



Metropolitan Transportation Authority

Capital Program Oversight Committee Meeting

April 2019

Capital Program Oversight Committee Meeting

2 Broadway, 20th Floor Board Room

New York, NY 10004

Monday, 4/15/2019

2:00 - 3:30 PM ET

1. PUBLIC COMMENTS PERIOD

2. APPROVAL OF MINUTES MARCH 25, 2019

- Minutes from March '19 - Page 3

3. COMMITTEE WORK PLAN

- 2019 - 2020 CPOC Committee Work Plan - Page 6

4. MTACC CAPITAL PROGRAM UPDATE

- Progress Report on East Side Access - Page 8*
- IEC Project Review on East Side Access - Page 38*
- IEC East Side Access Appendix - Page 42*
- Update on Second Avenue Subway Phase II - Page 43*
- Update on Penn Station Access Project - Page 48*
- Progress Report on LIRR Expansion - Page 62*
- IEC Project Review on LIRR Expansion - Page 81*

5. CAPITAL PROGRAM STATUS

- Commitments, Completions, and Funding Report - Page 85

MINUTES OF MEETING
MTA CAPITAL PROGRAM OVERSIGHT COMMITTEE
March 25, 2019
New York, New York
2:00 P.M.

MTA CPOC members present:

Hon. Fernando Ferrer
Hon. Andrew Albert
Hon. Sarah Feinberg
Hon. Mitchell Pally

MTA CPOC members not present:

Hon. Norman Brown
Hon. Lawrence Schwartz
Hon. Susan Metzger
Hon. Polly Trottenberg
Hon. Peter Ward
Hon. Carl Weisbrod
Hon. Neal Zuckerman

MTA staff present:

Tom Savio
Don Spero

NYCT staff present:

Anthony Febrizio
Sonia Jaising
Branko Kleva
Bill Motanile
Alok Saha

Independent Engineering Consultant staff present:

Joe DeVito
Kent Haggas
Dianne Rinaldi
Mark Sielucka
Cesar Silva

* * *

Acting Chairman Ferrer called the March 25, 2019 meeting of the Capital Program Oversight Committee to order at 4:02 P.M.

Public Comments Period

There were three public speakers in the public comments portion of the meeting: Jason Pineiro; Kevin Zeng; and Omar Vera.

Meeting Minutes

Upon motion duly made and seconded, the CPOC members approved the minutes to the previous meeting held on February 25, 2019.

Committee Work Plan

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

NYCT Update on Stations Division

Mr. Febrizio reported on progress of the 2015 - 2019 Stations Program since the last report to CPOC in November 2018, including ADA Accessibility. Commissioner Pally asked what the largest stations are in the system -- by ridership -- that will still need to be made accessible once accessibility has been achieved at those stations cited in the presentation (which account for 48% of total subway ridership); Mr. Febrizio said he would follow up with a response. Mr. Montanile then provided a status report on the Sea Beach Line Projects, and an update on the Enhanced Stations Initiative (ESI). In its oral remarks on ADA Accessibility, the IEC stated that 12 of the 16 such projects highlighted by NYCT are included in the IEC's Quarterly Traffic Light Report, and that the key performance criteria of cost, contingency and schedule are all identified as "green", -- reflecting no exceptions since the last reporting period. With respect to the Sea Beach Line Projects, the IEC noted that all platforms are back in service at Kings Highway, Avenue U and 86th Street, and commended the project team for the significant improvements that were completed at those three stations. The IEC then remarked that while great progress has been made among the 6-Station Contract sites, ongoing construction challenges have impacted interim milestones, and therefore, the April 2019 completion dates will not be achieved. The IEC completed its remarks on the Sea Beach Line Projects by citing its concern that the remaining project risks -- as identified by NYCT -- will continue to negatively impact both budget and schedule in 2019. In its oral remarks on the ESI Program, the IEC agreed with NYCT that the remaining work at all stations should be substantially completed by mid-May. The IEC then noted that while the Program is currently on budget, there is some cost risk as work at several stations continues following reopening. 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 Update on Sandy Recovery and Resiliency Division

Mr. Kleva provided an overview of the NYCT Sandy Recovery and Resiliency Program, with detailed highlights of the Coney Island Yard. Commissioner Albert asked whether the new drainage system for the Coney Island Yard will include a means of treating the outflow prior to discharge into the ocean (via the Coney Island Creek); Mr. Kleva said he would follow up with a response. Ms. Jaising then updated the committee on the Clifton Shop. In its oral remarks on the Coney Island Yard, the IEC agreed with NYCT that the substantial completion date remains September 2022, and that based on its review of design, construction and soft costs, the IEC finds that the project is within budget. The IEC then stated that it participates in monthly risk management meetings with the NYCT, and that in the IEC's opinion, NYCT has effective risk mitigations in place to control key project risks. In its oral remarks on the Clifton Shop, the IEC noted that achieving the current completion date of May 2021 will require a significant uptick in productivity. In addition, the IEC remarked that the project team is taking actions to mitigate potential risks to productivity by completing early requirements for submittals, communications and commissioning. 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.

Miscellaneous Reports

Acting Chairman Ferrer brought the Committee's attention to the following reports in the CPOC Agenda and asked if there were any comments or questions with respect thereto, of which there was none: MTA Capital Program Commitments & Completions and MTA Capital Program Funding Reports; Quarterly Traffic Light Reports; and Quarterly Change Order Report.

Adjournment

Upon motion duly made and seconded, Acting Chairman Ferrer adjourned the March 25, 2019 meeting of the MTA Capital Program Oversight Committee at 4:42 PM.

Respectfully submitted,
Michael Jew-Geralds
Office of Construction Oversight



2019-2020 CPOC Committee Work Plan

I. Recurring Agenda Items

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

II. Specific Agenda Items

May

LIRR Capital Program Update

- Jamaica Capacity Improvements
- Mid Suffolk Yard
- Morris Park Locomotive Shop and Employee Facility

MNR Capital Program Update

- Harmon Shop Replacement
- Hudson Line Sandy Restoration
- Customer Information System

Update on New Fare Payment System

Update on Minority, Women and Disadvantaged Business Participation

June

NYCT Capital Program Update

- Signals and Train Control Division
- Systems and Security Division

Quarterly Change Order Report

Quarterly Traffic Light Reports

July

MTACC Capital Program Update

Update on Capital Program Security Projects (in Executive Session)

September

NYCT Capital Program Update

Quarterly Change Order Report

Quarterly Traffic Light Reports

October

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

November

NYCT Capital Program Update
Update on New Fare Payment System
Update on Minority, Women and Disadvantaged Business Participation
Update on Small Business Development Program

December

MTACC Capital Program Update
Quarterly Change Order Report
Quarterly Traffic Light Reports
Update on Capital Program Security Projects (in Executive Session)

January

NYCT Capital Program Update
NYCT Rolling Stock Procurement Program

February

B&T Capital Program Update

March

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

April

MTACC Capital Program Update

BRINGING LONG ISLAND RAIL ROAD SERVICE TO THE EAST SIDE OF MANHATTAN

Capital Program Oversight Committee
April 15, 2019



One year ago...



Harold
Interlocking



Concourse
Fit-out



Systems
Testing

NEW APPROACHES



Change Management
Group



Project Management
Office



Master Coordinated
Schedule



Incremental Integrated
Systems Testing



- **Contractor coordination & collaboration**
- **Driving issues to resolution and to action**
- **Schedule compliance**
- **Maintain Systems Testing Priority**



NEW APPROACHES



**Amtrak
Engagement**



THE HAROLD TURNAROUND



**14 Track Switches
installed**



**5 signal huts
cutover**



**G02 Substation
activated**



**Last ESA heavy civil
contract mobilized**

Risks remain...



Amtrak



**Coordination &
Systems
Testing**



**270 Park
Incursion**

PUBLIC ENGAGEMENT

tours / visits by elected officials / social media /
press engagement







The background of the slide is a blue map of the San Francisco Bay Area. Overlaid on the map are numerous yellow lines that represent transit routes, including highways and public transit lines. The lines are more densely packed in the urban areas and follow the coastline and major corridors.

BETTER PROJECT EXECUTION...

... REGIONAL TRANSFORMATION

Capital Program Oversight Committee Report

East Side Access, Q2 2019

Construction Progress Highlights

Harold & Queens

- Substantial Completion of CH057D Contract (Harold Track, Part 3)
- Cutover and placed into service the new G02 traction power substation (first new substation to be put in service by ESA)
- Installed 5165 East and West switches and catenary restoration during successful January 2019 extended outages. Port Wash 1 and Mainline 2 Track returned to service as planned.
- Installed section of Westbound Bypass Track and switch 3121E
- Demolished Freight Tracks and catenary wires to prepare for the Tunnel B/C Approach construction
- Mobilized heavy equipment for construction of Tunnel B/C Approach Structure.
- Commenced construction of the east section Tunnel D Structure (final section)
- Installed the second of 8 signal huts in Midday Storage Yard.
- Completed installation of Mid-day Storage Yard Pedestrian Bridge superstructure, including connection to Yard Services building.
- Performed preparatory work for Mid-day Storage Yard Track Installation

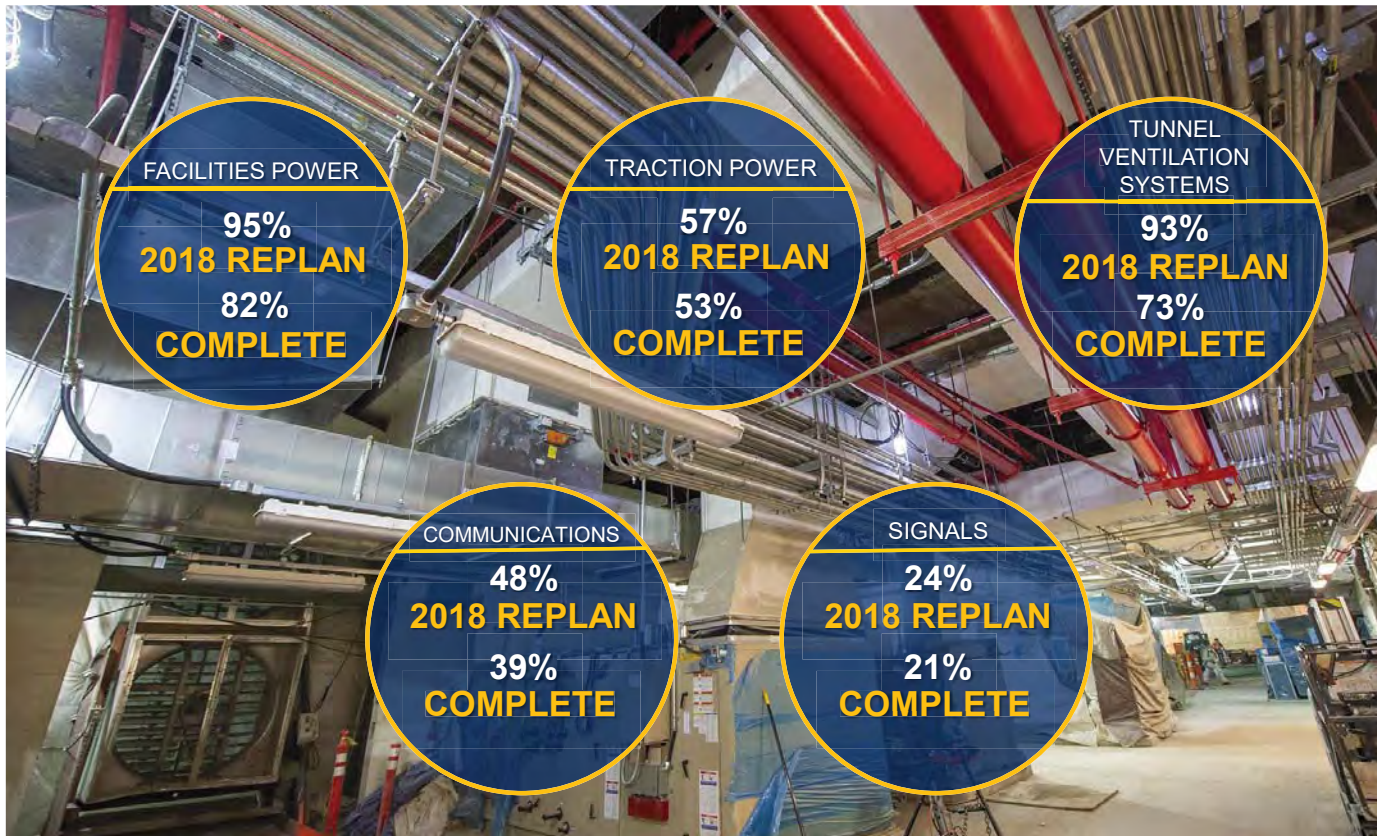
Tunnels, Terminal & Concourse

- Completed steel framing of all Cavern Escalators and Elevators
- Installed over 50% of track in the Caverns and Tunnels
- The smoke plenum is approximately 90% complete in both east and west caverns
- Plumbing is approximately 90% complete in both east and west caverns
- HVAC is approximately 50% complete in both east and west caverns

Systems

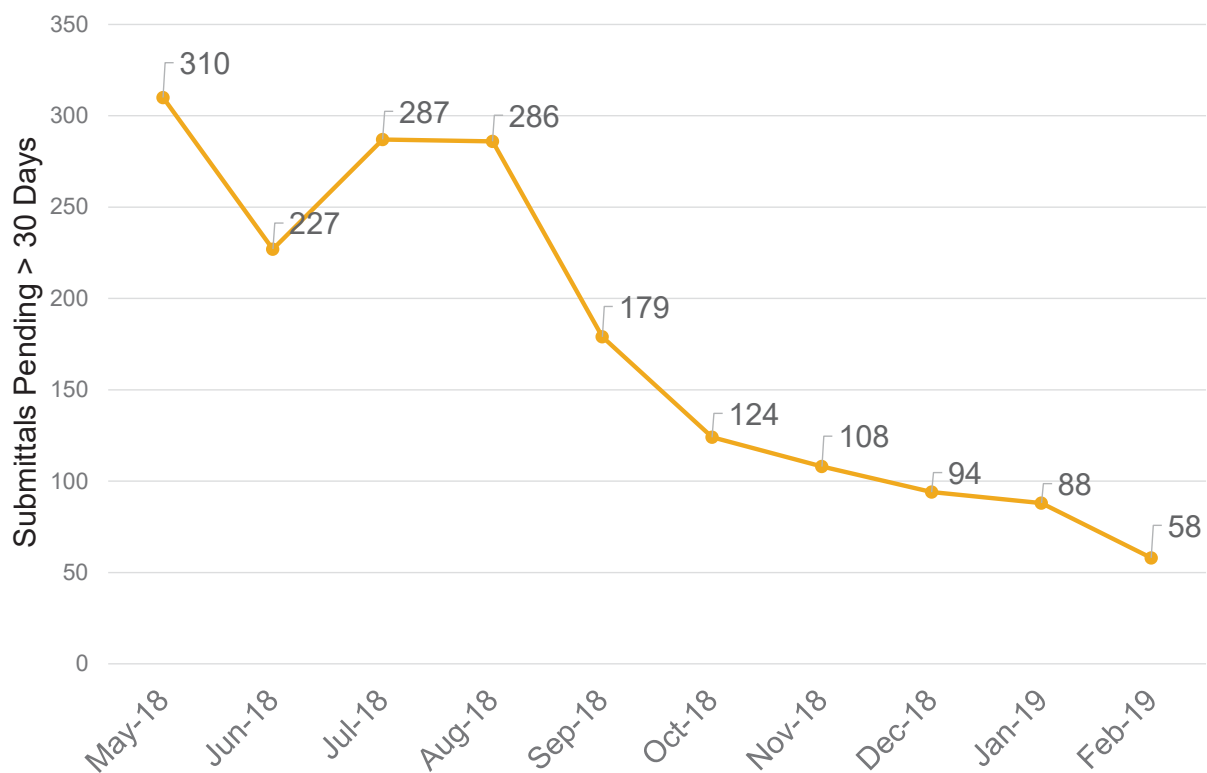
- BCS Fiber is 60% installed.
- Traction Power System - Substation equipment is 80% fabricated.
- Fabrication & Delivery of Signal Interlocking Equipment is 90% complete

Construction Progress – Systems (Includes Fabrication)



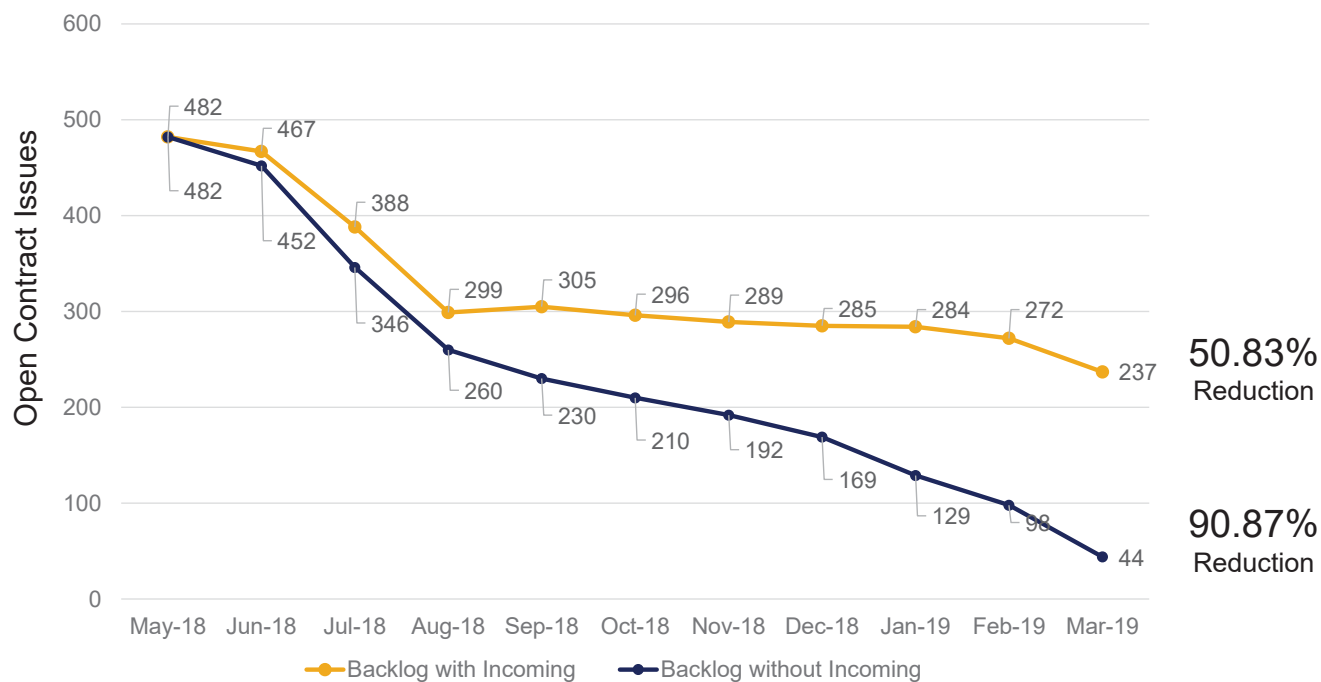
% completion based on earned value

Key Performance Indicators-- Submittals Review Performance (GEC/CM/LIRR)



Key Performance Indicators

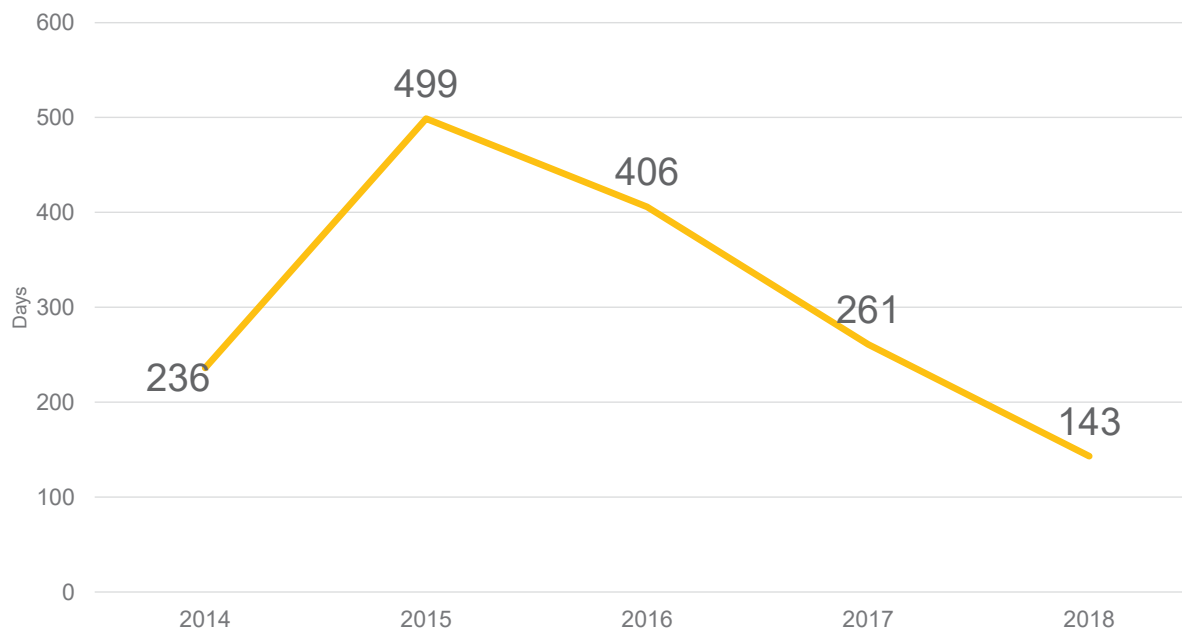
Change Management Group – Open Change Orders and Contract Issues for CM007, CM014B and CS179



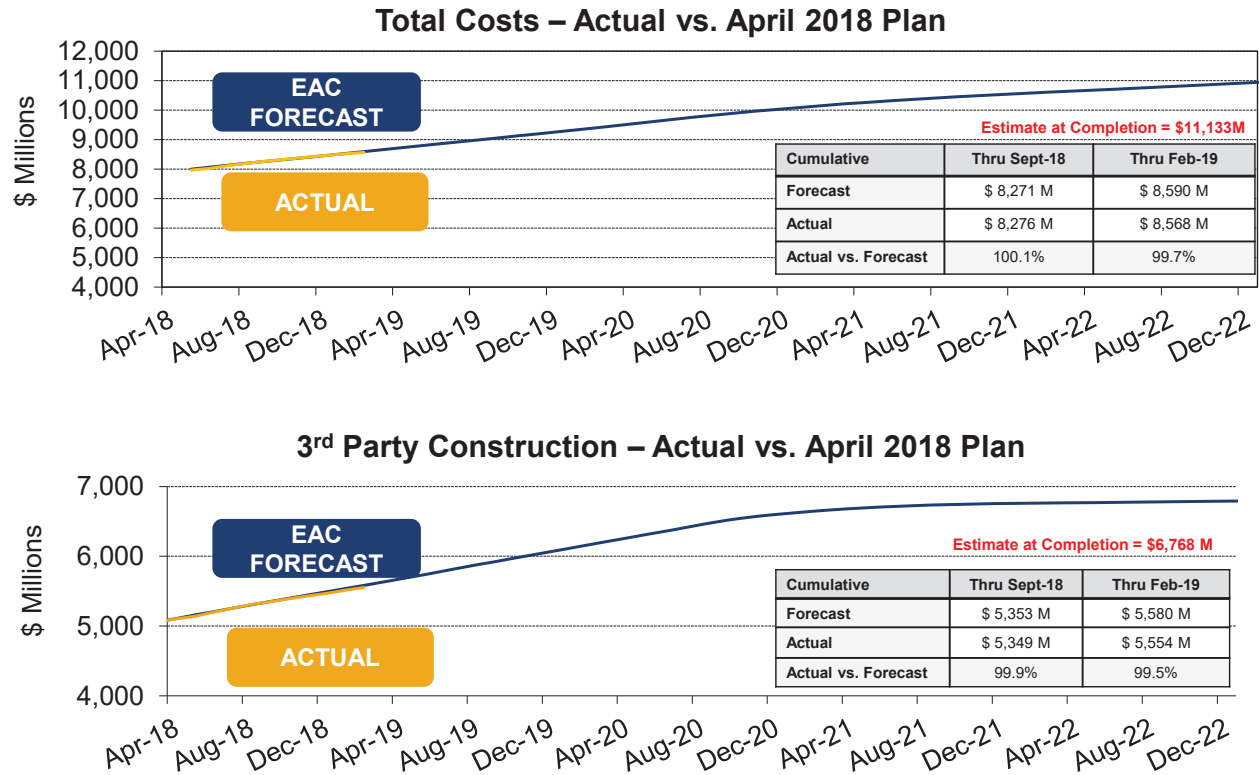
East Side Access

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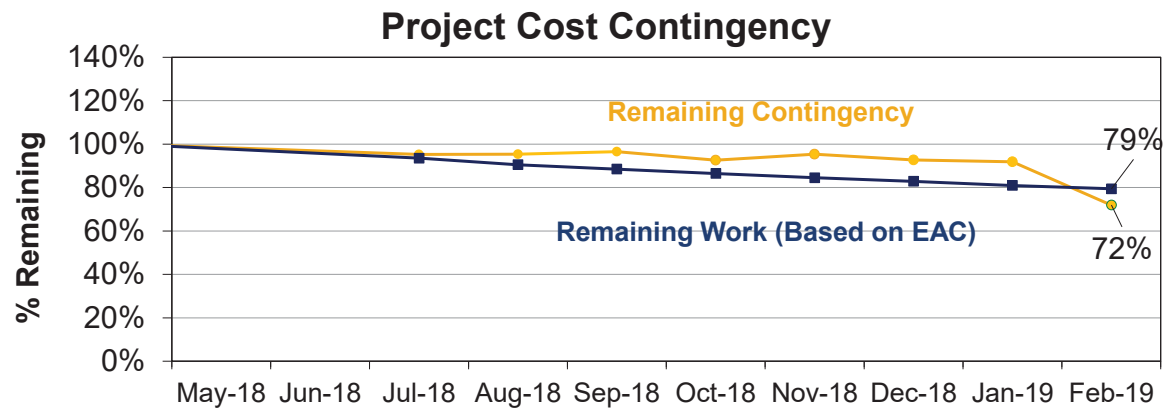
Key Performance Indicators Reduction in CS179 Change Order Processing Times



Financial Performance: Expenditures – Forecast vs. Actual



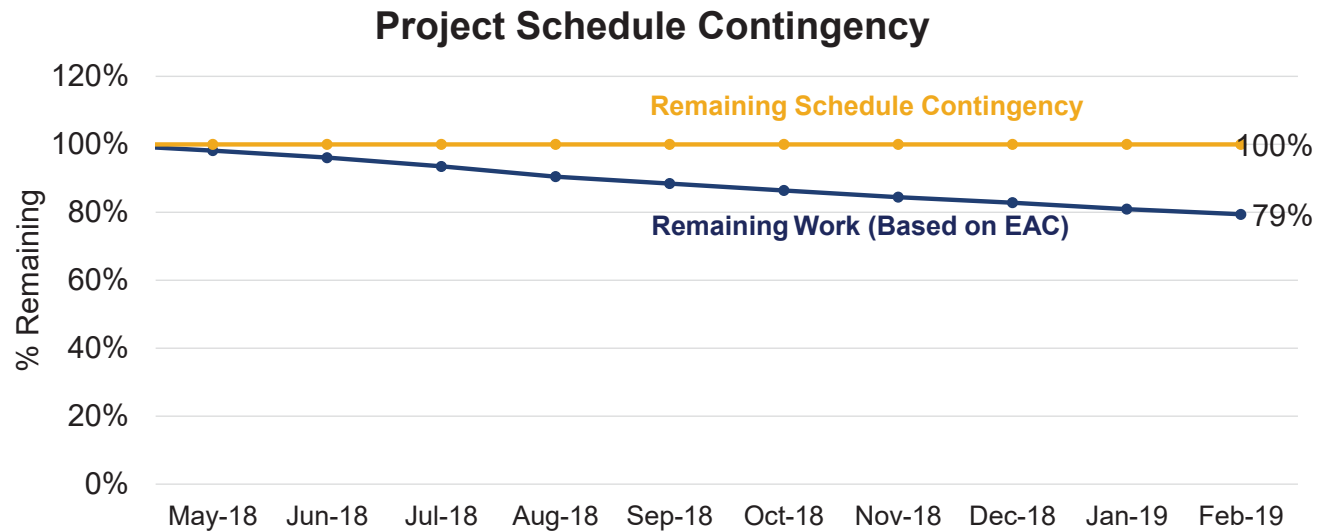
Financial Performance: Cost Contingency



April 2018 EAC Contingency	\$723 million
Unallocated contingency	\$267 million
Allocated contingency	\$456 million
February 2019 EAC Contingency*	\$520 million
Unallocated contingency	\$199 million
Allocated contingency	\$321 million

*Assumes execution of contract modifications for ESA Concourse and Facilities Systems.

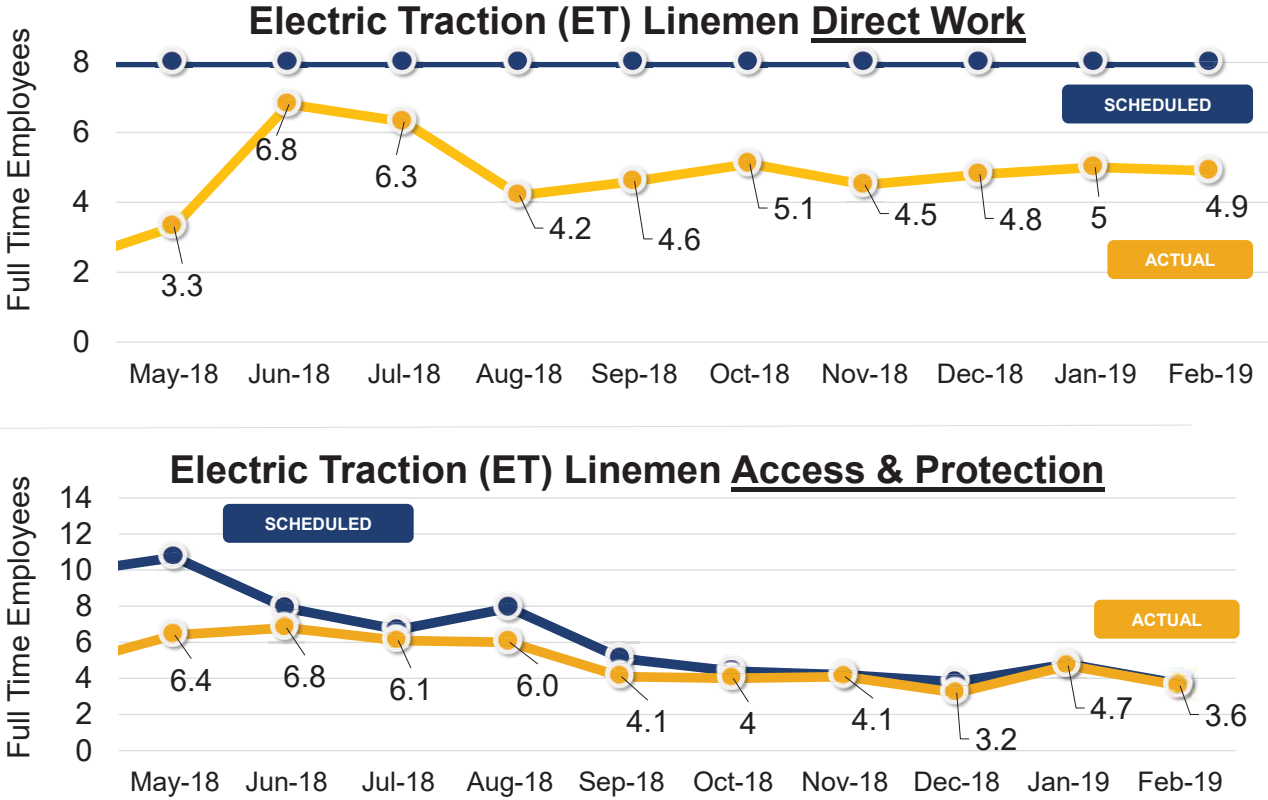
Schedule Performance: Schedule Contingency



Note: Remaining Work and Schedule Contingency re-indexed to April 2018 EAC and contingency values

Category	September 2018 Total	February 2019 Total
Program Contingency – Manhattan/Systems (Critical Path)	10 months	10 months
Program Contingency – Harold (5 months off Critical Path)	16 months	15 months
Program Contingency – Mid-Day Storage Yard (4 months off Critical Path)	19 months	14 months


Key Performance Indicators – Amtrak (Current)






90-Day Look Ahead


- Begin installation of architectural finishes, energize 2 facilities power substations, and install 3 elevators and 2 escalators in the GCT Caverns, delayed 4 months since last reported
- Commence installation of soldier piles for Tunnel B/C Approach Structure.
- Complete installation of soldier piles for Tunnel D Approach Structure East.
- Install the third Mid-day Storage Yard Signal Hut
- Tunnel SCADA factory acceptance testing
- Commence track/switch installation in Mid-day Storage Yard, delayed 4 months since last reported




Key Milestones and Issues

Status	Activity	Date Needed	Issues
 Yellow	Contractor Agreement on Incremental Systems Testing Approach, Schedule, and Cost	Ongoing	<p>Issue:</p> <ul style="list-style-type: none"> Timely contractor buy-in (agreement on the approach, schedule, and cost) is required for the program in order to commence testing on time. <p>Impact:</p> <ul style="list-style-type: none"> Delays may result in additional cost and schedule impacts to the contract and the program. The contractor may expect higher compensation than the amount anticipated by the project team. <p>Mitigation:</p> <ul style="list-style-type: none"> MTA has negotiated the cost of an accelerated syndicated schedule (CPR-220) with a substantial completion date in June 2021, with the contractor. This contract modification will be presented to the April Board. The accelerated syndicated schedule is supported by the concourse (CM014B) and cavern contracts (CM007).


	Red	Significant impact to Project Cost and/or Schedule (Milestones, Project Completion and/ or Revenue Service Date.)
	Yellow	Impact to Contract Cost and/or Schedule.
	Green	No Near Term Impact for Design, Procurement & Construction.




Key Milestones and Issues

Status	Activity	Date Needed	Issues
 Green	Start of Phase 3 – Incremental Systems Testing	August 2020	<p><u>Issue:</u></p> <ul style="list-style-type: none"> The previous three modifications, critical to the start of incremental testing in Phase 1 have been executed. As of December 2018, two modifications critical to the start of Phase 3 have been identified: <ul style="list-style-type: none"> CPR-76 – Field Networks CPR-51 – Public Address System <p><u>Impact:</u></p> <ul style="list-style-type: none"> Greater than anticipated durations to issue critical contract modifications may impact the start of incremental testing (CS179 – Phase 3). <p><u>Mitigation:</u></p> <ul style="list-style-type: none"> CPR-76 received Board approval in January 2019 and is currently awaiting contractor (TPC) signature. CPR-51 was approved at the March Board meeting; a retroactive NTP was issued on September 10, 2018, and the contractor (TPC) has started work.


	Red	Significant impact to Project Cost and/or Schedule (Milestones, Project Completion and/ or Revenue Service Date.)
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Key Milestones and Issues

Status	Activity	Date Needed	Issues
 Yellow	Factory Acceptance Testing (FAT) for Backbone Communications System (BCS)	November 2019	<p><u>Issue:</u></p> <ul style="list-style-type: none"> Design documents to be completed by the contractor to facilitate BCS FAT; RFIs in connection with executed modifications for FON Connectivity and IP Addresses to be answered to allow completion of design documents; CPR-203 (Corporate IT) tied to completion of BCS design documents in current accelerated syndicated contractor schedule. <p><u>Impact:</u></p> <ul style="list-style-type: none"> Delaying the start of BCS FAT will delay deployment of BCS equipment and subsequently delay the start of IST. <p><u>Mitigation:</u></p> <ul style="list-style-type: none"> Respond to RFIs in a timely manner and track progress of development of BCS design documents by the contractor closely; Correct logic in upcoming update of accelerated syndicated schedule and tie Corporate IT work to proper activities in schedule.


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Key Milestones and Issues

Status	Activity	Date Needed	Issues
 Yellow	Predecessor Work and Equipment Manufacturing (CS084)	September 2019 (Delivery of Final Substation)	<p>Issue:</p> <ul style="list-style-type: none"> Risk to timely handover of the traction power rooms to CS084 from other contracts, due to lack of facility power, water ingress and rework of installations Risk to the fabrication and delivery schedule of traction power equipment. <p>Impact:</p> <ul style="list-style-type: none"> Delays to equipment installation in the traction power rooms, required for track, traction power and signal (CTC) Integrated Systems Testing. <p>Mitigation:</p> <ul style="list-style-type: none"> The facilities contractor (CS179) was directed to provide temporary power to traction power rooms; leak mitigation at 55th Street and rework at other facilities is being advanced. ESA is coordinating tunnel access and equipment delivery with the track installation contractor (CM007). Equipment delivery dates are being monitored through monthly manufacturing progress reports, factory visits and management level meetings.


	Red	Significant impact to Project Cost and/or Schedule (Milestones, Project Completion and/ or Revenue Service Date.)
	Yellow	Impact to Contract Cost and/or Schedule.
	Green	No Near Term Impact for Design, Procurement & Construction.




Key Milestones and Issues

Status	Activity	Date Needed	Issues
 Green	Tunnel B/C Approach Predecessor Activities	April 2019	<p><u>Issue:</u></p> <ul style="list-style-type: none"> Completion of predecessor activities to Tunnel B/C Approach Structures contract by April 15, 2019 are essential to maintaining this contracts schedule. <p><u>Impact:</u></p> <ul style="list-style-type: none"> Delayed completion of predecessor activities will delay the start of Tunnel B/C Approach Structures and the completion of Harold work. Delays may result in additional cost and schedule impacts to the contract and the program. <p><u>Mitigation:</u></p> <ul style="list-style-type: none"> January 2019 outage scope completed on time. Amtrak and LIRR removed decommissioned infrastructure on time. Contractor commenced field work on March 2nd.


	Red	Significant impact to Project Cost and/or Schedule (Milestones, Project Completion and/ or Revenue Service Date.)
	Yellow	Impact to Contract Cost and/or Schedule.
	Green	No Near Term Impact for Design, Procurement & Construction.




Key Milestones and Issues

Status	Activity	Date Needed	Issues
 Yellow	Availability of Amtrak Resources for Harold	Ongoing	<p><u>Issue:</u></p> <ul style="list-style-type: none"> The levels of Amtrak ET Direct Work resources may not be sufficient to support ESA work in Harold. Based on historical performance, the Amtrak resources allocated to ESA have been less than required to support the schedule in accordance with prior agreements between Amtrak and MTA. <p><u>Impact:</u></p> <ul style="list-style-type: none"> Insufficient Amtrak ET Direct Work resources to support 3rd party construction and LIRR direct work in Harold Interlocking may result in delays to work on the Harold critical path. <p><u>Mitigation:</u></p> <ul style="list-style-type: none"> Access and protection has been on/close to requested levels. To reduce pressure on Amtrak ET Direct Work resources, MTACC has a procurement underway for a 3rd party contractor to perform ET direct scope as part of a design-build contract. Contract award is forecasted for Q3 2019.


	Red	Significant impact to Project Cost and/or Schedule (Milestones, Project Completion and/ or Revenue Service Date.)
	Yellow	Impact to Contract Cost and/or Schedule.
	Green	No Near Term Impact for Design, Procurement & Construction.




Key Milestones and Issues

Status	Activity	Date Needed	Issues
 Yellow	270 Park Avenue	Ongoing	<p><u>Issue:</u></p> <ul style="list-style-type: none"> JPMC's construction of its new headquarters at 270 Park Ave presents challenges to ESA construction and MNR train operations at Grand Central. <p><u>Impact:</u></p> <ul style="list-style-type: none"> Shear walls to be constructed by JPMC affect the architectural, MEP and systems work in the ESA/ LIRR Concourse. The impact of JPMC construction on MNR train operations is currently under review and will be properly addressed. <p><u>Mitigation:</u></p> <ul style="list-style-type: none"> A cost reimbursement agreement has been entered into with JPMC to eliminate cost exposure to MTA. In March, the MTA Board approved a Memorandum of Understanding (MOU) between JPMC and MTA that: 1. Ensures no delay in substantial completion of ESA, 2.Requires mitigating any service impact to MNR or GCT,3. Provides JPMC proportional funding to both the GCT Train Shed improvements and a future ESA Entrance at 48th St. A fully developed Construction Agreement with JPMC to memorialize the details of design and construction is being negotiated now.

	Red	Significant impact to Project Cost and/or Schedule (Milestones, Project Completion and/ or Revenue Service Date.)
	Yellow	Impact to Contract Cost and/or Schedule.
	Green	No Near Term Impact for Design, Procurement & Construction.

Key Milestones and Issues

Status	Activity	Date Needed	Issues
 Yellow	LIRR Operational Readiness	Ongoing	<p><u>Issue:</u></p> <ul style="list-style-type: none"> Hiring and training of LIRR personnel required for ESA revenue service is a significant effort that may be affected by the current hiring freeze. <p><u>Impact:</u></p> <ul style="list-style-type: none"> Impact ESA revenue service operations (number of trains, schedules, crew assignments, etc.) <p><u>Mitigation:</u></p> <ul style="list-style-type: none"> The RAP durations, which align with the revenue service date, are monitored as part of the ESA integrated project schedule LIRR is looking at mitigation measures to address current hiring and training constraints and the hiring freeze.

	Red	Significant impact to Project Cost and/or Schedule (Milestones, Project Completion and/ or Revenue Service Date.)
	Yellow	Impact to Contract Cost and/or Schedule.
	Green	No Near Term Impact for Design, Procurement & Construction.

April 2019 CPOC IEC Project Review

East Side Access



Budget and Schedule Review

■ Cost

- The cost contingency established in April 2018, intended to address contract issues and cost agreements to support the Incremental Integrated Systems Testing (IIST) plan, remains sufficient.

■ Schedule

- The execution of the current systems testing plan remains a challenge given the reduced 16-month IIST duration, which results in a significant amount of concurrent testing activities in multiple locations.
- Resource-loaded schedules from the Systems (CS179) and Manhattan Concourse (CM014B) contractors are required to assess the risk associated with the IIST plan.
- The early completion of systems testing, as agreed to with the Systems (CS179) contractor, reduces the risk to achieving the December 2022 Revenue Service Date.



Observations/Risks – Systems

- Integrated Incremental Systems Testing (IIST)
 - Increased productivity for systems installation and subsequent local testing is required to start IIST as planned.
 - A revised Comprehensive Systems Test Plan and individual system test procedures/cases are necessary to support the program schedule.
 - Sampling approach to IIST remains a risk.
- Potential impacts to IIST from other projects are yet to be captured in the program schedule.
 - Positive Train Control design delays (by others) may impact ESA installation and testing.
 - 270 Park by JP Morgan Chase (JPMC) may impact systems testing in the concourse.



Recommendations

- The project team and the Systems (CS179) contractor must fill key positions as soon as possible, to effectively progress the incremental testing work in accordance with an approved Comprehensive Systems Testing Plan.
 - System Integrator
 - System Technical Manager



Recommendation Log

ESA – IEC Recommendations / Observations Log

Recommendations (April 2018)	Agency Response/ Action	Status
Perform a Systems Risk Assessment and identify mitigations based on the incremental testing approach.	A system risk refresher will be performed, once a modification for the new Incremental Systems Testing schedule has been issued.	Ongoing
Manage in-house Force Account (FA) to balance resources between East Side Access and other projects.	LIRR Department of Program Management is refreshing their 5-year outlook to determine what resources will be needed leading to revenue service, to ensure it will be supported.	Ongoing



MTACC Report to CPOC Second Avenue Subway Phase 2

April 15, 2019



Federal Funding

- **Goal:** Funding agreement by Q4 2020
- **SEA** (*Supplemental Environmental Assessment*) completed and **FONSI** (*Finding of no significant impact*) obtained Nov. 2018.
- **Entry into Engineering** (*expected mid-year*)
 - *Submitted project documents for FTA risk assessment and to demonstrate readiness to Enter into Engineering*
 - *FTA PMOC assigned, kickoff meeting held, roadmap/schedule to complete readiness review and approve Entry into Engineering.*



Design Process

■ Advanced Works Design

- *Completed design documents*
- *Next steps:*
 - *Finalize third-party and Interagency MOUs/agreements*
 - *Assess and update documents based on cost containment and VE efforts*

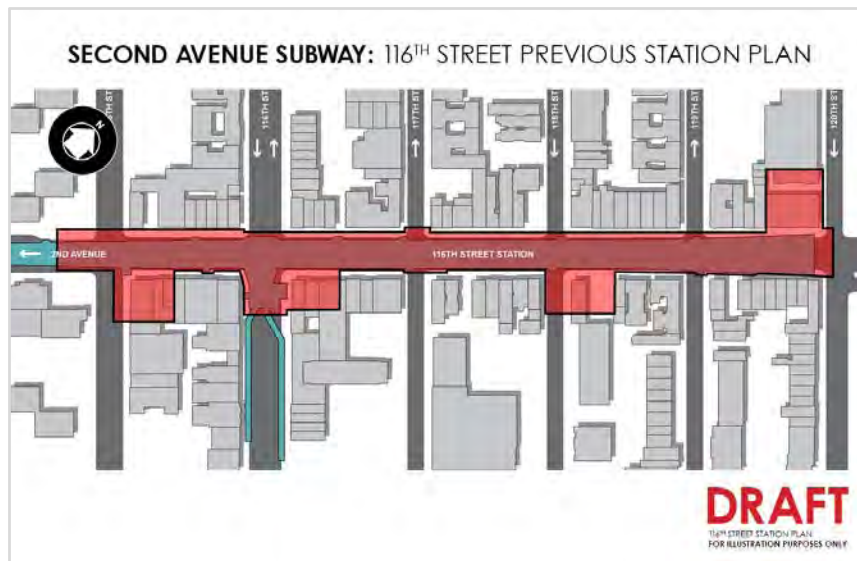
■ Completion of structural Design Build documents extended to end of Q3 2019, in order to address the following:

- *Input from academic review panel and international experts*
- *Value engineering*
- *Ongoing cost containment efforts with NYCT*



VE/Cost Containment 116th Street

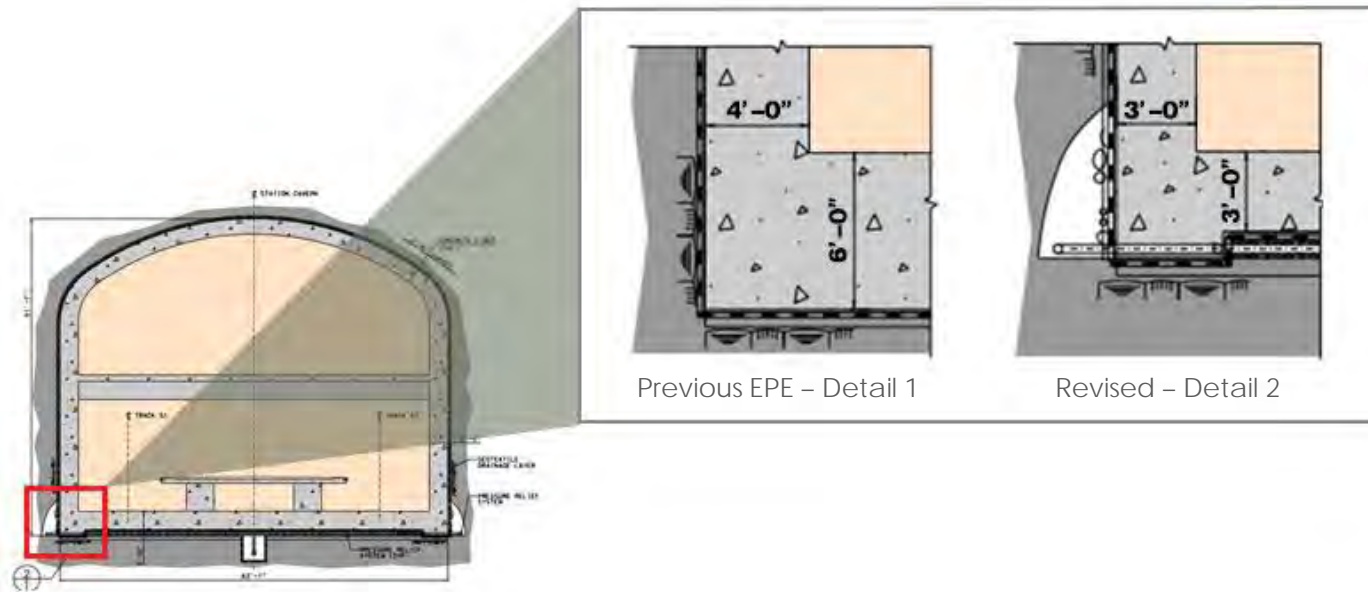
- Reuse, instead of demolishing, existing subway tunnel for new 116th Street Station



- Proposed demolition and excavation
- Existing tunnel

VE/Cost Containment 125th Street

- Modifications to the design of the entrances, ancillaries and station cavern have resulted in significant reductions in costly underground construction



Quantity Savings	
Concrete	65,000 (yd ³)
Steel Reinforcement	8,500,000 (lbs.)
Excavation	99,000 (yd ³)





Penn Station Access

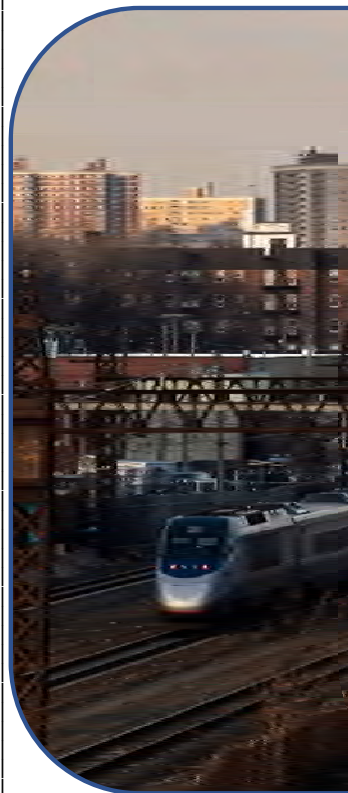
■ CPOC Presentation

April 15, 2019





Transportation Linking Communities and the Region



The New York Times

Relief for New York City's Transit Deserts? Commuter Trains Might Help

By Winnie Hu

Jan. 10, 2019



[What you need to know to start the day: [Get New York Today in your inbox.](#)]

Even when there are no subway delays, it takes Amy Sacks at least an hour and 20 minutes to get to work in the Bronx.

The problem is that the subway still leaves her about a mile — and a bus ride away — from her office. “There’s always a transfer unless I use my feet for the second half,” said Ms. Sacks, a writer who lives in Manhattan.

But the key to a shorter, easier commute lies just outside her office door: railroad tracks that run through the Bronx.

The tracks are used by Amtrak trains, but would be opened to new commuter trains under a billion-dollar expansion by the Metropolitan Transportation Authority of rail service linking Manhattan with suburbs north of New York City. Four new train stations for the Metro-North Railroad would be built along the line in the eastern Bronx, where subway service is sparse and buses are often slow and unreliable.

JOBS

Bronx to Manhattan →

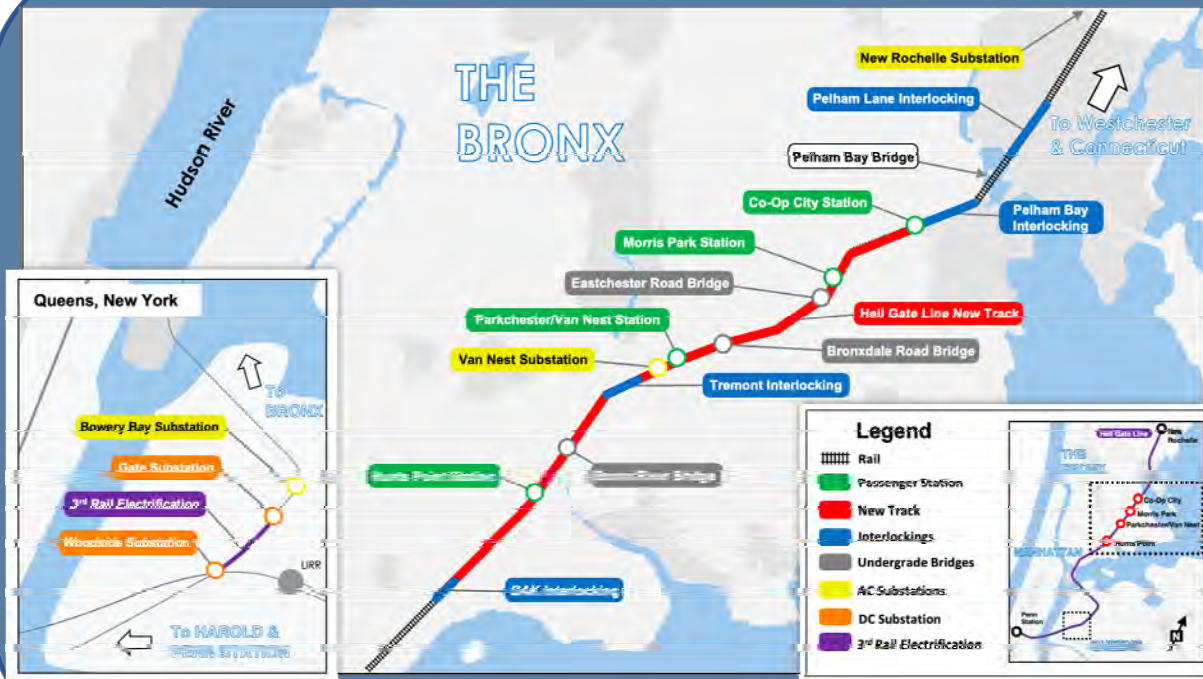
← Bronx to Westchester connection

Rail transit desert area

Access to *educational* facilities

Access to **medical** facilities

Project Components



- 4 new Metro-North stations
- New tracks on 6 miles of ROW
- 3 new and 1 reconstructed interlockings
- Rehabilitation of 4 bridges
- Upgrading signaling system
- Traction power, catenary, third rail and substations



This is what PSA will look like



Project Accomplishments

MTA/Amtrak Memorandum of Understanding



MTA Board Approved General Engineering Contract (GEC)



NTP Issued to GEC consultant



Key Stakeholders Kick-off Meetings: MNR/Amtrak/LIRR

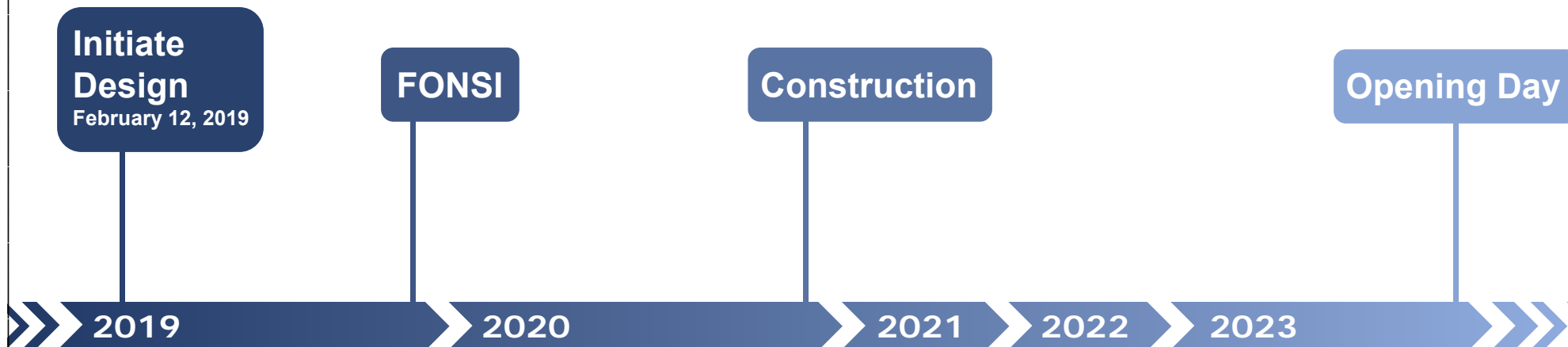


Activating Survey Work on Amtrak Right-of-Way





PSA Road Map



**D-B Selection
Long Lead Procurement**

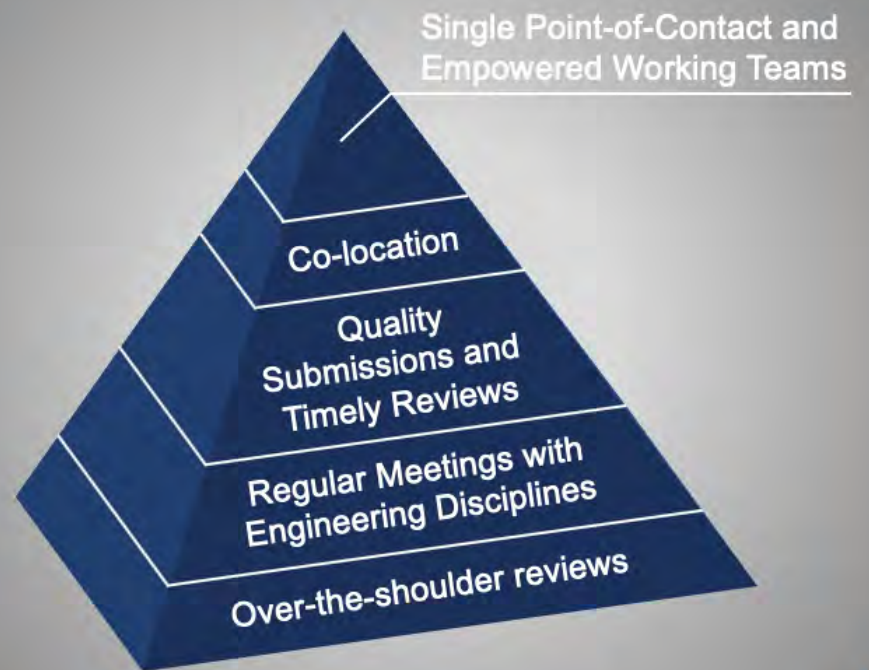


Key Stakeholder Engagement

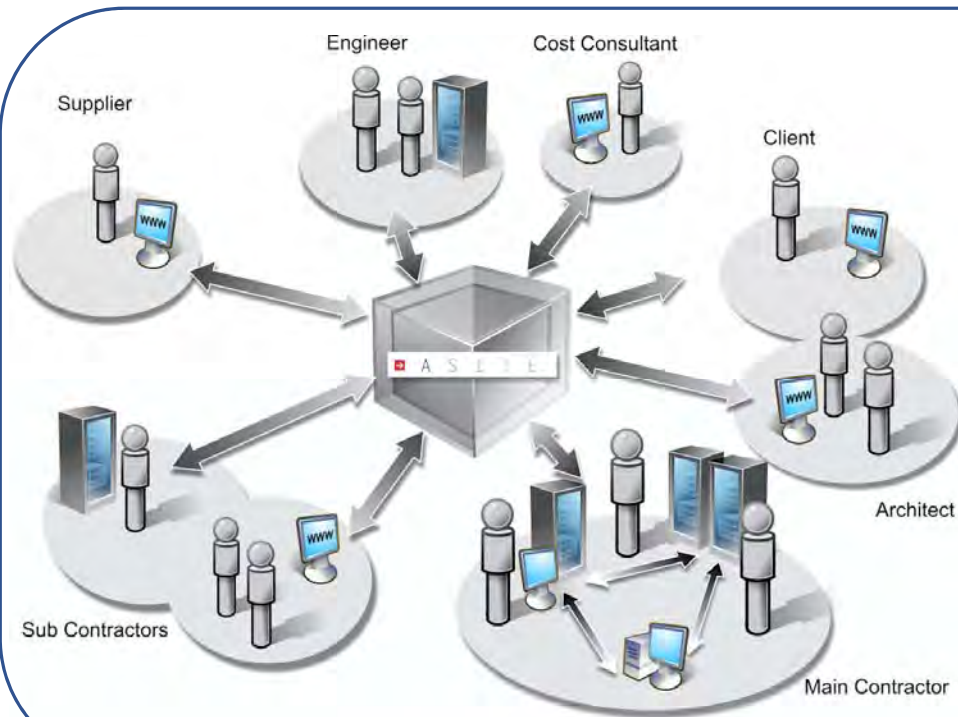


Integrated Project Management Team

Integrated Working Teams are Essential



Tools and Techniques



Electronic Project Management

- Life-cycle tracking

Cost Containment Principles

- Manage Scope

Design-Build Project Delivery

Benefits

- Early Construction Input
- Innovation: Alternative Technical Concepts
- Drive Schedule

Contractor Outreach

- Maximum Competition



Phasing Construction Activities to Minimize Disruptions

Logistics planning

- Track outages
- Construction temporary barriers
- Single tracking



©Amtrak

Community Outreach



4 unique neighborhoods

- Co-op City
- Morris Park
- Parkchester/Van Nest
- Hunts Point

Interactive workshops

City partnership

- City Planning
- CDOT
- EDC



Key Challenges Ahead

- 🔑 Amtrak Cooperation
- 🔑 Securing Funding in 2020-2024 Capital Plan
- 🔑 Completing Environmental Process



180 Day Look Ahead

- **Engineering**
 - Execute Design Phase agreement
 - Advance design of track alignment
- **Environmental**
 - Submit full draft EA to FTA
- **Pre-Construction**
 - Identify long lead items
 - RFQ for D-B contractors
- **Community Engagement**
 - Parkchester/Van Nest and Morris Park
 - Hunts Point and Co-Op City station planning



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LIRR Expansion Project Floral Park to Hicksville

CPOC Report April 2019

EXPANSION PROJECT

FLORAL
PARK

HICKSVILLE

- **Award Date:**
December 2017
- **Contract Type:**
Design-Build
- **Project Budget Contained In:**
Approved 2015-2019 Capital Plan: \$2,050M
Future 2020-2024 Capital Plan: \$ 538M

Design-Builder (3TC)

DESIGN BUILD

3rd TRACK CONSTRUCTORS
Picone | Dragados USA | CCA Civil | Halmar

LEAD OUTREACH
RUBENSTEIN

LEAD DESIGNER
Stantec

Project Management Team (PMT)

- MTACC
- LIRR
- NYSDOT
- Consultants

DECEMBER
2017



PROJECT
AWARD

Q4
2018



ADVANCE
HEAVY
CONSTRUCTION

Q4
2022



END
HEAVY
CONSTRUCTION

MID -
2023



SUBSTANTIAL
COMPLETION



Overall Summary

	TOTAL
Original Budget	
Design Budget	\$ 1,494,838,172
LIRR/Force Account	\$ 213,860,388
Project/Other	\$ 200,700,330
Contingency	\$ 140,601,110
Total Budget with Contingency	\$ 2,050,000,000
Expenditures	
Projected	\$412M
Actual	\$349M
Change Orders	
Allocated	\$0.5M
Under Negotiations	\$5M-\$10M Increase
Remaining Contingency	\$130M-\$135M

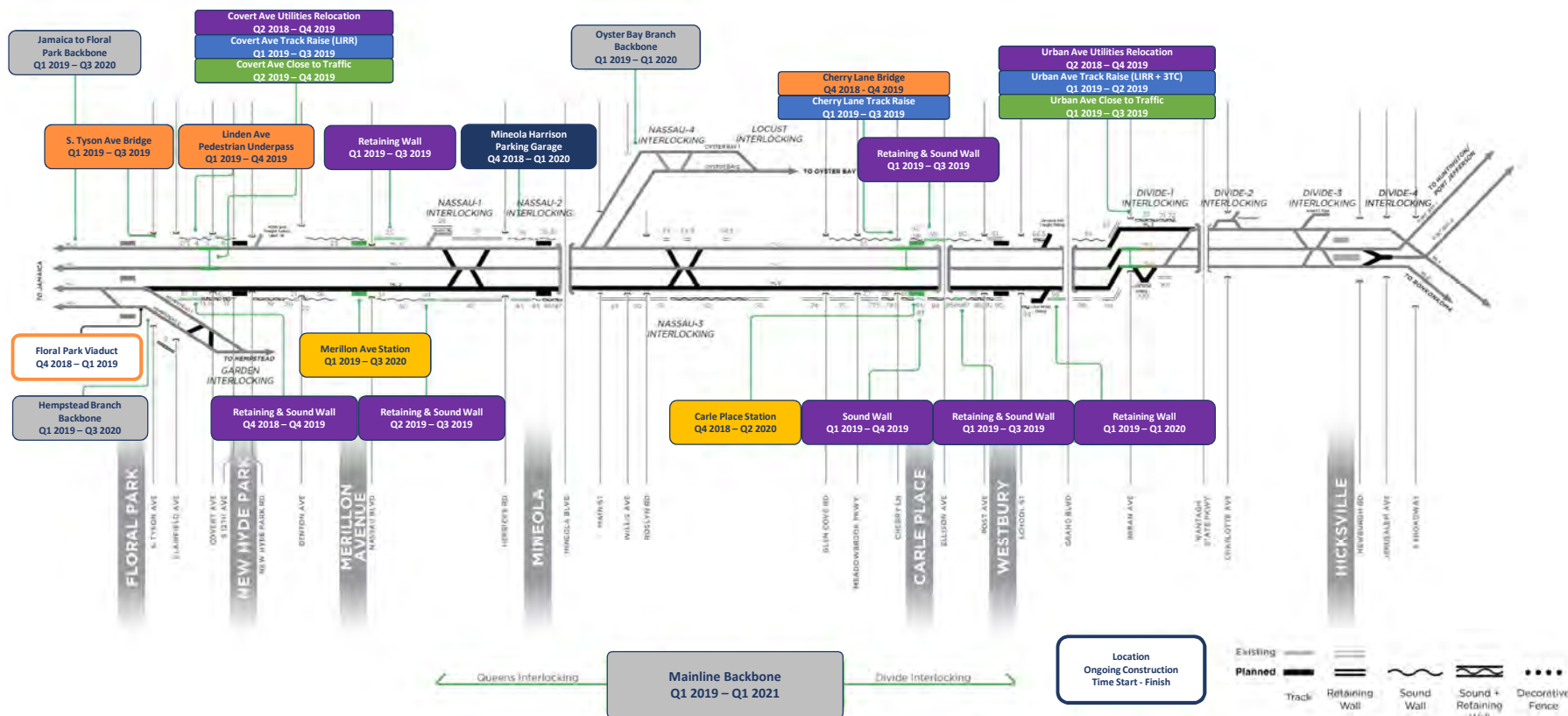
1. Project remains under budget:

- No major change orders from 3TC or MTA
- Less than \$0.5M has been allocated from contingency of \$140.6M (0.3%)
- We are negotiating further changes that will increase costs by \$5-10M – primarily to account for changes in 3TC vertical alignment that require LIRR support

2. Project is on schedule:

- All project elements proceeding per schedule
- Off Right-Of-Way elements advancing ahead of schedule
- On Right-Of-Way elements are advancing slower than anticipated; recovery plan in place
- Advancing two undergrade crossings early

Current Construction Activity



- ① Construction completed at one bridge; work ongoing on two bridges and one pedestrian underpass
- ② Started work on two stations
- ③ Started work at two undergrade crossings
- ④ Combining facilities in Mineola, Harrison Ave Parking Garage
- ⑤ Raising track at three locations
- ⑥ Fiber backbone installation along the mainline, Hempstead, Oyster Bay and Floral Park to Jamaica
- ⑦ Retaining walls, sound walls and utility relocations ongoing across full project



Installing Support Of Excavation at Covert Avenue



Raising Track at Urban Avenue



Excavating New Undergrade Crossing at Urban Avenue

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LIRR Expansion Project
Floral Park to Hicksville

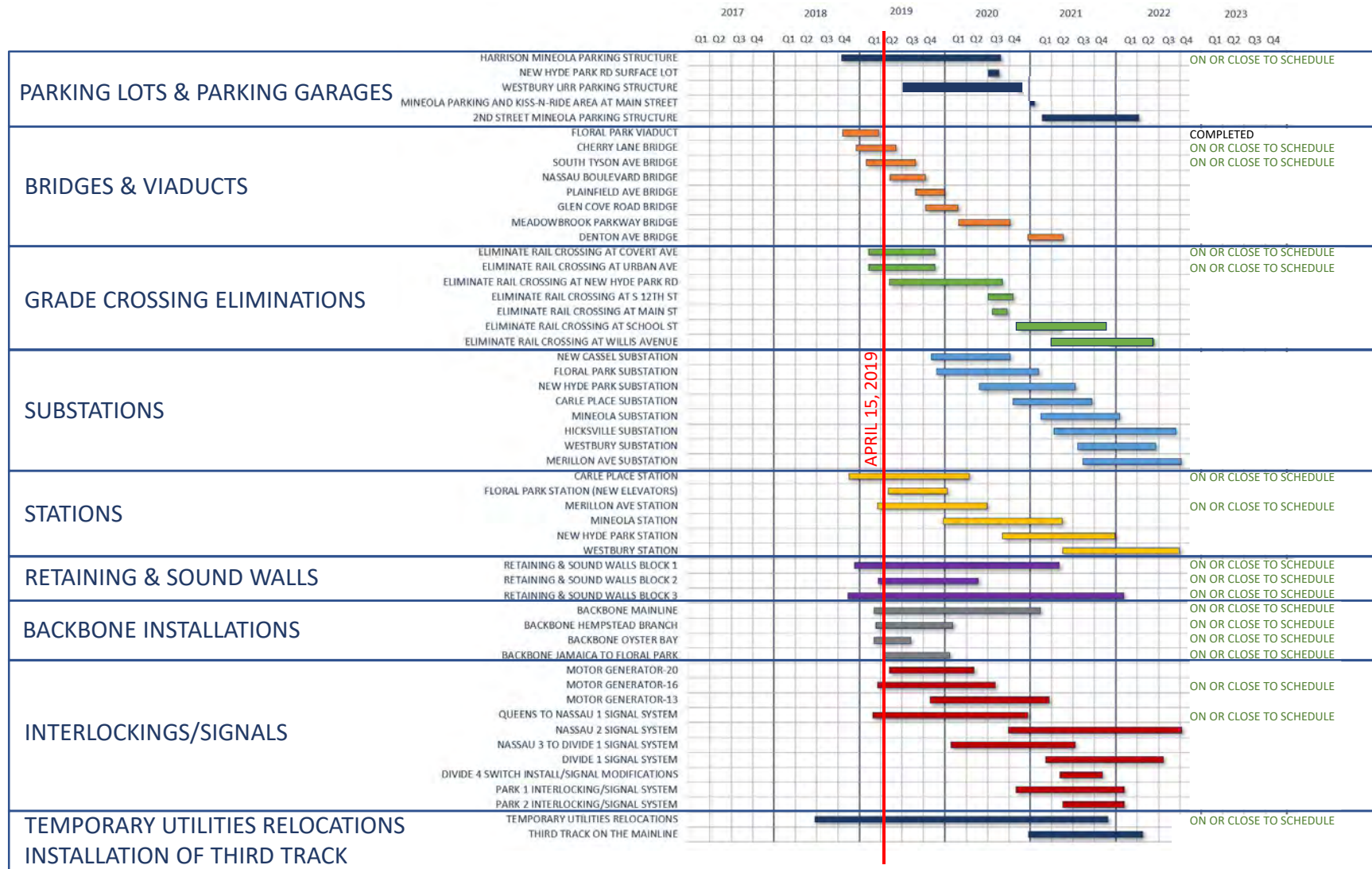


Excavation and SOE at Cherry Lane Bridge



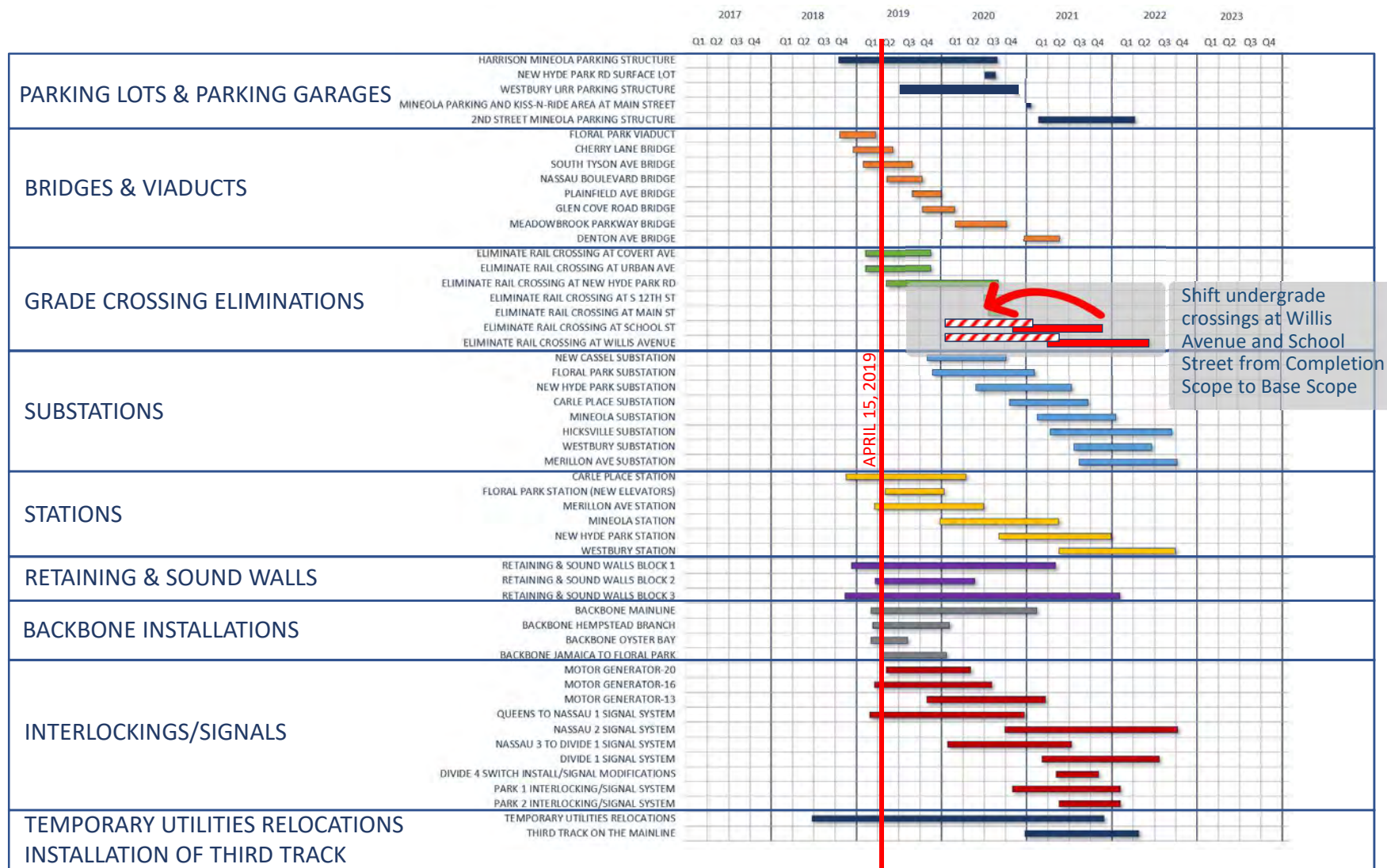
**Excavating new foundations at
Harrison Avenue Parking Structure in Mineola**

Construction Schedule Summary



1. Project is on schedule
2. Schedule has been developed to include resources and over 30,000 activities
3. All planned activities are underway

Advancing two Undergrade Crossings Early



Supporting Double Track Outages and Road Closures (2019)

Double Track Outages:

1. Project Related:

- June 1-2 at Cherry Lane (Mineola-Hicksville)
- July 20-21 at Urban Ave (Mineola-Hicksville)
- August 17-18 at South Tyson (Hempstead)
- August 24-25 at Covert Ave (Floral Park to Hicksville)
- Oct 5-6 at Nassau Boulevard (Floral Park to Hicksville)

2. LIRR (Outage Queens to Nassau 3, train service removal between Floral Park and Hicksville) :

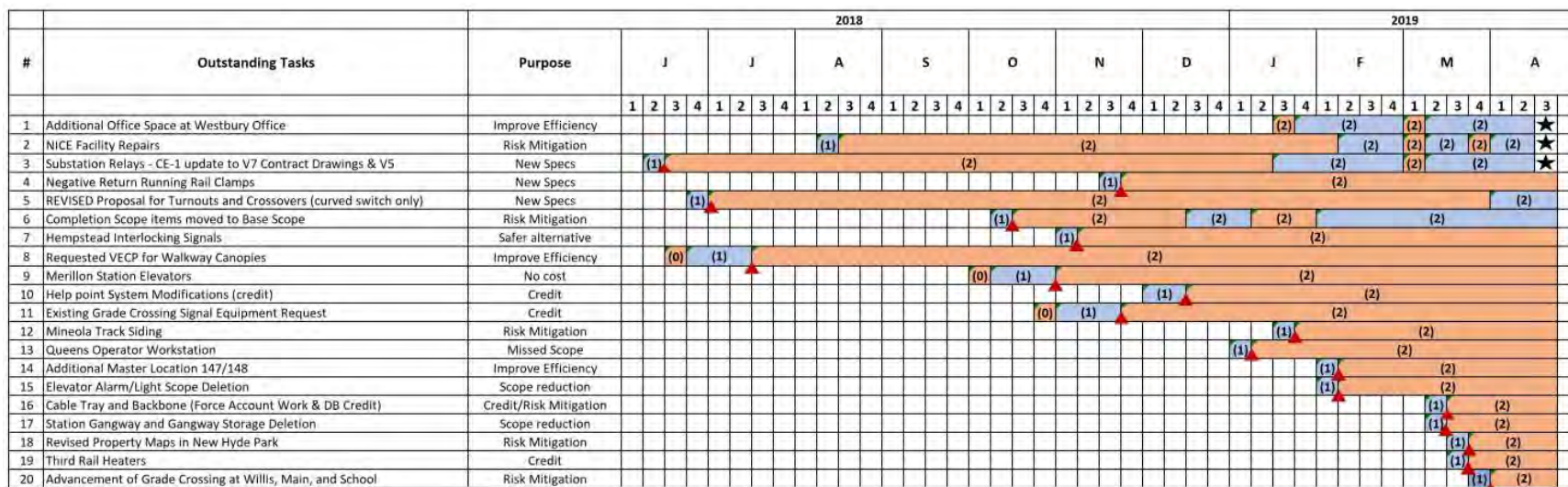
- June 22-23
- June 29-30
- September 7-8
- September 14-15

Road Closures:

- March 9 Closed Urban Ave for 6 months
- April 15 Close Covert Ave
- October close NHP Road (Restrict to 2 Lanes)





Change Orders / Risk Control

Ball in Court Tracker

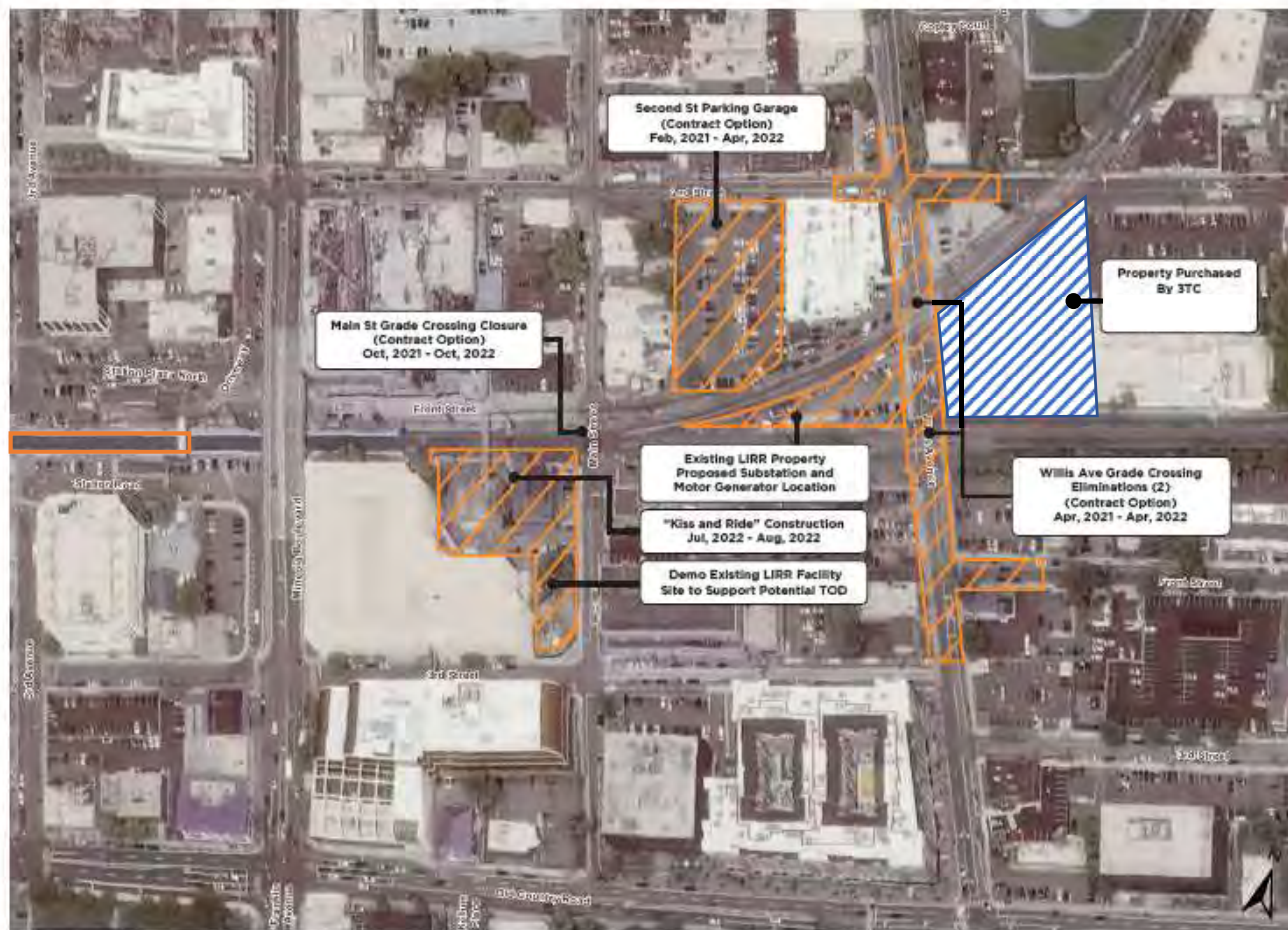


1. 15 out of 20 current changes are risk mitigations, safety initiatives or credits
2. We have introduced a simple three-step change order process to close issues as quickly as possible
3. 3TC made a slow start to change order processing but the pace has recently improved with dedicated staff
4. We are utilizing the change process to enable risk reduction by swapping scope from base to completion option

LEGEND

-  3TC Ball in Court
-  PMT Ball in Court
- (x) Step Number in Approval Process
-  RFP Sent
-  Completed

Risk Mitigation: Purchase of Additional Property in Mineola



Legend

Construction Area

Photo Location

Construction Activity Start Date - End Date

1. It is proposed that 3TC purchase the property to allow for the construction of the Willis Avenue undergrade crossing and the amalgamation of multiple permanent facilities
2. Facilities include substation, motor generator, crew facilities, maintenance facilities equipment storage
3. The proposed acquisition has been discussed in detail with the Village of Mineola and is undergoing environmental review
4. Net savings to the Project overall for both 3TC and MTA with new property handed over to the MTA at the completion of construction
5. We see further mitigations possible as we work through a detailed plan of the area



Map Issued on 3/29/2019

MTA Capital Construction

For illustrative purposes only.

Data Source: DCS Ver05

Aerial Map: Digital Globe, 2018

Not to Scale

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LIRR Expansion Project
Floral Park to Hicksville

Risk Mitigation: Environmental Factors

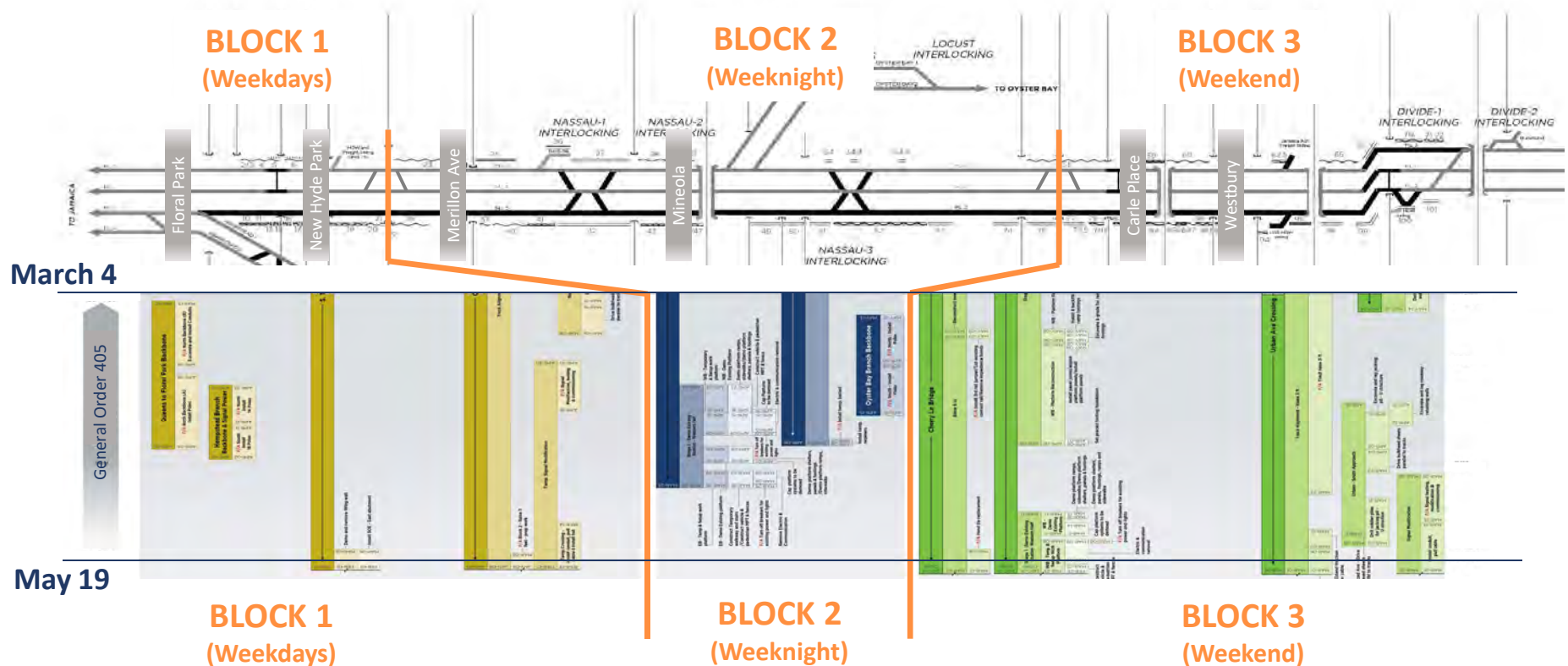
1. Continue to monitor or compliance with 600+ community commitments
2. Shroud to contain noise generated from pile driving equipment
3. Noise blankets to cordon residential properties from construction



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LIRR Expansion Project
Floral Park to Hicksville

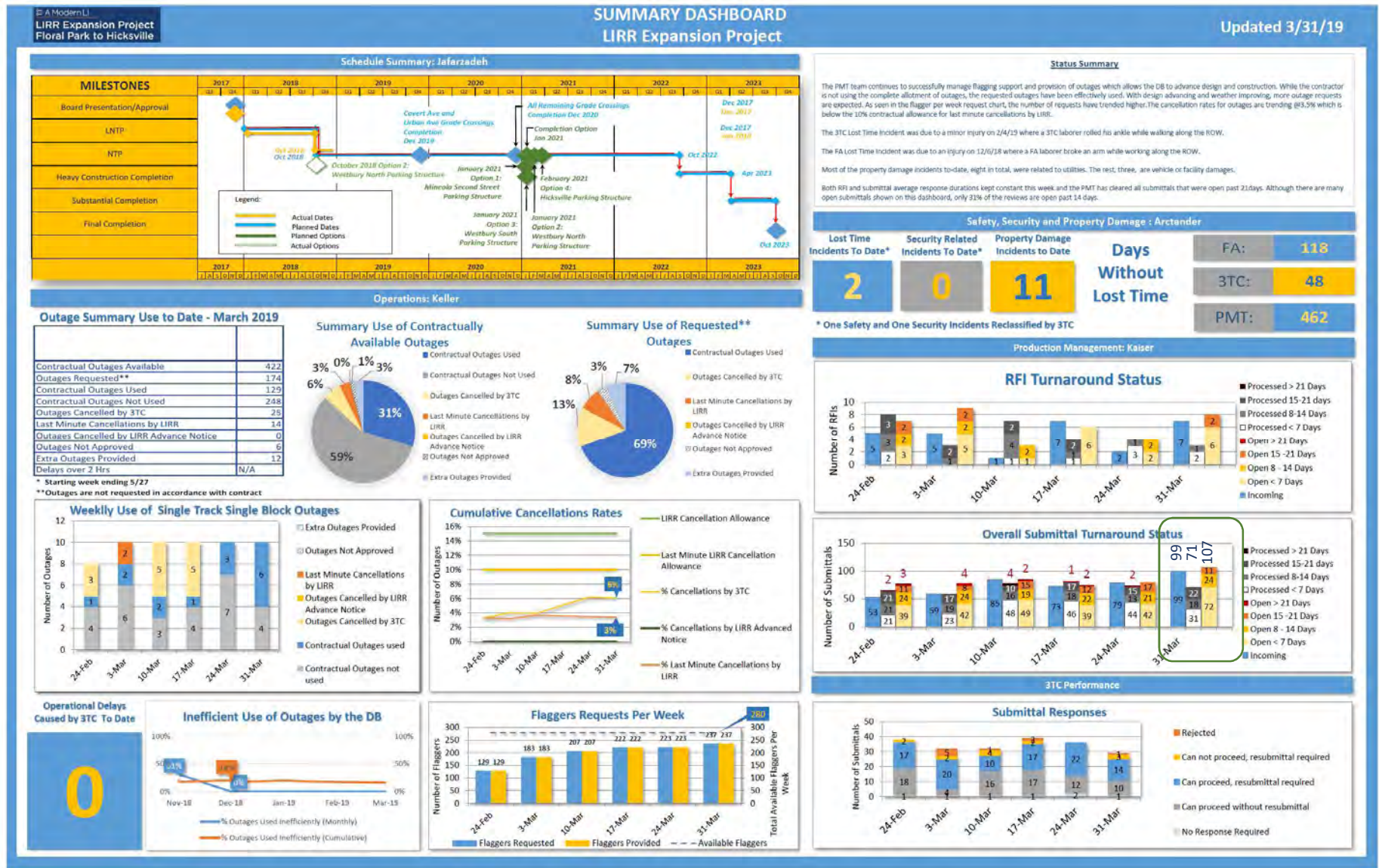
Risk Mitigation: Construction Productivity



1. Productivity is dependent on access, which is bound by blocks and timetables
2. Increasing numbers of access points to project site to advance production
3. Reconfigure 3TC & PMT Teams to enable field design of temporary utility relocations
4. Joint risk assessments (3TC & PMT) for major activities & Track “block” efficiency

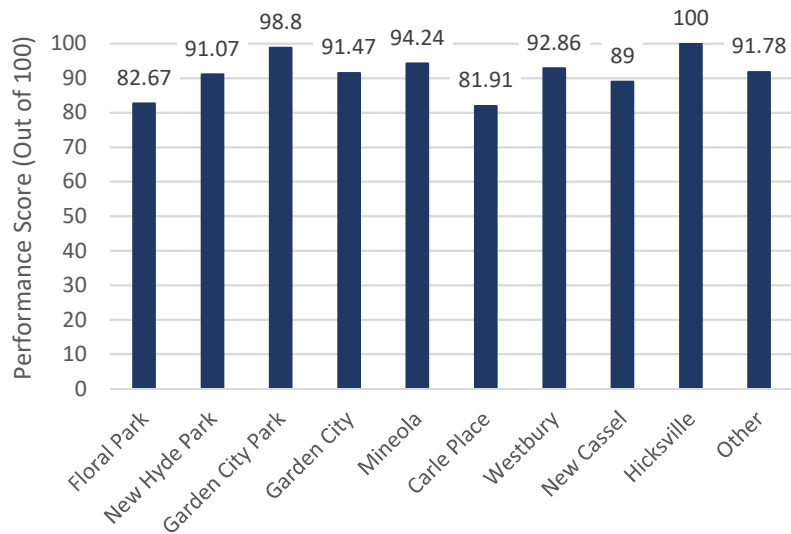
BLOCK X Segment of ROW Between Interlockings

Risk Mitigation: Monitoring Our Own Performance



Risk Mitigation: Good Neighbor Incentive

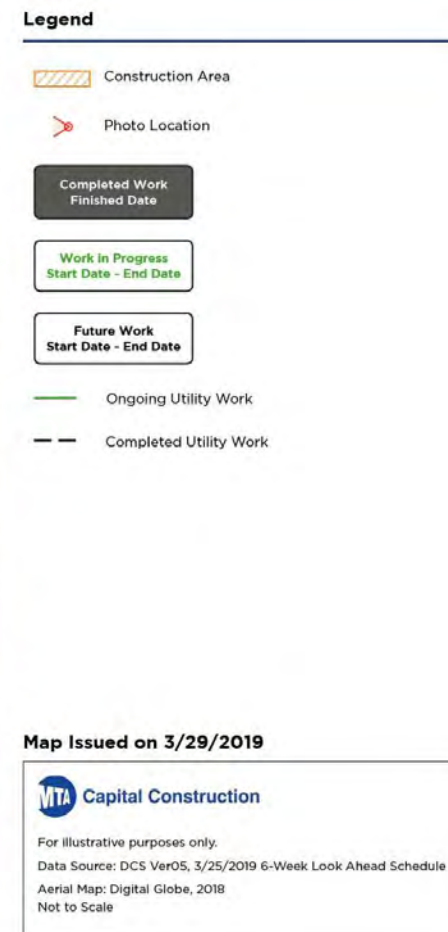
1. 3TC Awarded \$225K out of \$250K for performance in Q4 2018
2. Award amount reduced based on input from the public and elected officials
3. Survey for Q1 2019 is underway



Community Scorecard



Transparency: Project Reporting



Transparency: “Looking Over the Wall”



April 2019 CPOC IEC Project Review

Long Island Rail Road Expansion



Schedule Review

- The IEC has reviewed the project schedule and agrees with the project logic.
- Significant contractor resources are required to accomplish 2019 planned work.
- The longest path runs through the design, procurement and installation of Nassau 1 interlocking signal system.



Budget Review

- Budget
 - Based on the IEC's review of the project's construction cost, soft costs and remaining contingency, the IEC concurs that the project is within budget.



Risk

- The IEC participated in a quarterly project Risk Workshop update in March 2019. The contractor participated as well, and provided invaluable input.
- The top project risks are as follows:
 - Usage of track outages
 - Delivery of long-lead items – signals, track, precast concrete
 - Temporary utility relocations
- In the opinion of the IEC, the agency is taking appropriate steps to mitigate risks associated with achieving 2019 milestones.



MTA Capital Program Commitments & Completions

through March 31, 2019

Capital Projects – Major Commitments – March 2019

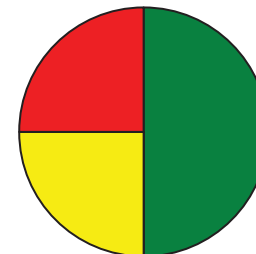
In 2019, agencies have a goal of \$5.6 billion in overall commitments. 37 major commitments are included; nineteen for NYCT, two for LIRR, four for MNR, six for B&T, one for MTACC, two for MTA Bus and three for MTA Police Department.

Through March, agencies have committed \$495 million versus a \$953 million YTD goal. The shortfall is due to delays of non-major commitments, such as force account and support costs related to MTACC's projects as well as MNR power projects.

Two major commitments were made on time or early, one major commitment was delayed but is now committed, and one other major commitment is delayed. The delays are explained on the following pages.

By year-end, the MTA forecasts meeting or exceeding its overall \$5.6 billion goal.

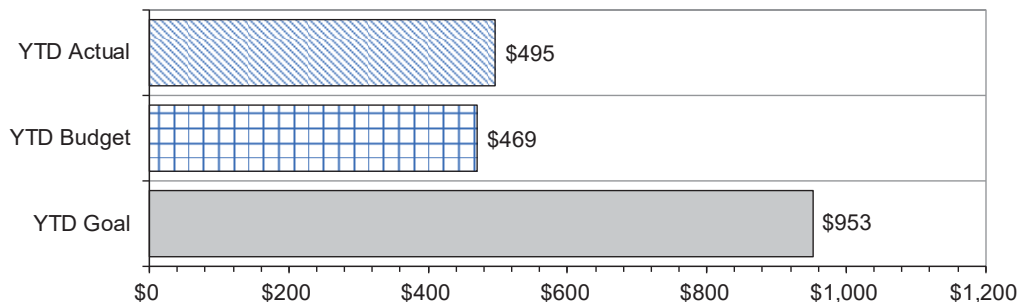
Year-to-Date Major Commitments



	Count	Percent	Change from Prior Month
GREEN = Commitments made/forecast w within Goal	2	50%	-
YELLOW = Commitments delayed beyond Goal (already achieved)	1	25%	↑ 1
RED = Commitments delayed beyond Goal (not yet achieved)	1	25%	↑ 1
	4	100%	↑ 2

Budget Analysis

2019 Annual Goal	\$5,613	(\$ in millions)
2019 Forecast	109%	of Annual Goal
Forecast Left to commit	92%	(\$5,601)



Year-to-Date Agency Breakdown

2019 Goals	Prior month variance		
	GREEN	YELLOW	RED
New York City Transit			
1	----	----	----
Long Island Rail Road			
1	----	----	+1 RED
Metro-North Railroad			
1	----	+1 YELLOW	-1 RED
Bridges and Tunnels			
	----	----	----
Capital Construction Company			
	----	----	----
MTA Bus Company			
	----	----	----
MTA Police Department			
	----	----	----

Capital Projects – Major Commitments – March 2019 – Schedule Variances

Project	Commitment	Goal	Forecast
1 All-Agency Red Commitments (1 New Item)			
<i>LIRR</i>			
<i>Rolling Stock</i>			
Work Locomotives (New Item)	Construction Award	Mar- 19	Aug- 19
		\$32.2	\$32.2
<p>An independent firm reviewed the procurement and recommended that work locomotives must not exceed required braking horsepower to deliver the cleanest locomotives. The award has been rescheduled for vendors to revise their submissions.</p>			

Capital Projects – Major Commitments – March 2019 – Schedule Variances

1 All-Agency Yellow Commitments (1 new this month)

MNR

Structures

Overhead Bridge Program East of Hudson (New Item)	Construction Award	Feb- 19	Mar- 19 (A)
		\$23.4	\$25.6

This award was delayed to March due to revisions made to the notice of award which resulted in a protracted approval process.

Capital Projects – Major Completions – March 2019

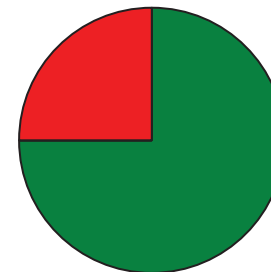
In 2019, agencies plan for a goal of \$3.4 billion in overall completions. 24 major completions are planned, including 14 for NYCT, four for LIRR, three for MNR, one for B&T, one for MTACC, and one for MTA Bus.

Through March, agencies have completed \$771 million versus a \$1 billion YTD goal. The shortfall is mostly due to delays with NYCT's Station Components: 4 Stations / Jamaica (\$95M) and non-major completions such as various NYCT station work (\$166M) and the Purchase of 72 Articulated Buses (\$66M).

Three major completions were made on time or early and one major completion remains delayed. The delay is explained on the following page.

By year-end, the MTA forecasts meeting or exceeding its overall \$3.4 billion completion goal.

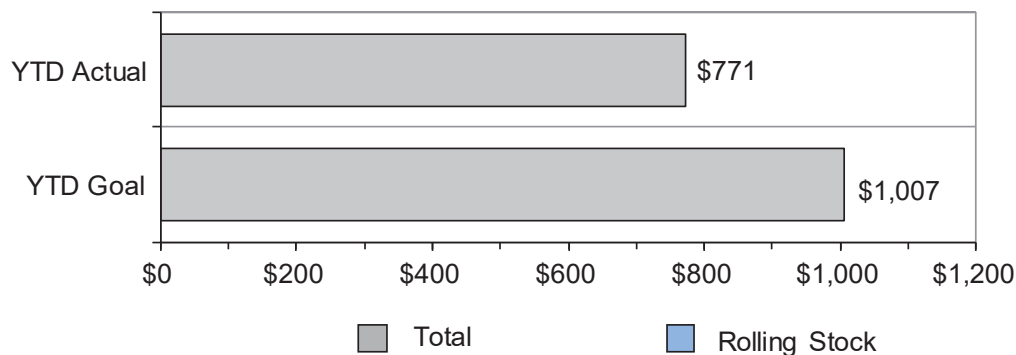
Year-to-Date Major Completions



	Count	Percent	Change from Prior Month
GREEN = Completions made/forecast within Goal	3	75%	-
YELLOW = Completions delayed beyond Goal (already achieved)	0	-	-
RED = Completions delayed beyond Goal (not yet achieved)	1	25%	-
	4	100%	-

Budget Analysis

2019 Annual Goal	\$3,428	(\$ in millions)
2019 Forecast	102%	of Annual Goal
Forecast left to Complete	78%	(\$2,739)



Year-to-Date Agency Breakdown

2019 Goals	Prior month variance		
	GREEN	YELLOW	RED
New York City Transit	3	1	
Long Island Rail Road			
Metro-North Railroad			
Bridges and Tunnels			
Capital Construction Company			
MTA Bus Company			
MTA Police Department			

Capital Projects – Major Completions – March 2019 – Schedule Variances

Project	Completion	Goal	Forecast
1 All-Agency Red Completions			
NYCT			
<i>Passenger Stations</i>			
Station Component: 4 Stations / Jamaica	Construction	Feb- 19 \$87.0	Jun- 19 \$94.5
Project delay due to extension granted to the contractor to complete additional work. Project cost increased to repair 30 tons of steel after a detailed steel repair survey revealed significant amount of steel deterioration.			

MTA Capital Program Commitments & Completions Quarterly Report of Prior Years' Delays

Prior Years' Major Commitments – Quarterly Update: March 2019

The status of 2016 through 2018 major commitments delayed beyond 2018 are tracked until committed and reported to CPOC quarterly.

In 2016, agencies set an overall MTA commitments goal of \$6.6 billion including 41 major commitments. In 2016, 27 major commitments and a total of \$5.0 billion were made. Of the remaining projects, one remains delayed and is forecast for award in 2019.

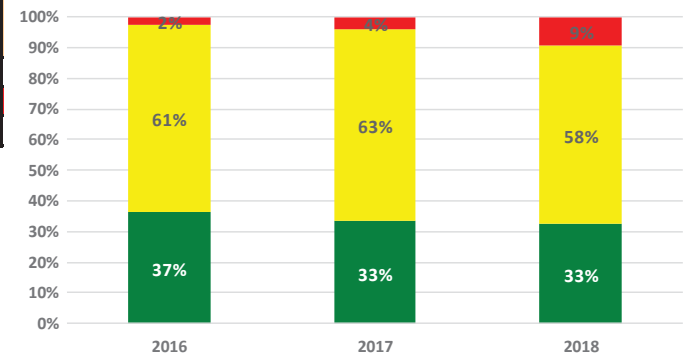
In 2017, agencies set an overall MTA commitments goal of \$7.3 billion including 51 major commitments. In 2017, the MTA achieved 100% of its \$7.3 billion commitments goal, including 39 major commitments. One project will no longer be progressed at this time, and will not be tracked by this report. Of the remaining projects, two were awarded in the first quarter of 2019, and three are forecast for award in 2019 or 2020.

In 2018, agencies set an overall MTA commitments goal of \$7.3 billion including 43 major commitments. In 2018, the MTA achieved 86% of its \$7.3 billion goal, including 36 major commitments. All seven of the remaining major commitments are forecast for award in 2019.

Actual		MTA-Wide Prior Years' Major Commitments														Post 2020
		Goal	On Time	Achieved Late	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	
Total	135															
2016	41	15	25												1	
2017	51	17	29	1		1								1		2
2018	43	14	22		1	2			1	1			2			

This chart tracks when all major commitments are forecast/achieved versus original goal, starting with those that were committed within 2016, 2017, and 2018 followed by those that slipped beyond 2018. Green represents projects that were achieved on-time, yellow represents projects that were delayed but have since been committed, and red represents projects that are still delayed. Projects that are red will become yellow when they are committed.

% of Project Status by Year



GREEN = Commitments made/forecast within Goal

YELLOW = Commitments delayed beyond Goal (already achieved)

RED = Commitments delayed beyond Goal (not yet achieved)

Prior Year Major Commitments – March 2019 – Schedule Variances				Actual Results Shaded			
Project	Commitment	Goal	Forecast	Project	Commitment	Goal	Forecast
8 All-Agency Red Commitments							
NYCT				MTA Bus Company			
Passenger Stations				Bus Company Projects			
ADA: 68 St- Hunter College / Lexington	Construction Award	Sep-16 \$66.8M	Dec-19 \$116.3M	HVAC - College Point	Construction Award	Dec- 18 \$8.5M	Oct- 19 \$8.5M
Award Schedule revised to 2019 following resolution of real estate issues at Imperial House and Hunter College properties. Project cost increased because of added architectural , structural, electrical and utility relocation work. The complexity of the utility relocation under the street work with limited space constraints requires multiple construction phasing to keep the street open to both vehicular and pedestrian traffic throughout construction				The latest project specification was resubmitted to Specification Review. Additional time is needed for comments and approval.			
Access Improvements: Grand Central: Phase 2							
	Construction Award	Jul- 17 \$66.7M	Jul- 20 \$66.7M				
Procurement process will involve multiple phases reflecting the various activities in the project. The last activities is expected to be awarded in 2020							
Track				MTACC			
Mainline Track & Switch Program (6 Projects)- 3rd Qtr	Construction Award	Aug- 18 \$44.0M	Oct- 19 \$44.0M	Regional Investments			
Award of the Flushing line Switches re- scheduled to 2019 due to track access issues.				Rolling Stock Procurement M-9A Cars	Purchase Award	Dec- 18 \$367.0M	Jun- 19 \$367.0M
				RFP was modified to maximize competition, delaying the procurement process.			
Employee Facilities				Bridges and Tunnels			
Livingston Plz Electrical and Mechanical Sys Improvements	Construction Award	Dec- 17 \$62.7M	Jan- 20 \$62.6M	Verrazano Narrows Bridge			
The project was split into 2 parts (phase "A", the redundant Dry Coolant System for the 4th Floor Data Center awarded in July 2018, and phase "B" for the remaining scope. Design for phase "B" started in July 2018 with projected award in early 2020.				Miscellaneous Steel Repair, Concrete Rehab, & Structural Painting	Construction Award	Oct- 18 \$79.5M	Jul- 19 \$79.5M
				Bids were received and rejected for this contract as they were not within a reasonable range of the Engineer's estimate. Contract will be rebid.			
MNR							
Sandy							
Power and Signal Mitigation	Construction Award	Nov- 17 \$20.6M	Nov- 19 \$20.6M				
Contract to be awarded in fall of 2019 when more in- house resources to support the project will be available.							

Prior Year Major Commitments – March 2019 – Schedule Variances

Actual Results Shaded

Project	Commitment	Goal	Actual
5 All-Agency Yellow Commitments (5 new this quarter)			
NYCT			
Passenger Stations			
Times Square Reconstruction & ADA, Phase 3 - Shuttle	Construction Award	Jun-18 \$259.3M	Mar-19 \$201.5M
Project awarded. Award was delayed several months due to service plan reassessment regarding the shutdown. Bid opening was also postponed several times delaying the award.			
Signals and Communications			
Culver Line Interlockings & CBTC	Construction Award	Sep-18 \$424.0M	Feb-19 \$409.5M
Project awarded in February. Bids received on November 5th and awarded on February 4th. Project Cost reflects favorable bids received.			
Sandy			
Sandy Mitigation: St. George	Construction Award	Nov-18 \$70.1M	Mar-19 \$47.4M
Bids postponed but were received in early December. Project cost decreased reflecting favorable bids			
Work Equipment			
Purchase 35 Locomotives - and Option for up to Additional 35	Purchase Award	Dec-17 \$128.3M	Mar-19 \$128.3M
Delay was due to changes required to the technical specifications to comply with NYS Department of Labor requirements regarding workers' exposure to diesel exhaust emissions.			
MTACC			
GEC Design	Construction Award	Dec-17 \$37.0M	Jan-19 \$34.1M
Delay was due to change in procurement strategy. Award was further delayed due to the need to obtain Amtrak agreement. Agreement reached with Amtrak in January 2019. Budget at award reduction reflects favorable bid.			

Prior Years' Major Completions – Quarterly Update: March 2018

The status of 2016 through 2018 major completions delayed beyond 2018 are tracked until achieved and are reported to CPOC quarterly.

In 2016, agencies set an overall MTA completions goal of \$4.6 billion including 43 major completions. In 2016, 36 major completions were made including several MTACC contracts associated with 2nd Ave Subway Phase 1 which achieved beneficial use in December 2016. One project remains delayed, and is forecast for completion in the second quarter of 2019.

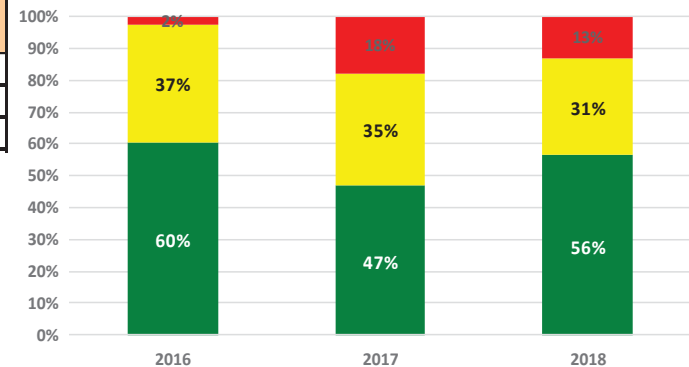
In 2017, agencies set an overall MTA completions goal of \$5.0 billion including 34 major completions. In 2017, 24 completions were achieved. Of the remaining projects, one was completed in the first quarter of 2019, and six are forecast for completion by the end of 2019.

In 2018, agencies set an overall MTA completions goal of \$6.3 billion including 39 major completions. In 2018, 32 major completions were achieved. Seven completions were delayed beyond 2018. Two were completed in the first quarter of 2019, and the remaining five are forecast for completion by the end of 2019.

Actual Goal		MTA-Wide Prior Years' Major Completions														Post 2020
		On Time	Achieved Late	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	
Total	116															
2016	43	26	16						1							
2017	34	16	11			1	3	1	1						1	
2018	39	22	10	1		1	2		1					1	1	

This chart tracks when all major completions are forecast/achieved versus original goal, starting with those that were completed within 2016, 2017 and 2018 followed by those that slipped beyond 2018. Green represents projects that were achieved on-time, yellow represents projects that were delayed but have since been completed, and red represents projects that are still delayed. Projects that are red will become yellow when completed.

% of Project Status by Year



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

Prior Year Major Completions – March 2019 – Schedule Variances

Project	Completion	Goal	Forecast	Project	Completion	Goal	Forecast
12 All-Agency Red Completions				MNR			
NYCT							
Subway Cars							
Purchase 300 B Division R179 Cars - (234 Cars)	Procurement	Dec-18	Nov-19	Substation Bridge 23 - Construction	Construction	Oct-17	May-19
		\$577.3M	\$743.6M			\$41.7M	\$41.7M
As of March, 168 cars were accepted and placed in service				In order to mitigate risks associated with the final cutover of the substation and to coordinate with the local utility company, unforeseen operational issues were identified which required elements of the work to be altered. The forecasted completion is May 2019.			
Passenger Stations							
Sea Beach Contract at 6 Stations	Construction	Dec-18	Dec-19	Shops & Yards			
		\$278.7M	\$296.5M	Harmon Shop Improvements	Construction	Jun-18	Jun-19
Extension was granted to contractor for additional work for Track Wall at 8th Avenue. The completion will be delayed further to December 2019 due to the addition of southbound elevator at 8th Ave station to the contract. Project cost increased due to contract modification for design of added work related to two new elevators at 8th Ave.						\$315.6M	\$315.6M
				Completion has been further delayed from March 2019 to June 2019 for additional work to design and install an enhanced carbon monoxide detection system.			
Buses							
Bus Command Center Construction - NYCT	Construction	Nov-17	Apr-19	MTACC			
		\$51.4M	\$57.1M	East Side Access			
Substantial Completion delayed further due to difficulty in obtaining water service and completing the sewer connection which delayed charging and testing of the sprinkler system. Cost increase due to extended project duration as well as funding additional scope items.				Plaza Substation and Structures (CQ032)	Construction Completion	Aug-16	Jun-19
						\$250.2M	\$259.2M
				Delayed for mitigation of leaks and duct bench issues.			
LIRR							
Track				Manhattan Northern Structures	Construction Completion	Jun-17	Apr-19
Massapequa Pocket Track	Construction	Nov-17	Dec-19			\$361.6M	\$361.6M
		\$19.6M	\$19.6M	Completion delayed to complete punchlist work and to resolve remaining commercial issues.			
Delay due to lack of available force account resources in the signals area							
Mainline Double Track- F/A Construction (L10683)	Construction	Oct-18	Apr-19	MTA Bus Company			
		\$33.M	\$24.7M	Bus Company Projects			
Due to lack of availability of track outages for remainder of 2018, completion moved to April 2019 to include switches. Reduction in budget reflects change to F/A Labor requirements.				Bus Command Center	Construction	Dec-17	Apr-19
						\$17.1M	\$17.1M
				Delayed for mitigation of sewer connectivity issues and testing of the sprinkler system.			
MNR				Bridges and Tunnels			
Power				Queens Midtown Tunnel			
Power Infrastructure Restoration - Substations	Construction Completion	Aug-17	Jun-19	Tunnel Ventilation Building Electrical Upgrade & Flood Mitigation (QMT)	Construction	Jul-18	Apr-19
		\$43.8M	\$45.7M			\$57.4M	\$57.4M
Due to additional time needed for acceptance testing and coordination with the local utility company for power cutover the forecasted completion is June 2019.				Extension to substantial completion required to provide additional factory acceptance testing and additional field installation verification /testing.			

Prior Year Major Completions – March 2019 – Schedule Variances

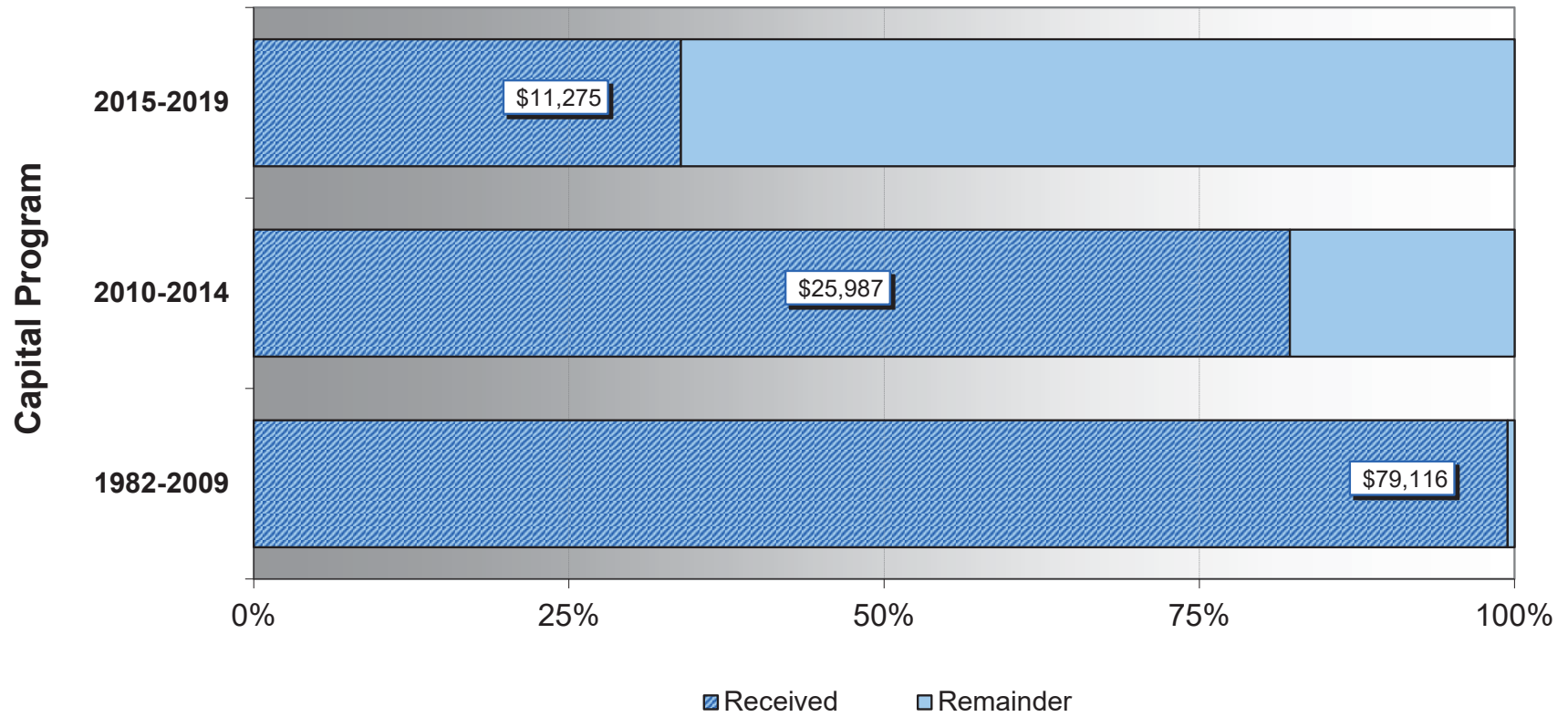
Actual Results Shaded

Project	Completion	Goal	Actual
3 All-Agency Yellow Completions (3 new this quarter)			
NYCT			
Bus Replacement			
Purchase 110 CNG Articulated Buses	Fleet Purchase	Dec-18	Jan-19
		\$104.2M	\$107.4M
A total of 106 of the 110 buses were received in December 2018. The remaining 4 are now received.			
Passenger Stations			
Sea Beach Contract at 3 Stations	Construction Completion	Dec-18	Mar-19
		\$114.1M	\$131.4M
Project completed March 6th. Delays were due to fabrication of windows for the control houses. Project cost increased due to contract modification for design of added work related to two new elevators at 8th Ave.			
Signals and Communications			
CBTC Flushing Line	Construction Completion	Nov-17	Mar-19
		\$505.2M	\$564.1M
CBTC is in full operation for the entire Flushing line since November. Substantial completion is delayed to March pending completion of the required training and tours.			

Status of MTA Capital Program Funding

Capital Funding (March 2019)

\$ in millions



Capital Funding Detail (March 31, 2019)

\$ in millions

1992-1999 Program
2000-2004 Program
2005-2009 Program

Funding Plan	Receipts		
<u>Current</u>	<u>February</u>	<u>This month</u>	<u>Received to date</u>
18,095	18,095	-	18,095
21,668	21,668	(0)	21,668
24,397	23,963	(1)	23,962

2010-2014 Program

Federal Formula, Flexible, Misc
Federal High Speed Rail
Federal New Start
Federal Security
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		
<u>Current</u>	<u>February</u>	<u>This month</u>	<u>Received to date</u>
\$5,853	\$5,839	\$ -	\$5,839
295	295	-	295
1,257	1,257	-	1,257
189	100	-	100
-	-	-	-
719	608	-	608
770	400	-	400
132	108	-	108
11,483	9,403	-	9,403
1,344	1,236	1	1,238
2,026	1,812	-	1,812
6,329	4,800	-	4,800
235	81	-	81
758	28	-	28
230	18	-	18
Total	31,619	1	25,987

2015-2019 Program

Federal Formula, Flexible, Misc
Federal Core Capacity
Federal New Start
Federal Security
State Assistance
City Capital Funds
MTA Bonds
Asset Sales/Leases
Pay-as-you-go (PAYGO)
Other
B&T Bonds & PAYGO

Funding Plan	Receipts		
<u>Current</u>	<u>February</u>	<u>This month</u>	<u>Received to date</u>
\$6,704	\$3,084	\$ -	\$3,084
100	-	-	-
500	-	-	-
3	3	-	3
8,640	805	-	805
2,667	667	1	668
7,968	4,116	-	4,116
1,017	318	-	318
2,145	1,730	-	1,730
592	-	-	-
2,936	553	-	553
Total	33,273	1	11,275