects – Major Completions – October 2016 – Schedule Variances

Actual Results Shaded

Project	Completion	Goal	Forecast
6 All-Agency Red Completions (1 new this month)			
NYCT			
<i>Line Structures</i>			
Overcoating: Broadway Junction - New Lots Avenue / Canarsie (New Item)	Construction Completion	Oct-16 \$27.1M	Nov-16 \$28.1M
The project was delayed due to the late removal of shielding under a separate project at Atlantic Ave Station that prevented some work from being performed. Inclement weather, high temperature and humidity resulted in work stoppages on multiple occasions last quarter.			
<i>Stations</i>			
Replace 11 Hydraulic Elevators	Construction Completion	Aug-16 \$24.0M	Dec-16 \$26.2M
The project was delayed due to extensive work on existing signal switches which delayed GOs until mid-November. Testing, termination, and inspection, commissioning and place in service of the elevators will follow. Project completion was previously delayed due to unforeseen field conditions.			
ADA & Station Renewal at Ozone Park-Lefferts Blvd / Liberty	Construction Completion	Aug-16 \$23.9M	Dec-16 \$23.9M
Project completion re-scheduled to December due to substantial changes in communication work associated with the ADA elevators and the Help Point Infrastructure.			
SIR: Station Construction: Arthur Kill	Construction Completion	Aug-16 \$23.2M	Jan-17 \$24.0M
Project completion delayed due to scope changes including the redesign of the electrical distribution room (EDR), exterior wall panel, ramp work, and various communications issues.			
MTA Bus			
<i>Bus Company Projects</i>			
Security Upgrades - Far Rockaway & Baisley Park	Construction Completion	Sep-16 \$9.9M	Dec-16 \$9.9M
Project completion delayed as a result of the delay in preparing revised drawings and to correct errors in contract documents.			
MTACC			
<i>East Side Access</i>			
Plaza Substation & Structures (CQ032)	Construction Completion	Aug-16 \$250.2M	Nov-16 \$257.7M
Substantial completion date was delayed as a result of additional work approved by the MTA Board in April 2016.			

Capital Projects – Major Completions – October 2016 – Schedule Variances
Actual Results Shaded

Project	Completion	Goal	Forecast
5 All-Agency Yellow Completions (1 new this month)			
NYCT			
<i>Stations</i>			
Renew Five Liberty Line Stations	Construction Completion	Apr-16 \$74.7M	May-16 (A) \$77.8M
The project was completed in May with the contract delay due to inclement weather, loss of two GOs, and the repair of corroded steel that stopped work at 111th Street Station. Project cost increased due to additional TA Labor services required for additional steel work.			
Brick Arch Repair: 168 Street & 181 Street / Broadway-7th Ave	Construction Completion	Jul-16 \$64.8M	Sep-16 (A) \$71.9M
A budget modification being processed to cover additional costs for additional weekend GOs and support costs required during construction. Additional work and an extended contract duration by 10 months resulted in the previous increase. Additional AWOs and scope related to station medallions have resulted the original schedule delay and the recent delay is due to modifications related to Help Points at the 168th Street station.			
LIRR			
<i>Track</i>			
Main Line Track Farmingdale-Ronkonkoma Phase I (New Item)	Construction Completion	Jul-16 \$36.3M	Oct-16 (A) \$36.3M
Delay related to contract change work that included wetland mitigation and an additional retaining wall on south side, which were completed in October (delayed from September due to weather conditions).			
B&T			
<i>Marine Parkway Bridge</i>			
Rehabilitate Rockaway Point Blvd Overpass	Construction Completion	May-16 \$11.1M	Jun-16 (A) \$11.1M
The project was completed in June. Although the overpass was opened for traffic at the end of May, substantial completion was previously delayed by one month due to outstanding work items including installing a concrete median barrier, curbs, drainage, and striping.			

Project	Completion	Goal	Forecast
MTACC			
<i>East Side Access</i>			
Manhattan South Structures	Construction Completion	Feb-16 \$249.8M	Jun-16 (A) \$249.8M
The project was completed in June. Substantial completion was impacted by delays to underground tunnel work.			

Capital Projects – Major Completions – October 2016 – Budget* Variances
Actual Results Shaded
**for variances of more than \$5 million or 10%*

Project	Completion	Goal	Forecast
---------	------------	------	----------

2 All-Agency Budget Only Completions (0 new this month)
NYCT
Track

Mainline Track Replacement 2016 / 63rd St	Construction Completion	Jul-16 \$40.0M	Jul-16 (A) \$28.5M
Project cost decreased to reflect favorable bid and project savings.			

B&T
Signals & Communications

Miscellaneous Structural Rehabilitation	Construction Completion	May-16 \$22.0M	May-16 (A) \$19.1M
The project was completed in May 2016. Project cost decreased to reflect unused project contingency.			

Status of MTA Capital Program Funding

Capital Funding Detail (October 31, 2016)

\$ in millions

	Funding Plan	Receipts		
	<u>Current</u>	<u>Thru September</u>	<u>This month</u>	<u>Received to date</u>
2005-2009 Program	24,504	23,374	\$534	23,908

	Funding Plan	Receipts		
	<u>Current</u>	<u>Thru September</u>	<u>This month</u>	<u>Received to date</u>
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	774	582	-	582
State Assistance	770	150	-	150
MTA Bus Federal and City Match	132	102	-	102
MTA Bonds (Payroll Mobility Tax)	12,703	9,850	146	9,996
Other (Including Operating to Capital)	1,538	655	422	1,077
B&T Bonds	2,111	1,292	-	1,292
Hurricane Sandy Recovery				
<i>Insurance Proceeds/Federal Reimbursement</i>	9,376	3,423	-	3,423
PAYGO	160	160	-	160
<i>Sandy Recovery MTA Bonds</i>	758	-	-	-
<i>Sandy Recovery B&T Bonds</i>	230	59	-	59
Total	34,892	22,280	569	22,848

	Funding Plan	Receipts		
	<u>Current</u>	<u>Thru September</u>	<u>This month</u>	<u>Received to date</u>
2015-2019 Program				
Federal Formula, Flexible, Misc	\$6,275	\$27	\$ -	\$27
Federal Core Capacity	100	-	-	-
Federal New Start	500	-	-	-
State Assistance	8,336	-	-	-
City Capital Funds	2,492	40	-	40
MTA Bonds	5,889	-	-	-
Asset Sales/Leases	600	-	-	-
Pay-as-you-go (PAYGO)	1,846	500	-	500
Other	562	36	-	36
B&T Bonds & PAYGO	2,856	-	-	-
Total	29,456	603	-	603

Capital Funding (October 31, 2016)

\$ in millions

