



**Metropolitan Transportation Authority**

# Capital Program Oversight Committee Meeting

## May 2018

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### Committee Members

J. Lhota, Chair

F. Ferrer

A. Albert

N. Brown

I. Greenberg

S. Metzger

J. Molloy

M. Pally

L. Schwartz

P. Trottenberg

J. Vitiello

P. Ward

C. Weisbrod

C. Wortendyke

N. Zuckerman

# **Capital Program Oversight Committee Meeting**

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

**Monday, 5/21/2018  
2:00 - 3:30 PM ET**

## **1. PUBLIC COMMENTS PERIOD**

## **2. APPROVAL OF MINUTES APRIL 23, 2018**

*- Minutes from April '18 - Page 3*

## **3. COMMITTEE WORK PLAN**

*- 2018 - 2019 CPOC Committee Work Plan - Page 6*

## **4. MNR CAPITAL PROGRAM UPDATE**

- Progress Report on MNR Capital Program - Page 8*
- IEC's project review on Harmon Shop Replacement - Page 28*
- IEC's project review on Customer Service Initiatives - Page 32*
- IEC's project review on Hudson Line Sandy Restoration/Resiliency - Page 35*

## **5. LIRR CAPITAL PROGRAM UPDATE**

- Progress Report on LIRR Capital Program - Page 39*
- IEC's project review on Main Line Double Track - Page 63*
- IEC's project review on Morris Park Locomotive Shop - Page 66*
- IEC's project review on Mid Suffolk Yard - Page 69*
- IEC's project review on Jamaica Capacity Improvements - Page 72*

## **6. CAPITAL PROGRAM STATUS**

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

Date of next meeting: Monday, June 18, 2018 at 1:30 PM

**MINUTES OF MEETING**  
**MTA CAPITAL PROGRAM OVERSIGHT COMMITTEE**  
**April 23, 2018**  
**New York, New York**  
**1:30 P.M.**

MTA CPOC members present:

Hon. Joseph Lhota  
Hon. Fernando Ferrer  
Hon. Andrew Albert  
Hon. Ira Greenberg  
Hon. Susan Metzger  
Hon. John Molloy  
Hon. Mitchell Pally  
Hon. Polly Trottenberg  
Hon. James Vitiello  
Hon. Carl Wortendyke  
Hon. Neal Zuckerman

MTA CPOC members not present:

Hon. Norman Brown  
Hon. Lawrence Schwartz  
Hon. Peter Ward  
Hon. Carl Weisbrod

MTA staff present:

Veronique Hakim  
Michael Jew-Geralds  
Donald Spero

MTACC staff present:

Bill Goodrich  
Janno Lieber

NYCT staff present:

Mark Bienstock  
Andy Byford  
Robert Gomez  
John O'Grady

Independent Engineering Consultant staff present:

Chris Adams  
Joe DeVito  
Nabil Ghaly  
Calvin Gordon  
Dianne Rinaldi  
Darlene Rivera

\* \* \*

Chairman Lhota called the April 23, 2018 meeting of the Capital Program Oversight Committee to order at 2:00 P.M.

**Public Comments Period**

There were two public speakers in the public comments portion of the meeting: Jason Pineiro and Omar Vera.

## **Meeting Minutes**

Upon motion duly made and seconded, the CPOC members approved the minutes to the previous meeting held on March 19, 2018.

## **Committee Work Plan**

Mr. Spero announced there were no changes to the Work Plan.

## **MTACC East Side Access Project Update**

Mr. Lieber provided a wide-ranging presentation that underscored the scope and complexity of the East Side Access (ESA) project, enumerated achievements to date, and listed the benefits that the project will bring to the region. In addition, Mr. Lieber cited problems that have hampered the project, and explored a number of measures that have been put into place to address these problems. Notable among these measures are a new Program Management Organization, a streamlined approach to the change order process, as well as a shift to Incremental Integrated Systems Testing, which -- along with other measures -- are intended to enable the project to maintain the December 2022 completion date, albeit not without a budget impact of some \$955 million (the vast majority of which will be funded in the 2020-2024 Capital Program). Commissioner Trottenberg initiated an extended discussion, which was joined by the Chairman and several fellow members, principally regarding the role that Amtrak resource allocation may have played in project budget and schedule performance, as well as Amtrak resource availability with respect to ongoing and future projects in the region. In addition to the executive-level contact that is currently underway with Amtrak, creating a forum that would allow for direct dialogue with Board members was also put forward. The IEC began its Project Review with the acknowledgement that MTACC has taken the right steps in its plan to complete the remaining ESA work, but that the IEC -- in accordance with its charge -- will monitor the project's performance against this plan, and will report its finding in future Committee meetings. The IEC concluded its Project Review with the following recommendations, implementation of which will be tracked in future presentations: appoint a separate executive for the systems program area; perform a systems risk assessment and identify mitigations based on the incremental testing approach; reestablish Key Performance Indicators for the revised cost and schedule; and manage in-house force account to balance resources between ESA and other projects. Further details of the presentations, and Committee Members' comments and questions with respect thereto, are included in the video recording of the meeting maintained in MTA's records.

## **NYCT Report on Signals and Train Control Program**

Mr. Gomez provided an overview of the Signals and Train Control Division Projects, and then reviewed progress on specific projects, including: CBTC Flushing Line; CBTC Queens Boulevard Line; CBTC Equipment Supplier Interoperability; ISIM-B Modules 1 and 3; several interlockings; and finally, the CBTC Culver Line. In its Project Review, with respect to the CBTC Flushing Line, the IEC offered the following Summary Assessment: "Progress was made in expanding CBTC revenue service north of 74th Street. However, system performance issues and lack of system stability are impacting the project team's ability to extend CBTC operation to the remaining section of the Line". Specific concerns of the IEC are as follows: communication issues continue to impact system performance; the root cause of communication failures has not been determined; additional design/software modifications are required; software updates are needed to address Automatic Train Supervision failures; system issues are causing system interruptions; and rescheduling of GOs to support commissioning activities south of 74th Street could be challenging. The IEC concluded its report on Flushing CBTC by recommending a third party, comprehensive, in-depth review of the Data Communication System design. With respect to CBTC - QBL, the IEC stated that the lack of GO availability could impact the installation of equipment required to complete the pilot section, which is on the project critical path. 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.

### **NYCT Report on Systems and Security Program**

Citing the fact that all presentation materials have been provided in the book, and in consideration of the late start time of the meeting (and given that one additional Committee meeting lay yet ahead on the day's schedule), Chairman Lhota proposed that in lieu of NYCT and the IEC actually providing their respective presentations, that should Committee Members have any questions on the materials, staff would be available to address them. Several such questions and comments ensued, which were responded to, in turn, by staff. 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**

Ms. Hakim reported that in 2018, agencies plan to commit a total of \$7.3 billion dollars, including 43 major commitments. Through March, the MTA made 7 major commitments, totaling \$1.7 billion (versus a \$1.4 billion year-to-date goal), having advanced 2 addition project awards. By year end, the MTA forecasts meeting its 2018 commitments goal. In terms of completions, in 2018, agencies plan a total of \$6.3 billion, including 39 major completions. Through March, the MTA has achieved 1 major completion. By year end, the MTA forecasts meeting or exceeding its 2018 completions goal.

### **Adjournment**

Upon motion duly made and seconded, Chairman Lhota adjourned the April 23, 2018 meeting of the MTA Capital Program Oversight Committee at 3:39 PM.

Respectfully submitted,  
Michael Jew-Geralds  
Office of Construction Oversight



## **2018-2019 CPOC Committee Work Plan**

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I. Recurring Agenda Items

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

II. Specific Agenda Items

**June**

Quarterly MTACC Capital Program Update

- Cortlandt Street Station
- East Side Access
- Second Avenue Subway
- Penn Station Access
- LIRR Expansion Project

NYCT, LIRR, MNR Update on New Fare Payment System

Quarterly Change Order Report

Quarterly Traffic Light Reports

**July**

NYCT Capital Program Update

- Canarsie Tube Restoration
- Reconstruction of Clifton Shop
- Enhanced Stations Initiative

LIRR and MNR Update on Positive Train Control (PTC)

**September**

Quarterly MTACC Capital Program Update

Update on Minority, Women and Disadvantaged Business Participation

Update on Small Business Development Program

Quarterly Change Order Report

Quarterly Traffic Light Reports

**October**

LIRR and MNR Capital Programs Update

LIRR and MNR Joint Update on Rolling Stock

LIRR and MNR Update on Positive Train Control (PTC)

Update on Capital Program Security Projects (in Executive Session)

**November**

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

**December**

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

**January**

NYCT Capital Program Update

**February**

B&T Capital Program Update  
Update on Minority, Women and Disadvantaged Business Participation

**March**

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

**April**

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

**May**

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

# Capital Program Oversight Committee

Major Projects - Status

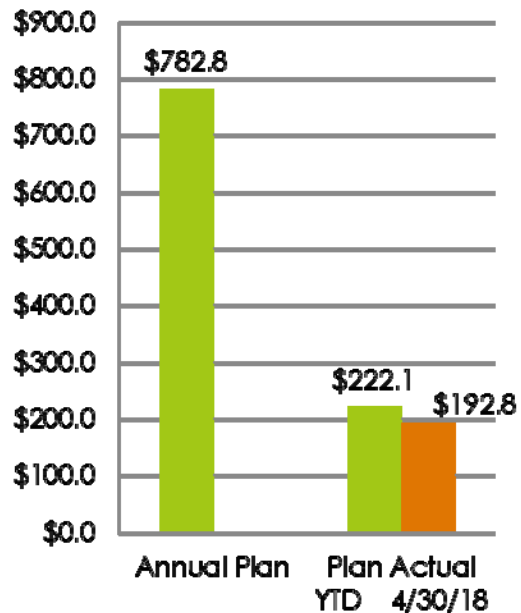
May 2018



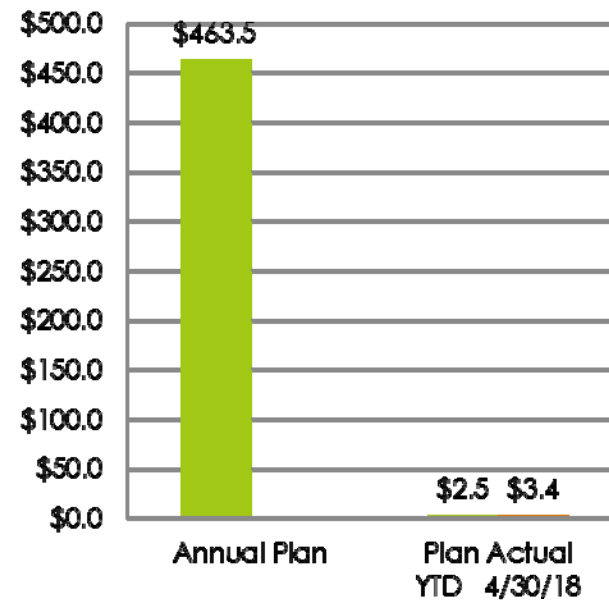
**Metro-North Railroad**

# 2018 Metro-North Capital Program Goals

## Commitments \$ million



## Completions \$ million



# Major Projects

- Harmon Shop Replacement – Phase V
- Customer Service Initiatives (CSI)
- Station Improvement Initiative
- Superstorm Sandy Restoration/Resiliency



# Harmon Shop - Design-Build Phase V – Stage I

Budget and EAC: \$316M

% Complete: 93%

Completion: August 2018

## Status

### ■ Consist Shop:

- Finalization of 3<sup>rd</sup> rail installation is pending final delivery of 3<sup>rd</sup> rail support brackets.
- 700 Vdc substation has been installed and wiring has commenced.

### ■ Electric Multiple Unit (EMU) Annex:

- Industrial Equipment Deliveries and installations are continuing.
- Interior finishes, MEP, HVAC work is nearing completion in employee facilities including offices, lunchroom and locker rooms.
- Project is within budget.
- Scheduled completion is now projected to be August 2018 due to a delay in procuring alternate track 3<sup>rd</sup> rail support brackets.
  - We are assessing a further impact due to delay in delivery of final industrial equipment and power issue.
  - Completion of two minor scope items were moved to Stage II for more efficient implementation



## Phase V – Stage I Progress Photos



Consist Shop Facility: Pre-testing of systems has commenced. Energization of lighting and gas fired units has also commenced.



EMU Annex: Installation of major industrial equipment ongoing.

# Harmon Shop - Design-Build Phase V – Stage II

Budget and EAC: \$442 M

Award: August 2018

Completion: August 2022

## Status

### ■ Replacement of Electric Car Repair Facility

- Technical/cost proposals from two shortlisted Design-Builders were received in March 2018
- The receipt of Best and Final Offers (BAFOs) and final negotiations are expected to continue through June 2018
- The Final Draft Risk Assessment report was issued in January 2018:
  - **Risk (Bid Premium – contract contingencies, agency reputation)**
    - Mitigation – Clearly articulated the project requirements via the Performance Design Criteria (PDC) and establish key scope “must haves”, better define scope (including alternatives). Negotiate with bidders to lower price.
  - **Risk (Re-bid – protest risk, failure to complete negotiations)**
    - Mitigation – Several reviews of the solicitation documents have been conducted to ensure the work scope is clear and comprehensive, and to ensure procurement rules and stipulations of the solicitation documents are followed.



# Customer Service Initiatives

Budget: \$220.0M

Completion Date: April 2021

- The Customer Service Initiatives (CSI) program of work is a multi-phase project that includes upgrades to customer information systems at:
  - Grand Central Terminal and 20 Outlying passenger stations
  - Metro-North facilities such as 525 North Broadway, GCT North End, etc.
- Eight (8) contracts awarded fall 2017
- The CSI program is complemented by an MTA wide Advertising Concessionaire approved in September 2017
  - The concessionaire provides approximately 160 customer information signs that will also carry advertising defraying some capital cost
- Later phases at other New York State stations will be advanced in the 2020-2024 Capital Program.



# Customer Service Initiatives

HUDSON LINE DEPARTURES			
TIME	TRK	DESTINATION	REMARKS
12:45	34	POUGHKEEPSIE	Tarrytown – 1st Stop
1:20	28	CROTON-HARMON	Marble Hill – 1st Stop
1:45	35	POUGHKEEPSIE	Yankees – E 153rd St – 1st Stop
2:20	28	CROTON-HARMON	Tarrytown – 1st Stop
2:45	33	POUGHKEEPSIE	Marble Hill – 1st Stop

TRACK 33	
3:20 OFF PEAK	CROTON-HARMON
<ul style="list-style-type: none"> <li>• Harlem-125th St</li> <li>• Yankees-E 153rd St</li> <li>• Morris Heights</li> <li>• University Heights</li> <li>• Marble Hill</li> <li>• Spuyten Duyvil</li> <li>• Riverdale</li> <li>• Ludlow</li> <li>• Yonkers</li> <li>• Glenwood</li> <li>• Greystone</li> <li>• Hastings-on-Hudson</li> <li>• Dobbs Ferry</li> <li>• Ardsley-on-Hudson</li> <li>• Irvington</li> <li>• Tarrytown</li> <li>• Philipse Manor</li> <li>• Scarsborough</li> </ul>	



# Customer Service Initiatives

## ■ Top Risks and Mitigation:

- Multiple interfaces between all contractors and Metro-North
  - **Mitigation:** Bring Construction Manager on quickly to work on integrated schedule
    - CM onboard since inception; Interface schedules being developed
- Unforeseen site conditions
  - **Mitigation:** Early validation of conduit routes and perform surveys
    - Ongoing
- Metro-North project support.
  - **Mitigation:** Integrate schedule to optimize use of Metro-North forces



# Station Improvement Initiative

- The Station Improvement Initiative is a \$135.6 million investment awarded at the end of 2017 to Halmar across five stations including:
  - White Plains
  - Crestwood
  - Port Chester
  - Riverdale
  - Harlem-125<sup>th</sup> St.



# Station Improvement Initiative

## ❑ Goals:

- ❑ Make State of Good Repair improvements to stations, improve waiting areas, improve customer information, bathrooms, etc.
- ❑ Introduce new technologies
- ❑ White Plains is Metro-North's 3<sup>rd</sup> largest station by ridership with a large infrastructure requiring rehabilitation and select upgrade. 65% of work at this station is State of Good Repair.

Station	Budget	Completion
White Plains	\$91.3M	12/31/20
Crestwood	\$10.6M	10/31/19
Riverdale	\$9.5M	9/30/18
Port Chester	\$13.2M	1/31/19
Harlem-125 <sup>th</sup> St	\$11M	1/31/19

## September 30<sup>th</sup> Deliverables:

- ❑ White Plains – Improvements at Main and Hamilton entrances, southern 3<sup>rd</sup> of island platform
- ❑ Riverdale - Kiss and Ride and Overpass
- ❑ Port Chester – Westchester Avenue Bridge



## Station Improvement Initiative White Plains Station



## Station Improvement Initiative Crestwood, Harlem-125<sup>th</sup> St., Port Chester, and Riverdale



# 30 Mile Hudson Line Power/Communication & Signal Two Phase Design-Build - Judlau/TC Electric JV

Budget: \$318 M

% Complete 37%

Completion: March 2021

## Status

### Phase IA - Croton-Harmon to Tarrytown

- ☐ Phase 1A work is substantially complete.
- ☐ Transition to Phase 1B was adversely impacted by the extreme weather In January and February 2018

### Phase IB – Tarrytown to Greystone

#### ☐ Schedule

- ☐ Phase 1B work commenced in late January 2018
- ☐ Phase 1B forecast Completion is April 2019, 22 months behind schedule

#### ☐ Scope of Work

- |                                                                                                                                                                                       |                                                  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|
| <input type="checkbox"/> C & S and Signal Power raceway                                                                                                                               | <u>QTY: INSTALLED/REQD.</u><br>6,500LF/34,800 LF |
| <input type="checkbox"/> Cross track conduit systems                                                                                                                                  | 0 ea./5 ea.                                      |
| <input type="checkbox"/> Elevated equipment platforms housing sectionalizing switches,<br>snow-melter systems, new Remote Terminal Unit ( RTU) houses<br>for system component control | 4 ea./17 ea.                                     |



# 30 Mile Hudson Line Power/Communication & Signal Two Phase Design-Build - Judlau/TC Electric JV

## Phase II – Mott Haven to Greystone

### Scope of Work

- ☐ C & S and Signal Power raceway Qty: 66,240 LF
- ☐ Cross track conduit systems Qty: 13 EA
- ☐ Elevated equipment platforms, sectionalizing switches, snow-melter systems, Remote Terminal Unit ( RTU) houses for system component control Qty: 48 EA

### Status

- ☐ 60% Design development drawings submitted for review.
- ☐ Started field utility mark out for Phase II.
- ☐ Non-outage work will advance concurrently with Phase 1B work

### Schedule

- ☐ Phase II (Final) Completion forecast is March 2021, a 20-month delay
- ☐ Phase II continuous outages will commence upon completion of Phase I (April 2019)

Phase II



# 30 Mile Hudson Line Power/Communication & Signal Two Phase Design-Build -- Judlau/TC Electric JV



System Installation South of Tarrytown



Precast conc. signal power duct bank/C&S troughs installed side by side.



Sectionalizing Switches set on support platform at Irvington



Conduit work in progress at platform in Irvington



Right of Way restored (ballast and silt fence)  
North of Tarrytown

## 30 Mile Hudson Line Power/Communication & Signal Two Phase Design-Build - Judlau/TC Electric JV

### Budget

- Overall Budget

- Budget: \$318M

- Phase 1: \$181M; Phase 2: \$137M

- Increase of \$16M due to:

- Unit Item quantity adjustment Change Order approved in April

- Force Account support for delay in Phase 1 completion

- Responsibility for any cost increases needs to be finalized.  
Analyzing time impact analysis submitted by JV



## 30 Mile Hudson Line Power/Communication & Signal Two Phase Design-Build - Judlau/TC Electric JV

### Mitigation

- Mitigation strategies implemented that will continue:
  - Review of outage sequencing and advancing portions of Phase 2 for efficiency
  - Maintain elevated flag support 16 (33%) to increase production rates.
  - Production has improved in the recent track 4 outage (CP19- CP 25)
  - Shift system routing generally to Track 4 to improve “wrench time”
  - Reduce required track crossings lessening need for less productive outages
  
- Additional schedule mitigation being discussed with Design-Build:
  - Reduced trough size where applicable at interlocking locations
  - Fortify Hudson River shore line to allow conduit system installation in areas of increased outage duration



## Sandy Hudson Line Restoration Replace 3 Hudson Line

Verde/ECCO

Budget and EAC: \$44M

% Complete: 88%

Completion: September 2018

### Status

- Croton-Harmon, Riverdale and Tarrytown
  - Component testing, switchgear wiring and terminations ongoing.
  - Next step: Final commissioning and power cut-over.
  - Completion: September 2018
- Delay incurred: Protracted Testing & Commissioning
  - Failure of the substations' waterproofing and floor electrical insulation tests requiring contractor rework
  - Extended duration for testing and commissioning of the Supervisory Control and Data Acquisition system
  - Time required for coordination with local utility (Con Ed) to schedule for energization of the substations



# Sandy Substations



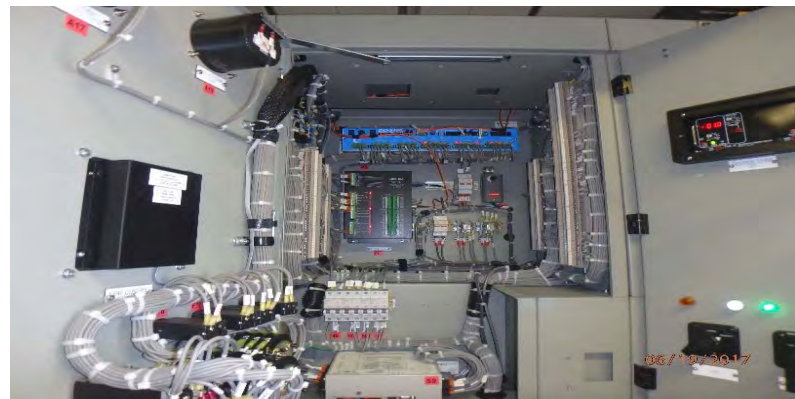
Riverdale: DC Traction Substation (AC/DC Switchgear)



Croton-Harmon: Exterior substation view, completion of access platform



Tarrytown: Internal breaker components



Tarrytown: Structure ground relay 64 testing



# May 2018 CPOC IEC Project Review

MNR Harmon Consist Shop Replacement  
Phase V, Stages 1 & 2



# Schedule/Budget Review

## □ Schedule

- The IEC is forecasting an overall 8-month delay to completion (4 additional months since the last CPOC) primarily due to:
  - Additional MNR work requests
  - Failures in Factory Acceptance Tests
  - Modifications to some of the equipment
- Time extension to the end of April 2018 approved. Additional request to the end of June 2018 under review.
- MNR is transferring some work to Stage 2 which will save approximately 2 months to substantial completion.
- Additional delays are still possible.

## □ Budget

- The project is within budget.



# IEC Observations

- Phase V – Stage 2 design/build contract is presently in procurement with a planned award in August 2018.
  - Any additional delay in Stage 1 could affect the award of Stage 2 as there is not enough room at the facility to support 2 contractors.
  - MNR is considering an off-site facility to house shop personnel temporarily, if needed.
- A timely Stage 2 award is critical to completing the overall Croton Harmon shop program on time (August 2022).



# Stage 2 Risk Discussion

- The Risk Assessment workshop was held in May 2017 and a mitigation workshop was held in October 2017.
  - The overall risk results will be presented at a future CPOC.
- The top schedule risks are:
  - Problems with building commissioning
  - Delays in the design/build submittal reviews.
  - Issues with pile installation.
- The top cost risks are:
  - Bid premium (Contractor contingencies, poor experience on similar project or with agency)
  - Bid market (Limited number of contractors, project size, etc.)



# May 2018 CPOC IEC Project Review

MNR - Customer Service Initiatives



# Schedule and Budget Review

## ■ Schedule

- Design efforts and site surveys have commenced as well as submission of early project deliverables.
- The IEC is awaiting approved individual contract schedules and the Integrated Program Schedule (IPS) for further analysis

## ■ Budget

- Based on contract awards and information provided in the Project Status Reports (PSR), the IEC agrees with the Agency that the Program is on budget.
- At this stage there have been no change orders negotiated.



# Program Risk Review

## ■ Top Risks Identified

- Significant change orders could affect the schedule and/or budget.
- Metro-North may not have sufficient resources to resolve interface issues between the various contracts.
- Upon receipt of an approved IPS the IEC will review the document to identify any additional risks.



# May 2018 CPOC IEC Project Review

MNR Hudson Line Sandy  
Restoration/Resiliency



# Schedule and Budget Review

## ■ Schedule

- The IEC forecasts the Phase I delay to be approximately 22 months, one month more than reported at the previous CPOC.
- Lower than estimated production rates is the primary cause of the delay.
- The IEC believes that recovery of the current delay is unlikely.

## ■ Budget

- As forecast at the previous CPOC, the Phase I budget was increased due to:
  - Change orders to date depleted the contingency.
  - Additional force account/flagging needed to cover additional crews and time.

# IEC Observations

- **Additional Budget Increases:** The IEC forecasts that the budget will need to be further increased for Phase II.
  - Funding within the project has been identified.
- **Improved Productivity:** The IEC notes improved production rates in the current stage. The IEC also notes that the current Phase I and II schedules assume achievable production rates.
- **Schedule:** Based on the current production rates and the forecast ones, the IEC believes that additional delays may be avoided.



# Risk Mitigations

## ■ Work Productivity Issues

- **Limited Access and Difficult Work Areas:** Recent production rates have improved. The next stages have more areas with fewer constraints.
- **Loss of Long-Term Track Outages:** MNR was able to extend the long-term outages as needed. This is still a risk in future stages.
- **Limited Flagging/Force Account Support:** MNR has been continually supplying additional flaggers over the contractual number.
- **Increasing Number of Crews:** There is not enough force account personnel to cover any additional crews than are currently available.



# Capital Program Oversight Committee

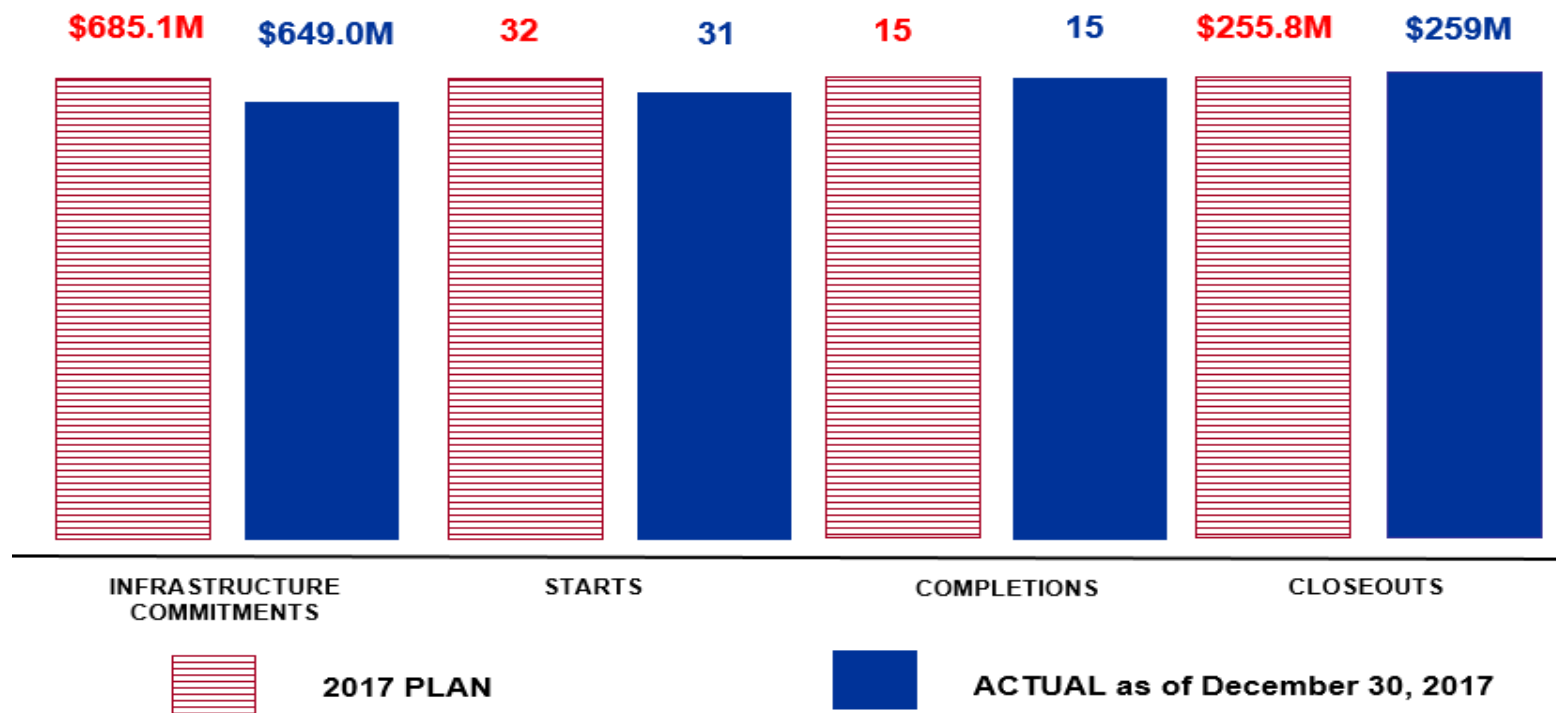
Major Projects - Status

May 2018

Long Island Rail Road



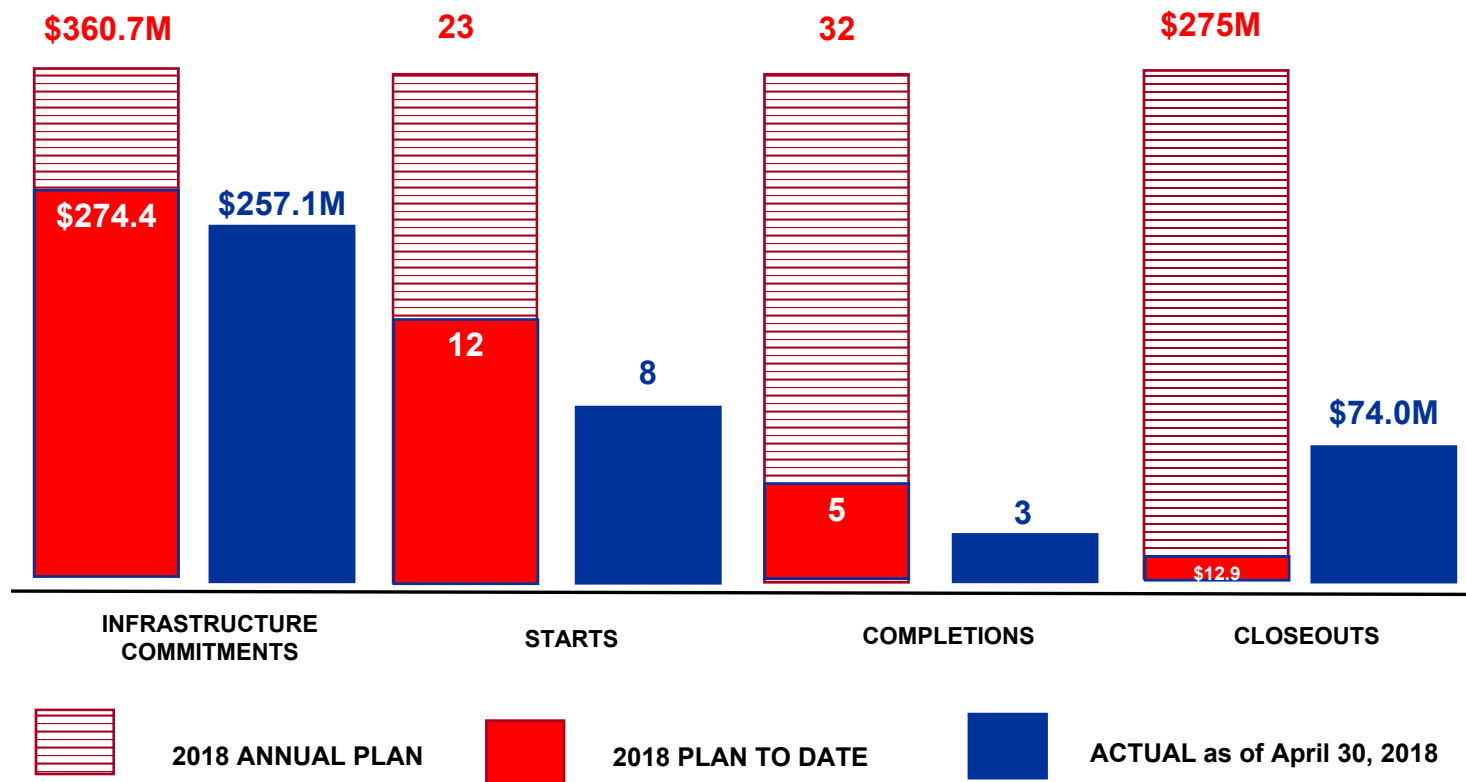
# 2017 LIRR Capital Program Goals



\* Does not include \$107M Moynihan Station/Penn Station, \$276M Rolling Stock.



# 2018 LIRR Capital Program Goals

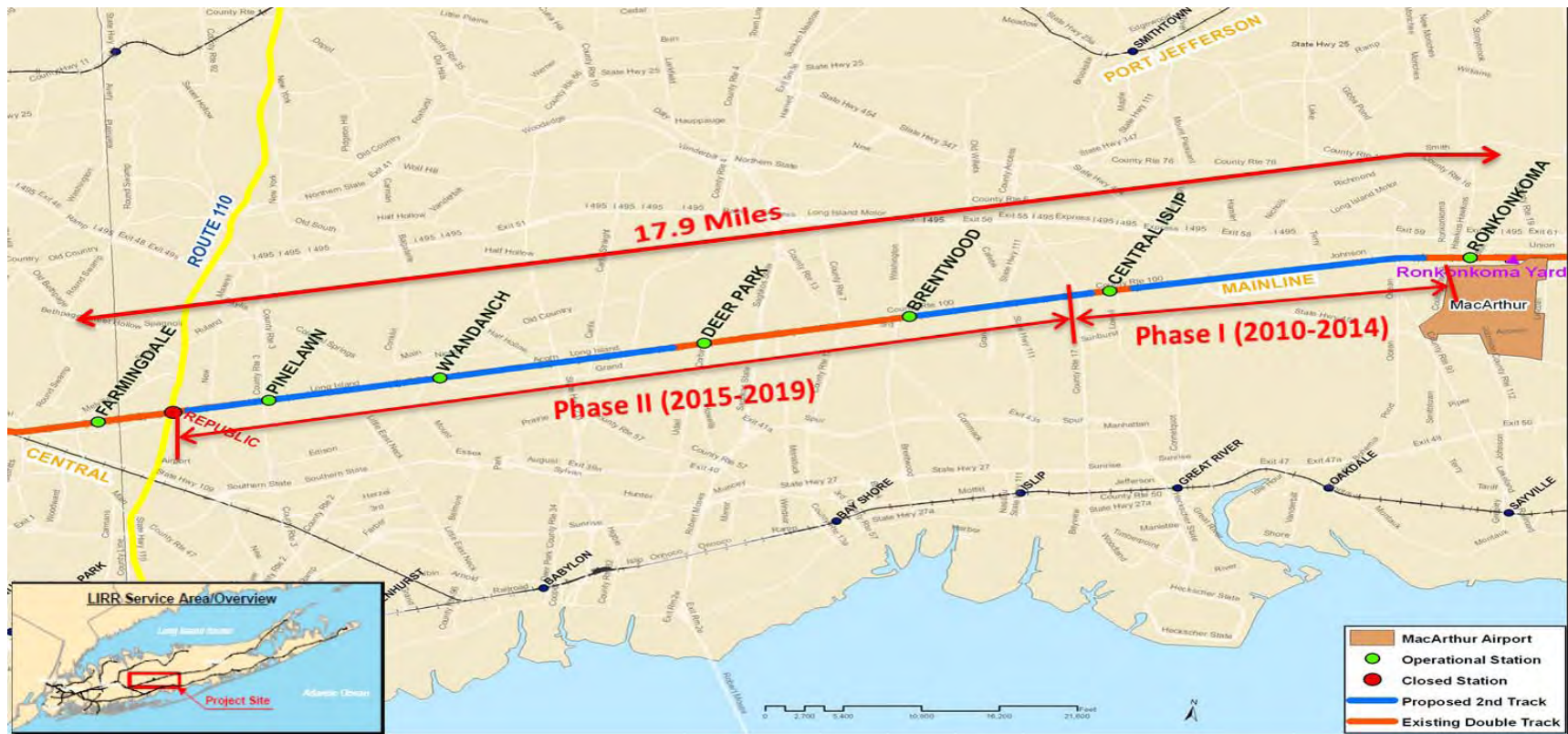


# Project Updates

## Main Line Double Track



# Main Line Double Track Project



# Main Line Double Track Project

## ■ Schedule:

- Phase 1 Civil and Site Work
  - Substantial Completion: May 2016 (A)
- Phase 1 Track and Systems Installation
  - Construction Start: August 2015 (A)
  - Beneficial Use: 2<sup>nd</sup> Q 2018 (F)
- Phase 2 Civil and Site Work
  - Notice of Award: June 2016 (A)
  - Substantial Completion: 3<sup>rd</sup> Q 2017 (A)
- Phase 1 & 2 Signal Equipment:
  - Notice of Award: June 2016 (A)
  - Beneficial Use: 3<sup>rd</sup> Q 2018 (F)
- Phase 2 Track, Systems and Station Platforms
  - Notice of Award: June 2017(A)
  - Beneficial Use: 3<sup>rd</sup> Q 2018 (F)

## ■ Budget & EAC:

- Budget: \$387.2M (Phase 1 – \$137.2M / Phase 2 - \$250M)
- Current EAC: \$432M
- Phase I Percent Complete: 90%
- Phase 2 Percent Complete: 60%



# Main Line Double Track Project Phase I - West of Central Islip to Ronkonkoma



Force Account 3<sup>rd</sup> Rail Installation just east of Rt. 111



Central Islip CIL (Central Instrument Location)

# Main Line Double Track Project

## Phase II - Farmingdale to West of Central Islip



Surfacing of New Track West of Brentwood Station



Rail De-Stressing and Welding



# Main Line Double Track Project

## Phase II - Farmingdale to West of Central Islip



Track Installation and ADA Ramps at Pinelawn Station



Installation of New Overpass at Wyandanch Station

# Project Updates

## **Morris Park Locomotive Shop**



# Morris Park Locomotive Shop and Employee Facility



Locomotive Shop Rendering

## ■ Schedule

- Design/Build Award: December 2017(A)
- Beneficial Use: 1<sup>st</sup> Q 2020 (F)
  
- Budget: \$102.3M
- EAC: \$102.3M
- Percent Complete: 5%



Existing Shop (Built in 1889)



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## Facility Footprint

# Morris Park Locomotive Shop and Employee Facility



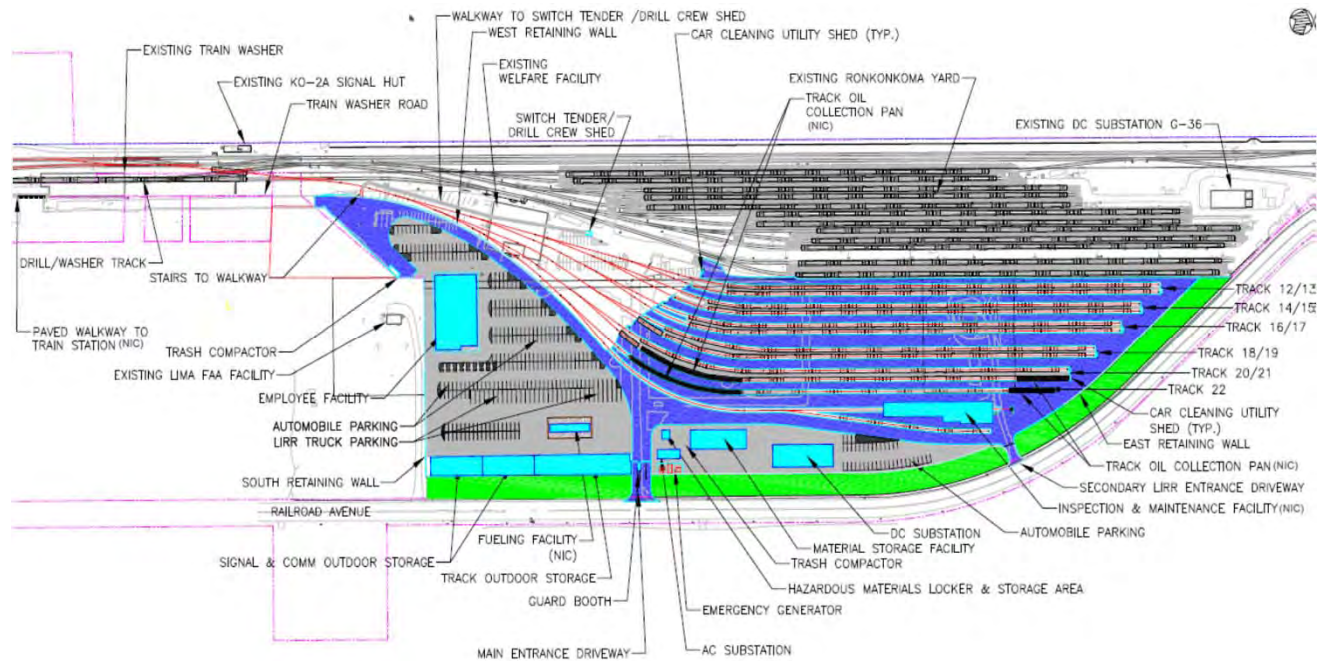
Sheeting Installation for Drop Pit Excavation

# Project Updates

## **Mid Suffolk Yard (ESA Readiness)**



# Mid-Suffolk Yard



- **Schedule:**
  - Design/Build Contract Awarded December 2017 (A)
  - Initiated Design and completed surveys & soil borings 1<sup>st</sup> Q of 2018 (A)
  - Beneficial Use: March 2020 (F)
- **Budget: \$128M**
- **EAC: \$128M**
- **Percent Complete: 5%**

# Mid-Suffolk Yard



0 140 280 Feet



# Mid-Suffolk Yard



New Employee Facility Rendering

## ■ Risk Management

- A comprehensive Risk Assessment was completed in June 2017.
- Top Risks as of April 2018:
  - Long lead special track work
  - Track outage availability
  - Force Account resource availability
- The Risk Assessment and resultant risk register will be tracked and updated throughout completion of the project.



# Mid-Suffolk Yard



Current Yard Space and Employee Facility

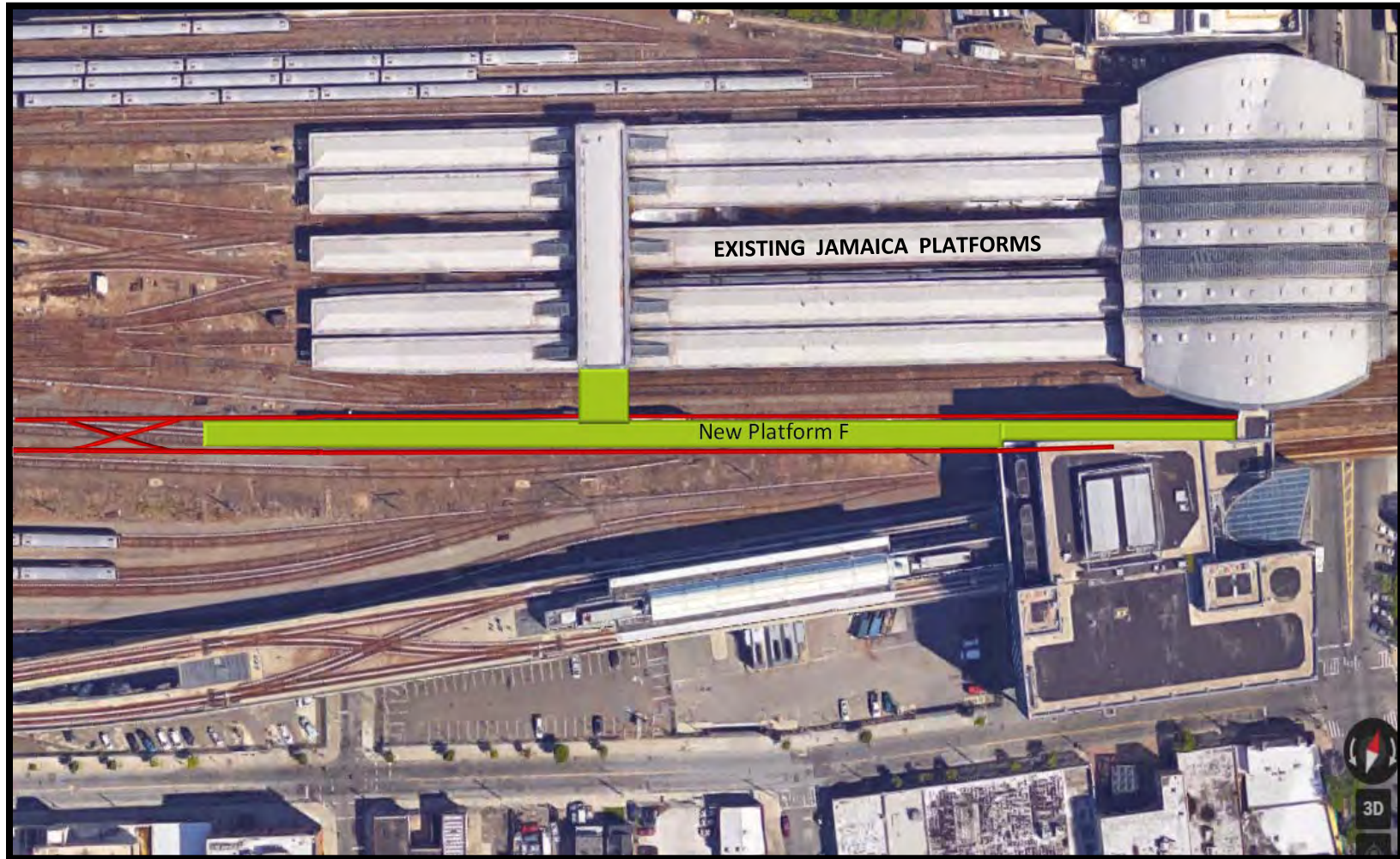


# Project Updates

## **Jamaica Capacity Improvements**



# Jamaica Capacity Improvements



# Jamaica Capacity Improvements - Phase I

## □ Schedule:

- Platform F Construction (3<sup>rd</sup> Party)
  - Award: September 2016 (A)
  - Completion: 3<sup>rd</sup> Qtr 2019 (F)
- Installation of 3-Crossover at Dunton Interlocking (Force Account)
  - Forecasted Completion (including cutover): 4<sup>th</sup> Qtr 2018 (F)
- Universal Crossovers (Force Account): Union, Metropolitan and Beaver
  - Completion 3<sup>rd</sup> Qtr 2020 (F)

## □ Budget & EAC:

- Budget: \$301.6M
- Current: EAC \$301.6M
- Percent Complete: 36%

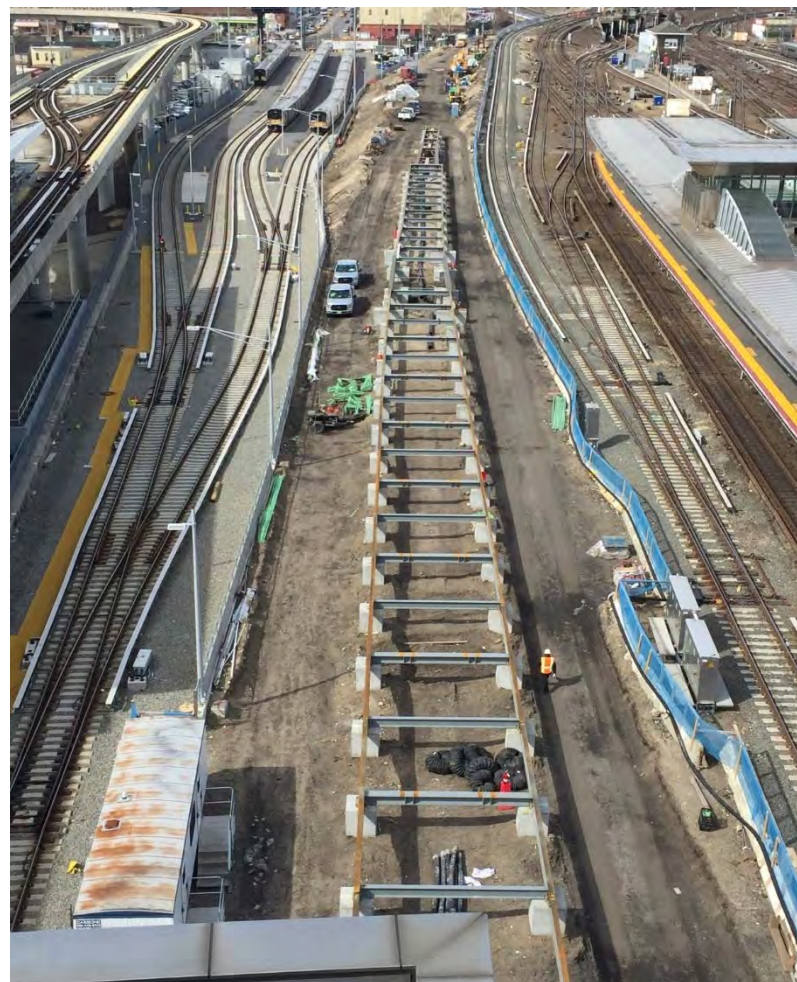


# Jamaica Capacity Improvements - Phase I

Initial Site Grading / Existing Track Removal



Platform Pile-caps Installed (Winter 2018)



Platform Structural Steel Installed (April 2018)

# Jamaica Capacity Improvements - Phase I



Dunton 3-Crossover New Signal Bridge



Conduit Install for New Electric Switch Heaters



New Signal Cases Built and Installed by LIRR Forces

# Jamaica Capacity Improvements – Phase II

- ❑ Schedule:
  - ❑ Design Award: December 2017(A)
  - ❑ Design Completion: December 2020 (F)
  - ❑ Construction Start: TBD
- ❑ Budget:
  - ❑ Design & LIRR Support: \$77.5M
  - ❑ Current EAC: \$77.5M
  - ❑ Construction: TBD
  - ❑ Percent Complete: 1%
- ❑ Project Update:
  - ❑ JCI Phase II commenced in Dec of 2017 and is currently in design. Initial survey, data collection, and preliminary design activities are underway.



# May 2018 CPOC IEC Project Review

## Main Line Double Track



# Budget Review

- The agency has requested a budget increase which has been incorporated in the plan amendment.
- This increase will cover owner-driven station enhancements at Wyandanch station, upgrades to the signal power along the Ronkonkoma branch, additional construction management services, and schedule acceleration costs.



# Schedule Review

- Six (6) months of delays in signal equipment delivery have occurred, impacting signal installation and testing, which is on the project critical path.
- In the opinion of the IEC, the project delays can be recovered, provided that the following conditions are met:
  - Mitigation steps are taken to re-sequence the critical path;
  - Change order to complete Segment 2 cable termination is progressed on time by the agency;
  - Availability of Force Account labor; and
  - Availability of track outages.



# May 2018 CPOC IEC Project Review

Morris Park Locomotive Shop



# Budget and Schedule Review

## □ Budget

- The Design Build contract was awarded on December 12, 2017, within the engineer's estimate.
- The project is currently on Budget.

## □ Schedule

- The Design Build contractor submitted a project schedule in March 2018 which has been approved by the agency, and reviewed by the IEC.
- The project is currently on Schedule.



# Risk

- A Risk Assessment Workshop was held on June 6, 2017, which provided the initial foundation for developing the risk register, risk mitigation plan, and implementation schedule. The IEC participated in the workshop.
  
- As of April 2018 top project risks are as follows:
  - Long Lead Equipment Approval,
  - Contractor Interface



# May 2018 CPOC IEC Project Review

Mid Suffolk Yard



# Budget and Schedule Review

## ■ Budget

- The Design Build contract was awarded on December 15, 2017, within the engineer's estimate.
- The project is currently on Budget.

## ■ Schedule

- The project is on schedule for substantial completion on February 12, 2020.



# Risk

- The IEC Facilitated and participated in Risk Assessment Workshop on April 24, 2017, which provided the initial foundation for developing the risk register, risk mitigation plan, and implementation schedule
- As of April 2018 top project risks are as follows:
  - Long Lead Equipment Approval,
  - General Order and Track Outages, and
  - Force Account availability.



# May 2018 CPOC IEC Project Review

Jamaica Capacity Improvements – Phase I



# Schedule and Budget Review

## ■ Schedule

- The project remains on schedule.
- The project schedule has sufficient contingency to reach substantial completion.

## ■ Budget

- The project is on budget.
- The project budget has sufficient budget contingency to reach substantial completion.



# Risk

- The LIRR PM team has continuous reviews of risk mitigation with all parties involved to manage key risk areas, such as:
  - Coordination between third party and Force Account crews, and
  - Force Account Availability.
- In the opinion of the IEC, the project is managed well and the appropriate steps are taken to mitigate cost and schedule risks.



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# **MTA Capital Program Commitments & Completions**

## **through April 30, 2018**

## Capital Projects – Major Commitments – April 2018

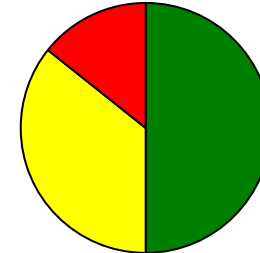
In 2018, agencies plan for a goal of \$7.3 billion in overall commitments with 43 major commitments planned.

Through April, agencies have committed \$2.1 billion versus a \$2.6 billion YTD goal. The shortfall was partly due to delays with MTACC's Mainline Expansion project support tasks (\$169M), East Side Access (\$79M), MTA Bus Company's procurement of 53 articulated buses (\$53M), and NYCT's ADA: Greenpoint Avenue project (\$31M).

Seven major commitments were made on time or early, five were delayed but have now been committed, and two other major commitments remain delayed. The delays are explained on the following pages.

By year end, the MTA forecasts meeting or exceeding its overall \$7.3 billion goal.

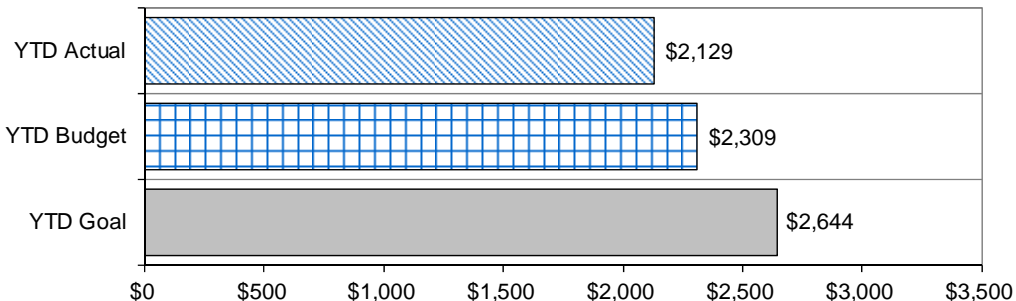
## Year-to-Date Major Commitments



	Count	Percent	Change from Prior Month
<b>GREEN</b> = Commitments made/forecast w/in Goal	7	50%	↑ 1
<b>YELLOW</b> = Commitments delayed beyond Goal (already achieved)	5	36%	↑ 4
<b>RED</b> = Commitments delayed beyond Goal (not yet achieved)	2	14%	↓ 2
	14	100%	↑ 3

## Budget Analysis

2018 Annual Goal	\$7,337	(\$ in millions)
2018 Forecast	107%	of Annual Goal
Forecast left to Commit	73%	(\$5,712)



## Year-to-Date Agency Breakdown

2018 Goals	Prior month variance		
	GREEN	YELLOW	RED
<b>New York City Transit</b>			
2	3		
	—	+3 YELLOW	-3 RED
<b>Long Island Rail Road</b>			
4			
	+1 GREEN	—	—
<b>Metro-North Railroad</b>			
1	1		
	—	—	—
<b>Bridges and Tunnels</b>			
	—	—	—
<b>Capital Construction Company</b>			
1			
	—	+1 YELLOW	-1 RED
<b>MTA Bus Company</b>			
2			
	—	—	+2 RED
<b>MTA Police Department</b>			
	—	—	—

## Capital Projects – Major Commitments – April 2018 – Schedule Variances

Project	Commitment	Goal	Forecast
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### 2 All-Agency Red Commitments (2 new this month)

#### MTA Bus Company

##### Bus Company Projects

<b>53 Articulated Buses (New Item)</b>	Fleet Procurement	Apr- 18	Jun- 18
		\$53.2	\$53.2

Award forecast revised, due to a pending audit for Buy America adherence.

<b>Bus Digital Information Screens (DIS) (New Item)</b>	Construction Award	Apr- 18	May- 18
		\$11.7	\$11.7

Delay due to pending required insurance information from the lowest bidder.

## Capital Projects – Major Commitments – April 2018 – Schedule Variances

Project	Commitment	Goal	Actual
<b>5 All-Agency Yellow Commitments (4 new this month)</b>			
<b>MNR</b>			
<i>Signals &amp; Communications</i>			
Harlem Cable Installation	Construction Award	Feb- 18 \$47.7M	Mar- 18 (A) \$47.7M
The delay in award was due to pre- award activities required to comply with the contract's diversity compliance goals.			
<b>NYCT</b>			
<i>Passenger Stations</i>			
<b>ADA: Gun Hill Rd / Dyre (New Item)</b>	Construction Award	Mar- 18 \$37.8	Apr- 18 (A) \$52.0
Delayed due to final procurement activities. Project cost increased reflecting unfavorable bids received, as well as additional scope items.			
<b>ADA: Bedford Park Boulevard / Concourse (New Item)</b>	Construction Award	Mar- 18 \$37.8	Apr- 18 (A) \$29.7
Delayed due to several bid extensions and final procurement activities. Project cost reflects favorable bids received.			
<b>Replace 12 Traction Elevators / Broadway- 7th Avenue (New Item)</b>	Construction Award	Mar- 18 \$88.1	Apr- 18 (A) \$97.9
Delayed due to final procurement activities. Project cost increased due to scope changes and unfavorable bids.			
<b>MTACC</b>			
<i>East Side Access</i>			
<b>Harold Structures - Trackwork (CH057D) (New Item)</b>	Construction Award	Mar- 18 \$48.5	Apr- 18 (A) \$36.4
Award was delayed due to the contractor's delay in finalizing administrative elements required by procurement to award the contract. Award value reflects good bid savings.			

Capital Projects – Major Completions – April 2018

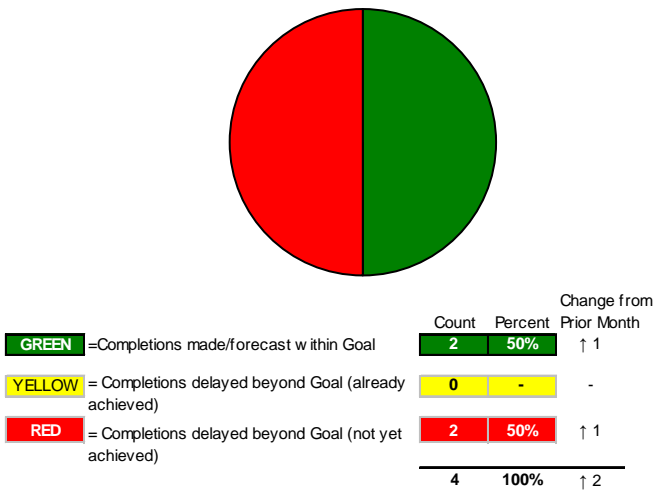
In 2018, agencies plan for a goal of \$6.3 billion in overall completions, with 39 major completions.

Through April, agencies have completed \$712 million versus a \$1.2 billion YTD goal. The shortfall is mostly due to delays with NYCT completions including various track work (\$250M), a signals contract for the LIRR's Main Line Double Track Phase 2 (\$30M) and the purchase of 92 articulated buses (\$82M), all of which are forecast for achievement in the second quarter of 2018.

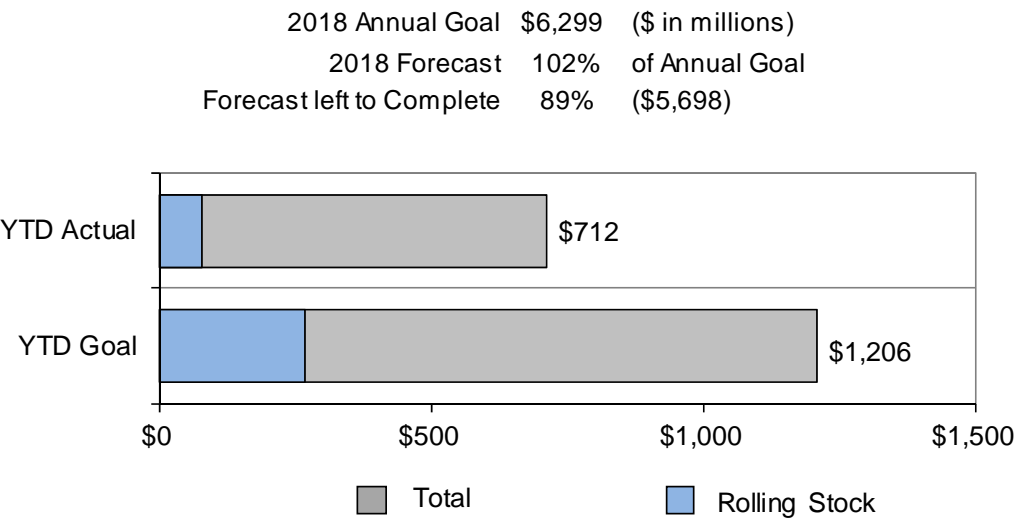
Two major completions were made on time or early, and two other major completions remain delayed. The delays are explained on the following pages.

By year end, the MTA forecasts meeting or exceeding its overall \$6.3 billion completion goal.

Year-to-Date Major Completions



Budget Analysis



Year-to-Date Agency Breakdown

2018 Goals	Prior month variance		
	GREEN	YELLOW	RED
New York City Transit			
Long Island Rail Road			
Metro-North Railroad			
Bridges and Tunnels			
Capital Construction Company			
MTA Bus Company			
MTA Police Department			

## Capital Projects – Major Completions – April 2018 – Schedule Variances

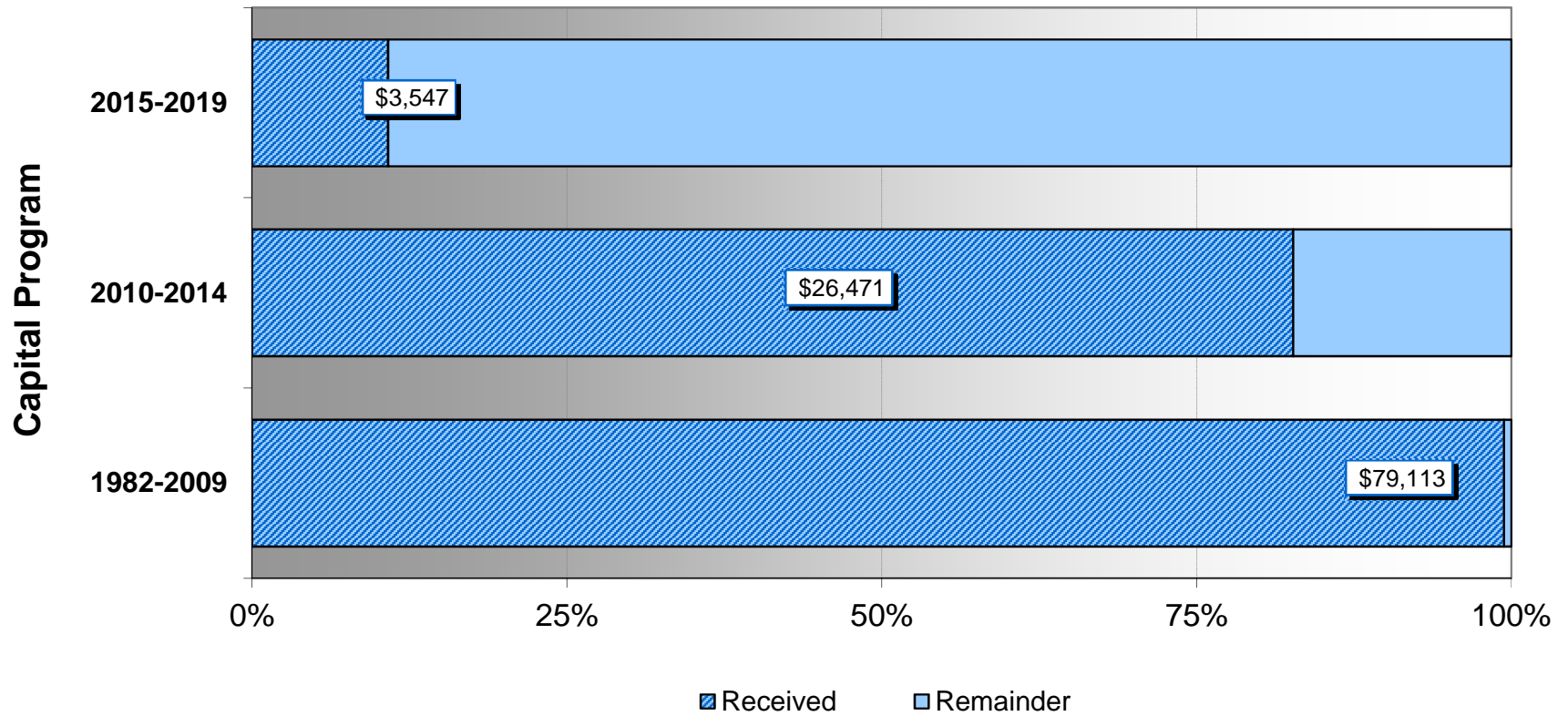
Project	Completion	Goal	Forecast
<b>2 All-Agency Red Completions (1 new this month)</b>			
<b>NYCT</b>			
<i>Buses</i>			
Purchase 92 Articulated Buses (Nova)	Fleet Procurement	Mar- 18	May- 18
		\$83.9	\$82.2
Deliveries will be completed in May 2018. Additional technical requirements, processed post-award, have resulted in a longer turnaround time for the vendor's overall production of each bus.			
<b>LIRR</b>			
<i>Track Improvement</i>			
<b>Main Line Double Track Ph 2 (New Item)</b>	Construction	Apr- 18	Jun- 18
		\$30.0	\$30.0
Delay due to additional signal modifications required of the manufacturer.			

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## Status of MTA Capital Program Funding

## Capital Funding (April 2018)

\$ in millions



## Capital Funding Detail (April 30, 2018)

\$ in millions

### 1992-1999 Program

### 2000-2004 Program

### 2005-2009 Program

Funding Plan	Receipts		
Current	March	This month	Received to date
18,099	18,099	-	18,099
21,691	21,691	-	21,691
24,390	23,930	2	23,932

### 2010-2014 Program

Federal Formula, Flexible, Misc

Federal High Speed Rail

Federal Security

Federal New Start

Federal RIFF Loan

City Capital Funds

State Assistance

MTA Bus Federal and City Match

MTA Bonds (Payroll Mobility Tax)

Other (Including Operating to Capital)

B&T Bonds

Hurricane Sandy Recovery

*Insurance Proceeds/Federal Reimbursement*

PAYGO

*Sandy Recovery MTA Bonds*

*Sandy Recovery B&T Bonds*

Funding Plan	Receipts		
Current	March	This month	Received to date
\$5,544	\$5,544	\$ -	\$5,544
295	295	-	295
1,257			
193	100	-	100
-	-	-	-
729	608	-	608
770	400	-	400
132	108	-	108
11,772	10,980	-	10,980
1,737	1,479	0.5	1,480
2,025	2,021	-	2,021
6,343	4,727	-	4,727
235	81	-	81
758	2	-	2
230	124	-	124
<b>Total 32,019</b>	<b>26,471</b>	<b>0</b>	<b>26,471</b>

### 2015-2019 Program

Federal Formula, Flexible, Misc

Federal Core Capacity

Federal New Start

State Assistance

City Capital Funds

MTA Bonds

Asset Sales/Leases

Pay-as-you-go (PAYGO)

Other

B&T Bonds & PAYGO

Funding Plan	Receipts		
Current	March	This month	Received to date
\$6,956	\$1,030	\$ -	\$1,030
100	-	-	-
500	-	-	-
8,466	65	-	65
2,492	271	-	271
7,907	12	-	12
600	-	-	-
2,270	1,691	-	1,691
575	-	-	-
2,936	479	-	479
<b>Total 32,801</b>	<b>3,547</b>	<b>-</b>	<b>3,547</b>