Capital Program Oversight Committee Meeting

November 2020

Committee Members

- P. Foye, Chair
- N. Zuckerman, Vice Chair
- A. Albert
- J. Barbas
- N. Brown
- M. Fleischer
- R. Glucksman
- R. Herman
- D. Jones
- K. Law
- R. Linn
- D. Mack
- J. Samuelsen
- V. Tessitore

Capital Program Oversight Committee Meeting

2 Broadway, 20th Floor Board Room New York, NY 10004 Wednesday, 11/18/2020 10:00 AM - 5:00 PM ET

1. PUBLIC COMMENTS PERIOD

2. APPROVAL OF MINUTES OCTOBER 28, 2020

Minutes from October '20 - Page 3

3. COMMITTEE WORK PLAN

2020 - 2021 CPOC Committee Work Plan - Page 4

4. C&D CAPITAL PROGRAM UPDATE

Update on Signals and Train Control - Page 6
IEC Project Review on Queens Boulevard CBTC - Page 10
IEC Project Review on Culver Line CBTC - Page 15
IEC Project Review on 8th Avenue CBTC - Page 19
IEC Project Review on Bus Radio System - Page 24

5. UPDATE ON OMNY, MTA'S NEW FARE PAYMENT SYSTEM

Update on OMNY - Page 28
IEC Project Review on OMNY - Page 36
IEC OMNY Appendix - Page 41

6. UPDATE ON SMALL BUSINESS DEVELOPMENT PROGRAM

Small Business Development Program - Page 44

7. UPDATE M/WBE, DBE, and SDVOB PARTICIPATION on CAPITAL PROJECTS

M/WBE, DBE, and SDVOB Participation - Page 74

8. CAPITAL PROGRAM STATUS

Commitments, Completions, and Funding Report - Page 75

MINUTES OF MEETING MTA CAPITAL PROGRAM OVERSIGHT COMMITTEE

October 28, 2020 New York, New York 10:00 A.M.

Because of the ongoing COVID-19 public health crisis, the MTA Chairman convened a one-day, virtual Board and Committee meeting session on October 28, 2020, which included the following committees:

- Joint Long Island Rail Road and Metro-North Railroad Committees;
- New York City Transit and MTA Bus Committee;
- Bridges and Tunnels Committee;
- Finance Committee;
- Audit Committee;
- Safety Committee;
- Capital Program Oversight Committee.

To see a summary of the CPOC Committee meeting, please refer to the October 28, 2020 Board minutes in the October Board Book available here on the Board materials website:

https://new.mta.info/transparency/board-and-committee-meetings/november-2020

2020 - 2021 CPOC Committee Work Plan

Recurring Agenda Items

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

II. Specific Agenda Items

December

C&D Capital Program Update

Integrated Projects
 LIRR and MNR Update on Positive Train Control (PTC)
 Quarterly Traffic Light Reports

<u>January</u>

Rolling Stock Procurement Update

February

C&D Capital Program Update

B&T

March

C&D Capital Program Update Quarterly Traffic Light Reports

<u>April</u>

C&D Capital Program Update
Update on Capital Program Security Projects (in Executive Session)

May

C&D Capital Program Update

<u>June</u>

Update on OMNY Program
Update on Minority, Women and Disadvantaged Business Participation
Quarterly Traffic Light Report

<u>July</u> C&D Capital Program Update

<u>September</u>

C&D Capital Program Update Quarterly Traffic Light Reports

<u>October</u>

C&D Capital Program Update Update on Capital Program Security Projects (in Executive Session)

November

C&D Capital Program Update Update on Minority, Women and Disadvantaged Business Participation Update on Small Business Development Program



Since the last report to CPOC, in May 2020, responsibility for Signals & Train Control projects was transferred to MTA Construction & Development (as of September 2020). This document presents an executive summary of the status of the projects and identifies primary factors influencing the projects' performance.

CBTC on Queens Boulevard West for NYCT

- Project will overlay the Queens Blvd. Line with CBTC signaling from Union Turnpike to 50th St, Manhattan on the 8th Ave line. Three separate contracts were awarded: Siemens and Thales are suppliers, and LK Comstock is the installer.
- QBL is the first interoperable CBTC project implemented for NYCT that allows CBTC from two different suppliers to overlap on the same line. Interoperability will allow flexibility of train operation and provide for more competitive bidding for future CBTC contracts.
- 3. Project is currently approximately 72% complete with an overall end date of Q3 2021 and an original in-service date expected in 3/21.
- 4. Project has suffered from poor performance by CBTC suppliers, Siemens and Thales, late award of the installer contract, and difficulties in coordinating the three contracts, resulting in recent projections of late in-service operation (Q3/Q4 2021) and increases in in-house support costs of the order of \$45M.
- 5. To mitigate late delivery, and control projected expenditures, Construction & Development has taken the following actions since taking over the project in Q2 2020:
 - Appointed a new experienced MTA Project CEO to be the single point of accountability for the project
 - Installed a new MTA staff team to lead and support the project
 - Addressed Thales performance failures by engaging their upper management to ensure immediate responsiveness
 - Addressed Siemens performance failures and engaged their upper management in both Europe and North America. Siemens has installed a new highly experienced CBTC project leader on site in New York, and engaged support from resources in Germany to provide immediate responsiveness to project issues.
 - Accelerated key scope of the installer (LK Comstock) to enable in-service testing work by Thales and Siemens
- 6. The overall impact of the above changes has been the elimination of a back-log of technical and procedural issues, the development of a single integrated project schedule, a realignment of a now unified single project team, and the implementation of a new plan to complete the project (software/firmware upgrade, train testing and in-service launch plan)
- 7. C&D's overall objective of the above changes has been targeted at reinstating the original in-service date of March 2021. Our ability to meet this date is not yet confirmed but is pending (1) demonstration of CBTC stability and



interoperability functionality (2) effectiveness of software/firmware upgrades (3) completion of safety certification (4) detailed understanding of implications to passenger services and fleet availability.

CBTC on Culver Line for NYCT

- This project builds on the CBTC work on the QBL line and will overlay the Culver Line with CBTC signaling from W8 St to Church Ave Station, Brooklyn. The work includes modernizing of the Ave X and Ditmas Ave interlockings with new SSI controls. Project substantial completion, at the project outset, was anticipated in August 2022.
- Unlike the QBL line, which includes separate contracts for suppliers and installers, MTA adopted a single combined contract for the installer and supplier for the Culver line CBTC. Tutor Perini is the primary contractor and installer, with Siemens as their major subcontractor supplying signaling and CBTC technology.
- 3. The project is currently on budget but is drifting 2-3 months behind schedule in recent months. The overall project is 25% complete.
- 4. Project delays have resulted from (1) scope changes and slow decision making (2) projected late delivery of equipment by Siemens/Tutor Perini.
- To control the potential associated costs of time and bring the project back within schedule, C&D has taken the following actions since taking over the project in Q2 2020:
 - Appointed a new experienced MTA Project CEO to be the single point of accountability for the project.
 - In partnership with Siemens, developed a new equipment delivery plan to reallocate work between subcontractors and address the equipment delivery problems experienced by Siemens.
 - Retooled the role and scope of the Consultant Construction Management (CCM) team (Systra) to introduce stronger leadership and link payments to performance.
- 6. The performance of Siemens on this project, and the inability of Tutor Perini to manage Siemens, are ongoing concerns. The poor performance of Siemens's Louisville facility remains to be further addressed by Construction & Development.
- 7. The project team is focused on arresting any further schedule loss and finding opportunities to bring the project substantial completion back to August 2022, in line with the original schedule projection at project award.
- 8. Notable recent project activities:
 - Completion of 90% construction of Ave X, Bay Pkwy, and Ditmas Ave relay room buildings
 - Advancement of track realignment and switch installation south of Church Ave
 - Right of way installation of radio cases, messenger brackets, equipment platforms, and junction boxes continue under weekend shutdowns



 Progression of additional work order for the design of structural reinforcement of subway structure at Church Ave

Eighth Ave CBTC for NYCT

- 1. Project builds on the technology introduced in previous CBTC projects, notably the interoperability of CBTC on the QBL line, and introduces for the first time Axle Counters In lieu of Insulated Joints/Track Circuits to reduce overall project cost and schedule.
- Project was not awarded based on low bid, but instead was procured using both cost and schedule as evaluation criteria to drive proposers to improve delivery performance.
- 3. Project is currently approximately 10% complete and remains on target for cost and schedule. C&D is addressing the following factors to keep the project on track:
 - Redesign of three relay rooms due to the manufacturer discontinuing specific equipment
 - Availability of flaggers to enable contractor (LK Comstock) to access project sites and fully utilize forces
 - Capability of Siemens (subcontractor to LK Comstock) to deliver equipment on the projected schedule.
- 4. C&D is reframing the role and scope of the Consultant Construction Management (CCM) team (AECOM) to introduce stronger leadership and link payments to performance.

Centralized Train Control – Movement Bureau for LIRR

- In 2019, LIRR successfully completed construction of the Centralized Train Control – Movement Bureau Theater space, an important milestone in the railroad's efforts toward Centralized Train Control [CTC] and tower migration into the central control facility in Jamaica.
- 2. The project included the fit-out of the 6th and 7th floors in the JCC building and the relocation of the Movement Bureau, Power and Signal Control Desk and the Incident Command Control Center into one location.
- 3. Project created a greater concentration of the LIRR's train dispatching and supervision functions within a single location and will lead to enhanced reliability in dispatch control.

Bus Radio Project for NYCT

- 1. Project is the development of a new digital bus radio system for NYCT and MTA Bus. Project includes:
 - Construction of 35 new radio base station sites throughout the five boroughs on properties owned or leased by the MTA.
 - Retrofitting all buses (approx. 6000) and non-revenue vehicles with new radio equipment.



- Furnishing a new radio control and dispatch system in the new Bus Command Center.
- 2. Project is a Design-Build contract with Parsons Transportation Group, awarded in 2016. C&D assumed responsibility for the project in Q2 2020.
- 3. At the outset of the project substantial completion of all works was anticipated in January 2021. Current projections indicate substantial completion in late 2021.
- 4. Current factors resulting in schedule delays include:
 - Parsons desire to self-perform bus installation work
 - Parsons' difficulties in developing installation manuals and training of sufficient staff to install equipment on buses to a standard acceptable to NYCT and MTA Bus.
- 5. The critical activity on the project is the installation of radios on buses.
- 6. Parsons is working to mitigate project delays with a substantial completion target date of June 2021 being assessed. This date remains to be confirmed as there may be insufficient time to achieve the required installation quality and potential implications to fleet and resource availability for MTA.
- 7. C&D has worked with Parsons make the following changes to improve performance:
 - Enhanced project management capability on site
 - New site warehouse for equipment/install kit formulation
 - Upgraded logistics planning and procedures
 - Persuaded Parsons to subcontract with experienced bus installation companies in-lieu of their self -perform approach.
- 8. Other recent and ongoing activities:
 - Parsons has commissioned six base stations on Staten Island
 - A further five radio sites are expected to be completed by end of 2020 in the Bronx
 - Remainder of radio tower sites in Manhattan, Brooklyn and Queens are scheduled for completion in Q1 2021
 - All third-party permits and approvals have been advanced and are nearing completion
 - New command center is nearing completion, and training of MTA staff is being planned

November 2020 CPOC Independent Engineering Consultant Project Review

QBL CBTC - Design, Furnish, & Install Program

MTACD Signals & Train Control Business Unit



OBL CBTC

Project Scope

The QBL-CBTC project scope will provide a radio-controlled Communication Based Train Control (CBTC) signal system overlay on NYCT QBL Line from north of Union Turnpike in Queens to north of 47th – 50th Street Station / 6th Avenue Line and south of 50th Street / 8th Avenue Line in Manhattan.

Cost Review

- In the May 2020 CPOC report, C&D identified the need for an additional \$45M, which reflects a March 2021 In-Service Date. Based on our forecast of up to a six-month delay to the full In-Service date, the IEC believes that the March 2021 In-Service date will not be met. Therefore additional funds will be required to support a later In-Service and Substantial Completion date. The Estimate at Completion (EAC) has increased to \$705.5M, however, a budget modification is required to align with the new EAC.
 - There is sufficient contingency to cover all current pending and negotiated AWOs on QBL CBTC contracts.



QBL CBTC

Schedule Review

- The October integrated project schedule (IPS) indicates the In-Service date has improved from September 2021 to the original March 2021 date.
 - Recent improvement in schedule is based on re-sequencing and compressing the testing process to mitigate the delays in the availability of CBTC ready trains caused by hardware and software defects.
 - In the opinion of the IEC there is significant risk that the March In-Service date will not be met due to:
 - Train availability lags project need and its is unlikely that the supplier's ramp up plan will provide 65 trains by January 2021.
 - Early test durations indicate that there is insufficient time to ensure reliable CBTC service in the subsequent sections.
 - The latest IPS does not reflect the time needed to stress the system on a section-by-section basis as required by the contract.



OBL CBTC

Upcoming Schedule activities to achieve March 2021 In-Service

- Current ramp-up plan indicates:
 - Provide 32 trains (64 units) for revenue service by 11/23/2020.
 - Install new Carborne Vital Digital Processor (CVDP) Boards by 12/25/2020.
- Sufficient GO's needed to stress the system are available.
- Criteria for trains to be ready for in-service by 11/23/2020:
 - Ensure that CBTC wayside hardware is fully operational.
 - Achieve full CBTC and radio communications and demonstrate continuous days without failure for the required period.
 - Complete field interoperability testing between Siemens and Thales CBTC equipment.



QBL CBTC

Observation

- Due to the COVID-19 pandemic the Project Team has been able take advantage of in-service testing without passengers during the nightly shutdown period to allow the contractor to test and debug its CBTC system without impacting passengers.
- The time allotted for review of software and database updates is being compressed.

Recommendation

- The project should develop a comprehensive testing and commissioning plan that includes the following:
 - Clear performance criteria that needs to be met in each section prior to proceeding to the next section.
 - A clear plan to stress the system prior to going into full passenger revenue service.



November 2020 CPOC Independent Engineering Consultant Project Review

Culver CBTC - Design, Furnish, & Install Program

MTACD Signals & Train Control Business Unit



Culver CBTC

Project Scope

The Culver Communication Based Train Control (CBTC) project includes the construction of 3 new relay rooms; Avenue X, Ditmas Avenue and Bay Parkway, modernization and commissioning of the interlockings associated with the relay rooms, the replacement of track work and certain portions of Church Avenue, Avenue X and Ditmas and a CBTC overlay between 8th Avenue and Church Avenue, on the NYCT Culver Line.

Cost Review

- Based on the IEC analysis of project costs, contingencies, work in place, pending changes and outstanding risks we find that the project EAC is currently within the budget of \$482M.
- There are 15 negotiated and pending AWOs with a total value of \$2.5M this is adequately covered by the current contingency.
- As determined by the IEC the project is 24% complete by payment with 48% of time elapsed. This difference is partially due to late delivery of equipment.



Culver CBTC

Schedule Review

Schedule Information	Baseline 2/04/19	Update #9 8/1/2020	Update #10 9/1/2020	Update #10 Revised
Forecast SC	08/04/2022	11/16/2022	09/09/2022	09/27/2020
Variance to baseline	0	-73 days	-25 days	-43 days

- The project is 43 days behind schedule due to late delivery of equipment.
- The project reduced the delay by re-sequencing the CBTC In-Service testing phase work, however, Siemens continues to miss milestones for Auxiliary Wayside equipment.
 - The intermediate milestone to place Avenue X interlocking in-service has slipped 3 months.



Culver CBTC

Observations

- Siemens has increased the level of participation on this project which has contributed to the September schedule improvement. The contractor is also benefitting from weekend line shutdowns.
- There is a cost risk that the number of Request for Information (RFIs) submitted by the contractor for design errors and unforeseen site conditions may result in additional change orders.
- The Culver CBTC project team to coordinate with the QBL team to allow access to the Integrated Test Facility (ITF) prior to September 2021, to test the Culver CBTC configuration and database.

Recommendation

The contractor must provide a recovery schedule reflecting how they will mitigate the lost time.



November 2020 CPOC Independent Engineering Consultant Project Review

8th Avenue CBTC - Design, Furnish, & Install Program

MTACD Signals & Train Control Business Unit



Cost Review

Project Scope

Provide a CBTC signal system on the NYCT 8th Ave Line from south of 59th Street Interlocking in Manhattan to High Street Station in Brooklyn. The new CBTC system shall tie-in to the CBTC system on the Queens Boulevard Line This project includes modernization of the 30th Street Interlocking, modernization of the 42nd Street North Interlocking and the decommissioning of the 42nd Street South interlocking (currently out of service). The two-existing mechanical interlockings will be replaced with processor-based (solid state) signal systems. The signal systems shall be designed in accordance with the latest NYCT Standards and shall be compatible with Communications-Based Train Control (CBTC).

■ The total budget and EAC is \$733.6M.

Cost Breakdown	Amount (M)
LK Comstock (LKC) Bid	\$245.8
Tracks & Switches installations	\$27.3
CBTC Carbone Equipment	\$82.0
Agency Cost Interlockings	\$234.8
Agency CBTC Support	\$143.7

- Major pending change orders include:
 - Axle counter installation work.
 - Contractor's force majeure claim for COVID 19
 - ☐ Tie-in work at 50th St. (QBL project) to 8th Ave. CBTC
- The IEC's budget review concludes project is on budget and has sufficient contingency.



Schedule Review

- Project is maintaining schedule and mitigating a number of project risks identified in the risk assessment including the introduction of axle counter technology on NYCT property, a significant change from existing practice as well as the introduction of a new car fleet.
- LKC's integrated baseline schedule which reflects little contingency has been conditionally approved.
- The project team needs additional input data from ongoing projects in order to complete the Integrated Project Schedule (IPS).
 - The project schedule is highly dependent on timely delivery of Data Communication System (DCS) and CBTC equipped R179 and R211 subway cars.



Observations

- The IEC notes the implementation of the Axle Counter System (ACS) is still under development at MTA and there may be scope changes which impact cost and schedule.
- Clarification of contract drawings/intent raised by the contractor are requiring numerous NYCT departmental reviews and may impact achieving intermediate milestones.



Recommendations

- EMI/EMC compatibility between various car classes operating on 8th Ave line and Axle counters should be validated in a timely manner.
 - The supplier is requesting a waiver of EMI/EMC device testing. A timeline should be established that demonstrates the validation process. It should provide a plan that includes a comprehensive analysis or product testing on NYCT property that will not impact project schedule.



November 2020 CPOC Independent Engineering Consultant Project Review

Bus Radio System

MTACD Infrastructure Business Unit



Bus Radio System (Design/Build)

Project Scope:

Project provides for a new digital bus radio system for NYCT and MTA Bus. Project outfits the Bus Command Center (BCC), that was completed under a separate contract, with bus dispatch consoles and radio equipment hardware and software to support voice and data traffic between the BCC and individual buses.



Bus Radio System (Design/Build)

Budget:

- Current budget is \$291M with Estimate at Completion (EAC) of \$294M.
- The IEC concurs with project's EAC, however, potential claims by Parsons or substantial delays in Substantial Completion (SC) could adversely impact the EAC.

Schedule:

- Contractual SC date is January 2021 and is being negotiated by the project to a June 2021 completion. Field progress is at 59%.
 - Construction of 10 base stations are complete with the remaining 25 sites in various stages of construction.
 - Bus installation is currently done in two stages: pre-wiring (Touch 1), and equipment installation and testing (Touch 2). Touch 2 bus installation has not commenced with over 6,000 buses requiring installation which also impacts Pilot testing.
 - The IEC's analysis of the submitted contractor's schedule shows that achieving June 2021 substantial completion will be challenging, assuming no changes in scope.



Bus Radio System (Design/Build)

Project Risks:

- Contractor bus installation is the highest risk to the project schedule and is driving the critical path. The contractor has not met NYCT's requirements to advance to the Touch 2 installation phase.
- ☐ There is a risk of delay due to dependency on utility providers.

Observation:

- Bus installation is behind plan:
 - Project is working with the contractor to develop a plan that can be properly executed.
 - Project is insisting that the contractor provide the required resources that include skilled trainers, skilled technical writers, skilled electricians with bus installation experience, skilled project coordinators, and qualified supervision.

Recommendation:

OMNY bus installation is ahead of that work on the BRS project.
 Project/contractor must explore using the skilled resources, that could be available, when OMNY bus installation is forecast to complete in December 2020.

MTA Independent Engineering Consultant

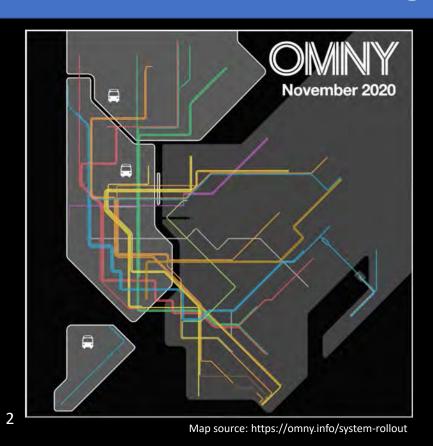
OMNY MTA's New Fare Payment System

November 2020 Update Capital Program Oversight Committee Briefing

Alan F. Putre
OMNY / MTA Fare Payment Programs, Executive Director
NYCT Vice President & Chief Revenue Officer



Program Status – OMNY Available Across All Stations and Buses Targeted for Year End



As of 11/10/2020:

enabled

431 (91%) subway stations and 2 SIR stations are OMNY enabled

- Over 3900 active OMNY readers2666 buses (44.9%) are OMNY
- Manhattan completed 7/20/20
- Bronx completed 10/13/20
- Over 6400 OMNY readers installed



OMNY Presentation November ©2020 Metropolitan Transportation Authority

Program Status – Buses

Remaining OMNY Bus Launches by Dec 2020

- Queens
- Brooklyn
- Including Select Bus Service ("SBS")
 All Door Boarding



Preparing electrical and communication cables for OMNY retrofit on bus



Program Status – LIRR and MNR

Contract option exercised for Railroads' vending machines and ticket office machines including spares and media

- Work Order approved October Board / November Award
- Cubic \$1 million economic hardship unilateral price reduction

Additional modification under development

- Update and Additions to LIRR and MNR requirements
 - Enhanced fraud protection, access security, onboard validation device functionality



Program Status – Schedule

Phase 2: Completion on budget and on schedule December 2020

All bus and subway validators installed

Railroads

- Completion moved back due to COVID and change in RR operations
- Phase 3: Feb 2021 → June 2022
- Phase 4: March 2022 → June 2023

NYCT

- Phases 3/4 completion moved back due to COVID
- Phase 3: Feb 2021
 September 2021
- Phase 4: March 2022 February 2023

Good news: No impact to Phase 5 Substantial Completion July 2023



Program Status – Budget

Current Budget

\$732M

Expended

\$250M

% Complete

34% of current budget

Estimate At Completion \$732M

Note: The October Board approved the \$39.2M Option for the LIRR and MNR equipment, media and spares on 10/28/20. Award expected in November.

6

Six-Month Look-Ahead

Physical build out	Additional fare options	
Complete Subway LAN infrastructure	Introduce Linked Products in Pilot public test	
Complete all OMNY Reader installations: • Subway	*Linked Products = time or trip based pass linked to a bank card; card used as access credential	
RBS Bus front & rear doorSBS	App & Website as sales channels	
In-service beta testing	Development and Design	
Mobile App w/OMNY Account and trip planning features	Continue design for RR mobile ticketing and OMNY services	
Transit Transaction Model ("TTM")	Continue design of CVM UI/UX	
Closed Loop and CVM Pilot Tests for NYCT		
7	OMNY Presentation November ©2020 Metropolitan Transportation Authority	

Risks

Risks to Schedule

- COVID safety work protocols negatively impacts productivity
- Second COVID wave potential work suspension
- Resource availability staff/materials

Anomalies, dependencies, integration

Continually achieve a uniform customer experience



November 2020 CPOC Independent Engineering Consultant Project Review

OMNY



Cost Review

OMNY	Contract \$	Program Budget \$	Agency Estimate at Completion (EAC)	IEC Forecast EAC
At Award (November 2017)	\$554M	\$645M	\$645M	#772NA (in alterdan
Last Report (June 2020)	\$552M	\$677M	\$677M	\$772M (includes CVM option)*
Current Status	\$552M	\$732M	\$732M	

- Project is on budget.
- Last report included funds moved to 2020-2024 Capital Plan to better align with expenditures.
- Program budget has increased from the last report to include:
 - Fully funded EFA and TAL tasks in the 2020-24 Capital Program for \$55M
 - Option for the Configurable Vending Machine (CVM) for Commuter Railroads for \$39M
- * Board approved CVM option will increase contract to \$591M once executed



Schedule Review

- Project progress is at 34% complete based on invoiced payments, while 53% of the project time has elapsed. Phase 2 installation is forecast to complete by December 2020:
 - Approximately 90% of subway stations have been completed
 - Approximately 60% of buses have been pre-wired (approximately 45% already installed)
- Phase 3 completion, originally February 2021, will be later to allow uniform operational requirements and harmonization of business rules:
 - NYCT Retail Network roll out starting July 2021 to align with Open Payment strategy, and completion of Reduced Fare by September 2021
 - Commuter Railroad Mobile Ticketing rollout by June 2022, including time for employee training and pilot testing
- Phase 4 installation of CVMs, originally March 2022, will be later to allow uniform operational requirements across all agencies:
 - NYCT: February 2023
 - Commuter Railroads: June 2023



Phase 3 and Phase 4 completion dates could impact July 2023 Substantial Completion due to schedule compression.

MTA Independent Engineering Consultant

Risk Review

- Risk to timely completion of Phase 2 bus installation by December 2020 due to issues attributed to COVID 19. Project and the contractor have accelerated the work by increasing installations at more bus depots.
- Risk to completion of NYCT CVM installation by February 2023 due to ongoing finalization of requirements. Project is guiding the User Interface/User Experience (UI/UX) design to accelerate finalization of requirements.



Observations and Recommendation

Observations

- OMNY mobile app with a complete feature set including account management, trip planning, service alerts and sales/payment options, that was planned for deployment in January 2021, will be deployed in Q2 2021 to allow design completion and testing. Beta testing is planned.
- Project resources have been limited since the public launch in May 2019, while the added amount and complexity of the work (system rollout, design, development) have been incrementally increasing.

Recommendation

Allow a minimum of three months for beta testing of the OMNY mobile app before public launch to ensure a better customer experience. Properly planned beta testing provides for bug detection and correction, optimization of user experience, app performance, and security.



Recommendation Log

OMNY - IEC Recommendations / Observations Log

Recommendation	Agency Response/ Action	Status
Governance agreement should be finalized to formalize the way of working between MTA agencies.	The OMNY PMO is working to complete other work streams that unexpectedly intersected with some of the areas covered by the MOU and will have impact on the finalization of some of the provisions of the MOU. A date for finalizing this agreement cannot be determined at this time.	In progress
The strategy to fully decommission MetroCard in 2023 must be developed by the MTA, including the approach to timely integration of the MetroCard Affiliate agencies which have chosen to subscribe to OMNY.	Strategy development has been completed and is being implemented. Strategy overview shared with IEC on 11/4/2020.	Closed



Recommendation Log

on hand

OMNY - IEC Recommendations / Observations Log

Recommendation	Agency Response/ Action	Status
Perform an analysis to determine the benefit of having a second source for semiconductors (chips) for MTA issued OMNY smart cards (fare media). The main component of OMNY smart cards is the chip with embedded software from a single manufacturer. Redundant sources for chips would guarantee continuity of supply for OMNY smart cards in the event of a disruption, and it would provide for competitive pricing.	Analysis was completed on 9/23-24/2020 and IEC completed review on 10/12/20. The analysis provided useful information that indicated potential risk with the LU supply chain. Once we determine the final LU media product, we will seek alternative manufacturers and their lead times for supplying the product, we'll determine the storage capacity available for the product, and mitigate the risk by balancing the two. EU media is common within the industry and while we do not anticipate any issues with the supply chain, during 2021, we will identify multiple card providers to ensure if and when needed, competitive pricing and the ability to continue to keep sufficient stock balance	Closed



Recommendation Log

OMNY - IEC Recommendations / Observations Log

Recommendation	Agency Response/ Action	Status
Finalize design and testing of Transit Transaction Model (e.g. bundles transactions reducing transaction fees, a cost benefit to the MTA) and deploy it as soon as all buses and subway stations are OMNY capable. TTM will provide a newer customer experience than the current retail model; completion of bus and subway installations would provide a good transition point to the TTM model.	TTM testing moved to 1Q2021 due to COVID-19 impact and significant testing required for BU2P2 in November/December, and risk and resource management. BU2P2 testing includes planned 18 days of testing for: SIT: UMB; SIT; Validator; SIT; OVD; SIT: Mobile; PERFORMANCE (Website AND App); and AD HOC for all components.	In progress



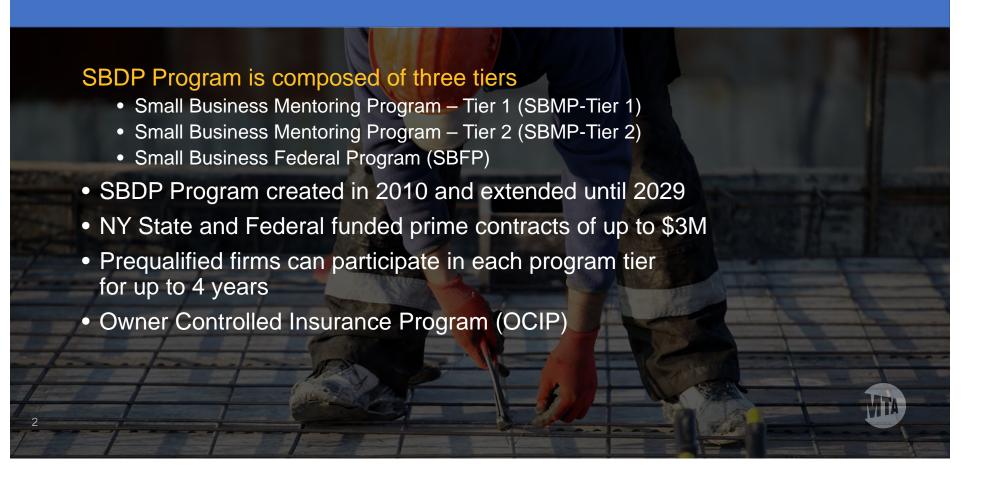
Annual Update MTA Small Business Development Program

Jigish Patel
Deputy Director
Small Business Development Program
Office of Construction Oversight
Department of Capital Programs

George Cleary, MBA
Deputy Chief Diversity Officer
Small Business Development Program
Department of Diversity and Civil Rights



Small Business Development Program (SBDP) Status



Typical SBDP Projects

- Stair replacements and station improvements
- Modular Buildings
- Mechanical and electrical upgrades
- Flood mitigation
- Installation of bus chassis wash lift equipment
- Bridge preservation project
- Asphalt & concrete paving, site work and landscaping
- Roofing
- Demolition

IMPACT OF COVID-19

SBDP Goals

 Projected Targets of Bid Opportunities were effected by the reduction in MTA's current Capital Budget.

Safety Measures

Contractors are successfully managing safety risks associated with COVID-19. There have been
no reports or incidents of Covid-19 related worksite contamination, therefore the safety
instructions/training provided by the MTA has proven helpful.

Mentoring

• Assistance was provided successfully to contractors in transitioning and effectively managing the remote working requirements, virtual meetings, electronic submissions, report submission, etc.

Communication

 Continuous communication and transparent reporting between the Contractors and SBDP has been critical towards the projects' progress, resolving field issues/conditions and achieving ontime or early project Substantial Completion.



Program Year 11 (01/2020 - 12/2020) Progress to Date (10/31/2020)

Challenges

- Developing projects that fit the capacity and capabilities of the contractor pool.
- Maintaining sufficient pool of qualified contractors.

Strategies to close the gap between Goals & Awards

• Have agencies identify projects in the planning phase.

Program Year 11 Awards					
Program	PY 11 Goal	Awarded			
Tier 1	\$26M	\$6.8M			
Tier 2	\$20M	\$4.9M			
Federal Program	\$20M	\$4.6M			
Total	\$66M	\$16.2M*			

*As of October 31, \$16.2 Million Awarded and \$19.1 Million in Bidding



Small Business Mentoring Program - Tier 1 Status

- Bond requirements waived
- NY State funded prime contracts up to \$1M
- 475 firms prequalified since program inception
- 192 firms awarded projects since program inception
- 13 Prequalified SDVOB Firms; 3 firms have been awarded projects.
- 80 of the 192 firms were awarded 2 or more projects

SBMP-Tier 1 Awards				
	Projects	Amount		
Awarded to 192 Firms	296	\$184M		
Final Completion Achieved	264	\$159M		

Proposed Capital Program

PY 12 (2021) Award Goal is \$27 Million 2020-2024 Award Goal is \$144 Million

70% of the projects were awarded to NYS-certified MWBEs



Small Business Mentoring Program - Tier 2 Status

- Program in existence for seven years
- NY State funded prime contracts from \$1M to \$3M
- Payment and performance bonds required
- 42 SBMP-Tier 1 Graduates are currently active participants in the SBMP-Tier 2

90% of the projects were awarded to NYS-certified MWBEs

SBMP-Tier 2 Awards		
	Projects	Amount
Awarded to 40 Firms	83	\$166M
Final Completion Achieved	50	\$89M

Proposed Capital Program

PY 8 (2021) Award Goal is \$21 Million 2020-2024 Award Goal is \$111 Million



Small Business Federal Program Status

- Program in existence for nine years
- Federally funded prime contracts of up to \$3 million
- Payment and performance bonds required
- 24 prequalified firms

68% of the projects were awarded to certified DBEs

84% of the projects were awarded to NYS-certified MWBEs

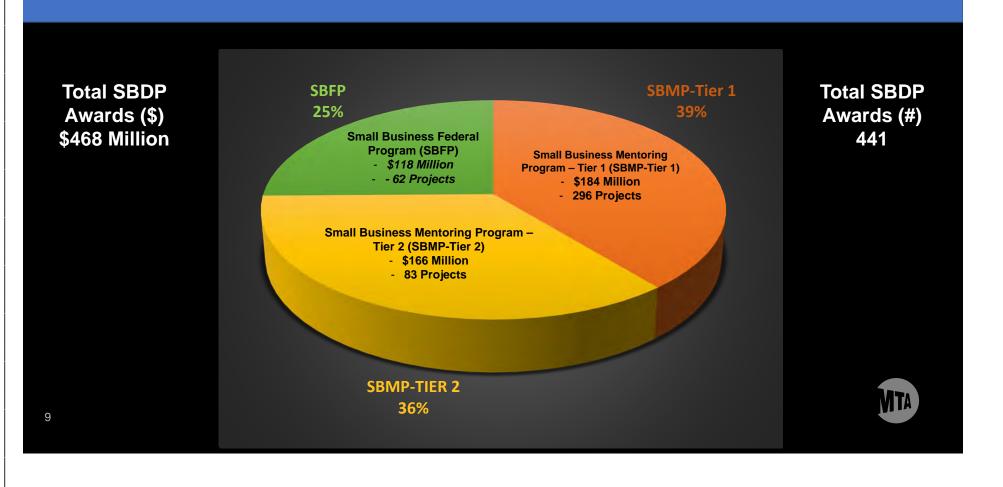
SBFP Total Awards		
	Projects	Amount
Awarded to 31 Firms	62	\$118M
Final Completion Achieved	51	\$91 M

Proposed Capital Program

PY 10 (2021) Award Goal is \$21 Million 2020-2024 Award Goal is \$111 Million



SBDP Contract Awards from the Inception



SBMP-Tier 1 – NYCT Dept. of Buses East New York Communication Tower Caisson Repairs

Honey Construction NY, Inc.







SBMP-Tier 1 – Metro North Railroad (MNR)

Larchmont Station Stair Rehabilitation Project

SAAD Construction Corp.







SBMP-Tier 2 – New York City Transit (NYCT)

Re-coating of Control House Exterior at East 180th Street

RVS Construction Corporation







SBMP-Tier 2 – Bridges & Tunnels (B&T) Rehabilitation of Burma Road and Misc. Site Improvement at the Verrazano Narrows Bridge

Malcolm Patrick Corporation







SBFP – Long Island Rail Road (LIRR)
Rehabilitation and improvement of Lynbrook Station Canopy and Platform Buildings

Zion Contracting LLC







Business Development



SBDP Firms Distribution by Location

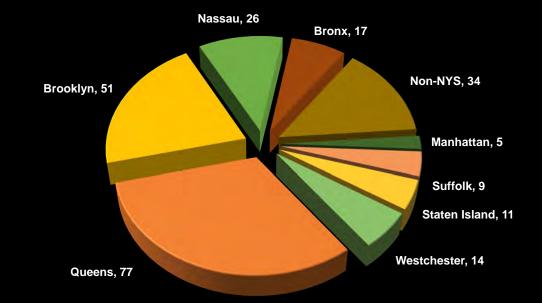
244 Prequalified Firms (as of October 31, 2020)



Certification *

MBE 150 **WBE** 32 **DBE** 66 **SDVOB** 13 **Non-Certified** 74 * Firms may have

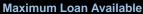
multiple certifications





SBDP Loan Program



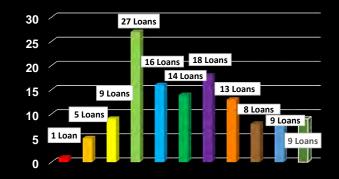


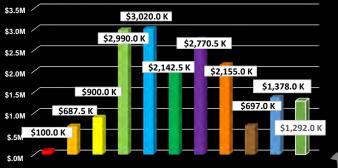
Tier 1 - up to \$150,000 SBFP and Tier 2 - up to \$900,000

Loan values shown are through October 31, 2020

Note: On January 1, 2019 the SBDP began reporting on a Calendar year instead of a Fiscal year.

Year 9 now represents activity from August 1st 2018 to December 31st, 2018 Year 10 represents calendar year 2019.







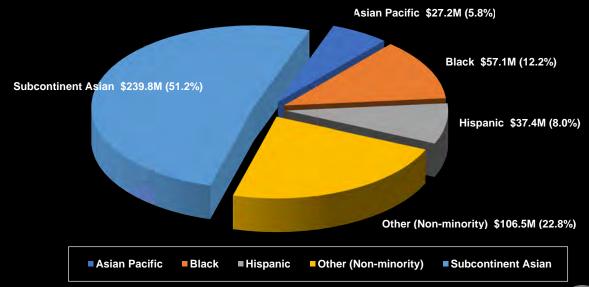
SBDP Firms Distribution by Location

Total SBDP Contract Awards by Ethnic Categories

Category	Awards
Subcontinent Asian	\$239.8M
Non-Minority/Other	\$106.5M
Black	\$ 57.1M
Hispanic	\$ 37.4M
Asian Pacific	\$ 27.2M

Total SBDP Awards \$468.0M

(Awards in Millions of Dollars)



Contract Awards through October 31, 2020



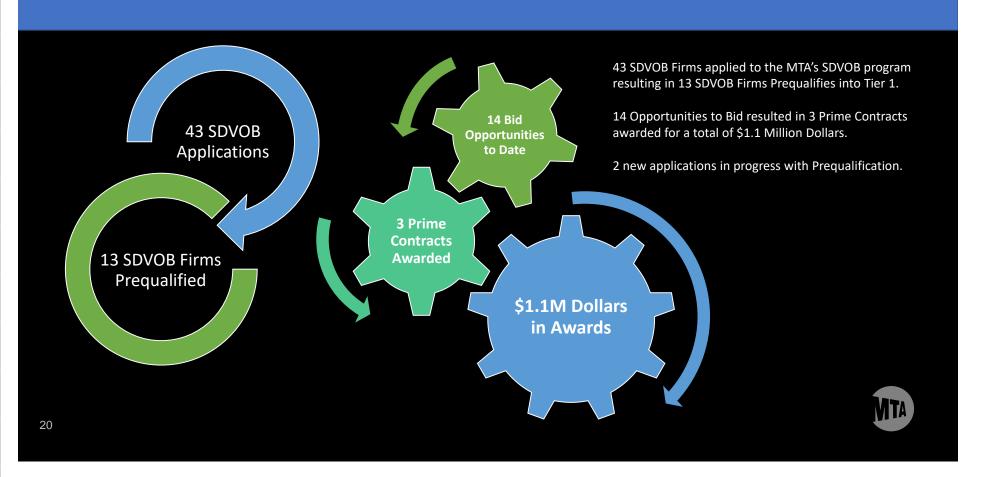
Emerging Contractors Program

Prequalified Emerging Contractors

	Prequalified	Transitioned	Projects	Amount
Black American	27	7	3	\$1.69M
Subcontinent Asian American	16	8	4	\$3.32M
Hispanic American	14	7	5	\$2.23M
Asian Pacific American	2	0	0	\$0.00M
Other	13	5	1	\$0.29M
Totals for SBMP-Tier 1 Emerging Contractors	72	27	13	\$7.53M



Service-Disabled Veteran-Owned Business (SDVOB)



MTA Contracts Outside of SBDP (Millions)

	Projects	Amount
Masterpiece U.S. Inc.	3	\$19.3M
Monpat Construction, Inc.	2	\$10.3M
Minhas Construction Corp.	2	\$72.7M
Voltamp Electrical Contractors	6	\$62.5M
Zion Contracting, LLC	23	\$24.5M
	0.0	* 4.00 * 11
Totals	36	\$189.3M



Zion Contracting, LLC

Project Name: C-40252 - Far Rockaway Bus Depot Rehabilitation, Queens, NY

Contract Value: \$7.18 Million



BEFORE









Zion Contracting, LLC

Project Name: NYCT A-37126 – Additional Platform Stairs at Broadway Junction Station, Brooklyn, NY

Contract Value: \$5.05 Million

BEFORE AFTER









Voltamp Electrical Contractors, Inc.

Project Name: NYCT E-31509 - "Sandy" Fan Plants & Pumps, Manhattan, NY

Contract Value: \$15.90 Million



BEFORE









Voltamp Electrical Contractors, Inc.

Project Name: NYCT P-36472 – Rehabilitation of New Circuit Breaker House #210 at 239th Street Yard, Bronx, NY

Contract Value: \$11.85 Million

BEFORE



AFTER





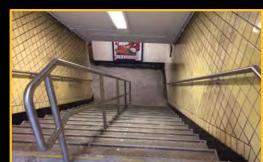
Empower Contracting, Inc.

Mentor Contractor Since 2018

- \$934K in MTA SBDP Prime Contract Awards
- 2 SBDP Contract Awards









K.O. Technologies, Inc.

Mentor Contractor Since 2013

- \$2.9M in MTA SBDP Prime Contract Awards
- 2 SBDP Contract Awards











Ko Jin Industries

Mentor Contractor Since 2013

- \$5.1M in MTA SBDP Prime Contract Awards
- 4 SBDP Contract Awards











SBDP Training Program

As of FALL 2020, 564 firms participated in the training program

14-Session Technical & Business Development Classroom Training

- Doing Business with the MTA
- Prevailing Wages & Project Management
- Estimating and Bidding Strategies at the MTA
- Project Scheduling at the MTA
- Cash Flow and Financial Management
- Marketing Your Business to the NY Construction Industry
- Developing a Profitable Business in the MTA Region
- Safety & Quality Planning at the MTA
- Requisition and Change Order Process
- Construction Law and Contract Review
- How to Acquire Surety Bonding and Access to Capital
- Navigating MTA Contracts and MWBE Compliance
- How to be a Prime Contractor
- What Every Small Business Owner Should Know About Government & Politics



Business Development Activities

Wide range of services

- Recruiting of and outreach to potential program contractors
- Mandatory and voluntary training classes
- Assessment & Action Plans of existing contractor businesses
- Ongoing contractor interface with high level of customer service
- Business Consulting and guidance
- Technical and Business Operations support
- Work with MTA Agencies to provide projects at \$3M to \$15M



MWDBE and SDVOB Participation on MTA Capital Projects with Goals*

	Federal	Partici	pation	Goal:	18%
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(Federal Fiscal Year 2020 (October 2019 to September 2020)

■ Total Awards: \$381M

■ Total DBE Awards: \$52M (14%)

■ Total Payments: \$612M

■ Total DBE Payments: \$133M (22%)

■ New York State MBE Participation Goal: 15%

(First and Second Quarter NYS Fiscal Year 2020-2021 (April 2020 - September 2020)

■ Total Awards: \$96M

■ Total MBE Awards: \$13M (13%)

■ Total Payments: \$379M

■ Total MBE Payments: \$43M (11%)

■ New York State WBE Participation Goal: 15%

(First and Second Quarter NYS Fiscal Year 2020-2021 (April 2020 - September 2020)

Total Awards: \$96M

■ Total WBE Awards: \$12M (12%)

■ Total Payments: \$379M

■ Total WBE Payments: \$44M (12%)

■ Service Disabled Veteran-Owned Business Participation Goal: 6%

(First and Second Quarter NYS Fiscal Year 2020-2021 (April 2020 - September 2020)

■ Total Awards: \$29M

■ Total SDVOB Awards \$511,165 (2%)

■ Total Payments: \$199M

■ Total SDVOB Payments: \$5M (2%)

^{*}Report is based on original contract amount provided by MTA Agencies for third-party design and construction contracts (excluding rolling stock and signals).

MTA Capital Program Commitments & Completions

through October 31, 2020



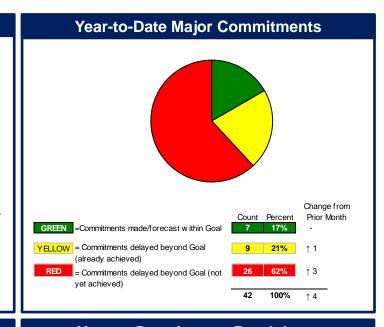
Capital Projects – Major Commitments – October 2020

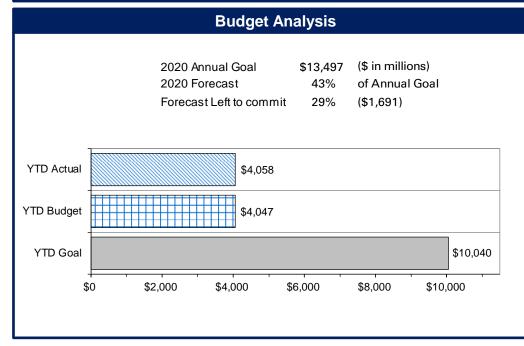
In 2020, agencies have a goal of \$13.5 billion in overall commitments. 51 major commitments are included; 29 for NYCT, eleven for LIRR, four for MNR, one for B&T, four for Network Expansion, and two for MTA Bus.

The MTA's Chairman Pat Foye announced at the March 25th Board meeting that capital work commitments will be considered on an exception basis. This action has impacted commitments since then. As a result, the MTA's \$13.5 billion 2020 commitment plan is under review.

Through October, agencies have committed \$4.1 billion including \$427.2 million of unplanned commitments versus a \$10 billion YTD goal. The shortfall is mainly due to slips of twenty-six major commitments pursuant to the moratorium on new commitments announced by the MTA Chairman. The twenty-six major slips are explained on the following pages.

Since the last report to the MTA Board in October 2020, the year end 2020 forecast has slipped from 51% to 43%, which reflects the anticipated movement of \$8.1 billion of commitments into 2021.









Capital Projects - N	Major Commitments	Octob	er 2020 – So
Project	Commitment	Goal	Forecast
26 All-Agency Red Con	nmitments (4 New Items	s)	
NYCT			
Passenger Stations			
Replace 8 Escalators / Various	Construction Award	Mar-20	Jul-21
		\$62.0	\$61.0
The award is delayed due to the pandemic. Cost decrease reflect	financial impact on the MTA as a res ts favorable bids.	sult of the CO	VID- 19
Replace 12 Escalators	Construction Award	May-20	Jul-21
		\$111.9	\$114.1
The award is delayed due to the financies. Cost increase reflect	financial impact on the MTA as a res s latest estimates.	sult of the CO	VID- 19
ADA and Station Improvements:	Construction Award	May-20	Mar-21
Westchester Square / PEL		\$90.0	\$94.4
The award is delayed due to nec additional scope.	essary coordination with other proje	ects. Cost inc	rease reflects
Overcoating: 17 Bridges & East 18	80 Construction Award	Aug-20	Nov- 21
Street Flyover / Dyre Av		\$132.5	\$143.7
	financial impact on the MTA as a res s latest estimates and additional sco		VID- 19
Replace 8 Traction Elevators /	Construction Award	Jun-20	Jul-21
Various		\$65.4	\$65.9
	financial impact on the MTA as a res s latest estimates and additional sc		VID- 19
ADA: 14 St Complex Bundle	Construction Award	Jul-20	Mar-21
		\$231.5	\$374.0
The award is delayed due to nec additional scope.	essary coordination with other proje	ects. Cost inc	rease reflects
Flushing (ADA/ Renewals/	Construction Award	Sep-20	Jul-21
Components) Bundle		\$520.7	\$605.0
The award is delayed due to the to pandemic. Cost increase reflect	financial impact on the MTA as a res s additional scope.	sult of the CO	VID- 19
Replace 11 Hydraulic Elevators /	Construction Award	Mar-20	Jul-21
Various		\$65.9	\$69.6
	financial impact on the MTA as a res s project complexity and unfavorabl		VID- 19

roject	Commitment	Goal	Forecas
IYCT			
Passenger Stations			
ADA: Wave A1Bundle	Construction Award	Sep-20	Jul-21
		\$391.7	\$235.4
•	financial impact on the MTA as a ets reduced number of stations no low) and latest estimates.		
ADA: Wave A2 Bundle	Construction Award	Sep-20	Jul-21
		\$788.8	\$402.1
ADA: 8 Stations (Pkg A) (see bel	·		
ADA: Wave A3 Bundle	Construction Award	Sep-20	Jul-21
		\$592.3	\$444.7
pandemic. Cost decrease reflect ADA: 8 Stations (Pkg A) (see bel	ets reduced number of stations no low) and latest estimates.	ow to be award	led under
ADA: 8 Stations (Pkg A)	Construction Award	Sep-20	Dec-20
		\$0.0	\$582.0
Eight (8) ADA stations from Wave new (Pkg A) bundle.	e A bundles are now packaged to	be awarded s	separately ir
ADA: Woodhaven and Jamaica	Construction Award	Sep-20	Feb-21
ADA: Woodhaven and Jamaica Renewals	Construction Award	Sep-20 \$239.2	Feb-21 \$313.2
Renewals The award is delayed due to the	financial impact on the MTA as a ts project complexity and market	\$239.2 result of the C	OVID-19
Renewals The award is delayed due to the pandemic. Cost increase reflec of Court Square ADA project to t Culver ROW (Painting)	financial impact on the MTA as a ts project complexity and market	\$239.2 result of the C	\$313.2 COVID-19
Renewals The award is delayed due to the pandemic. Cost increase reflect of Court Square ADA project to the state of the square ADA project to the s	financial impact on the MTA as a ts project complexity and market the bundle.	\$239.2 result of the C conditions an	\$313.2 COVID- 19 d the additio



Project	Commitment	Goal	Forecast	Project	Commitment	Goal	Forecas
26 All-Agency Red Comm	itments (continued	l)		LIRR			
NYCT				Rolling Stock			
Shops and Yards				M-9 Rolling Stock Procurement - 54-	Construction Award	Jun-20	Mar- 21
Rail Car Acceptance and Testing	Construction Award	Jul-20	Apr-21	Car (Option)		\$243.0	\$243.0
Facility, Brooklyn		\$78.9	\$78.9	The LIRR continues to negotiate with the	he vendor. Board approval i	is required to ex	ercise this
The award is delayed due to unresolv	ed ground lease agreement	issues.		option.			
Rolling Stock				Work Locomotives	Construction Award	Sep-20	Mar- 21
Purchase 84 Hybrid- Electric & 139	Construction Award	Mar- 20	Jul-21			\$35.2	\$35.2
Standard Buses (New Flyer)		\$161.8	\$162.6	The award was delayed due to a review	. ,		•
The award is delayed due to the finar pandemic. Cost increase reflects finar	•	•	•	General. LIRR Legal notified the project issuing a report. The procurement is no		•	
paridernic. Cost increase reflects fina	irriegotiated price.			December 2020.			
				Power			
Track				Cubatatian Dani Dankaga II 2D	Construction Award	Can 20	Nov. 20
8th Ave ROW (Misc.) Bundle	Construction Award	Oct-20	Jan-21	Substation Repl Package II-3P	Construction Award	Sep-20	
8th Ave ROW (Misc.) Bundle (New Item)		\$201.2	\$220.6	Construction		\$18.0	\$18.0
8th Ave ROW (Misc.) Bundle	ncial impact on the MTA as a	\$201.2 result of the CO	\$220.6 VID-19	Construction The award is delayed due to the finance pandemic.		\$18.0	
8th Ave ROW (Misc.) Bundle (New Item) The award is delayed due to the finar pandemic. Cost increase reflects the Hurricane Sandy	ncial impact on the MTA as a a addition of the platform com	\$201.2 result of the CO	\$220.6 VID-19	Construction The award is delayed due to the financ pandemic. Hurricane Sandy	cial impact on the MTA as a	\$18.0 result of the CO	\$18.0 VID-19
8th Ave ROW (Misc.) Bundle (New Item) The award is delayed due to the finar pandemic. Cost increase reflects the Hurricane Sandy Sandy Repairs: Mainline Track	ncial impact on the MTA as a a addition of the platform com	\$201.2 result of the CO	\$220.6 VID-19	Construction The award is delayed due to the finance pandemic. Hurricane Sandy LIC Yard Restoration		\$18.0 result of the CO	\$18.0 VID- 19 Mar- 21
8th Ave ROW (Misc.) Bundle (New Item) The award is delayed due to the finar pandemic. Cost increase reflects the Hurricane Sandy Sandy Repairs: Mainline Track - 200 St - 207 St / 8th Ave	ncial impact on the MTA as a a addition of the platform com	\$201.2 result of the CO aponent project	\$220.6 VID- 19 to the bundle.	Construction The award is delayed due to the finance pandemic. Hurricane Sandy LIC Yard Restoration (wall/pump) (New Item)	cial impact on the MTA as a l	\$18.0 result of the CO Oct-20 \$13.4	\$18.0 VID- 19 Mar- 21 \$13.4
8th Ave ROW (Misc.) Bundle (New Item) The award is delayed due to the finar pandemic. Cost increase reflects the Hurricane Sandy Sandy Repairs: Mainline Track	ncial impact on the MTA as a a addition of the platform com	\$201.2 result of the CO aponent project	\$220.6 VID-19 to the bundle.	Construction The award is delayed due to the finance pandemic. Hurricane Sandy LIC Yard Restoration (wall/pump) (New Item) The award is delayed to allow more time	cial impact on the MTA as a l	\$18.0 result of the CO Oct-20 \$13.4	\$18.0 VID- 19 Mar- 21 \$13.4
8th Ave ROW (Misc.) Bundle (New Item) The award is delayed due to the finar pandemic. Cost increase reflects the Hurricane Sandy Sandy Repairs: Mainline Track - 200 St - 207 St / 8th Ave	ncial impact on the MTA as a sea addition of the platform com Construction Award	\$201.2 result of the CO ponent project Oct-20 \$122.8	\$220.6 VID-19 to the bundle. Jan-21 \$137.0	Construction The award is delayed due to the finance pandemic. Hurricane Sandy LIC Yard Restoration (wall/pump) (New Item) The award is delayed to allow more time issues.	cial impact on the MTA as a l	\$18.0 result of the CO Oct-20 \$13.4	\$18.0 VID- 19 Mar- 21 \$13.4
8th Ave ROW (Misc.) Bundle (New Item) The award is delayed due to the finar pandemic. Cost increase reflects the Hurricane Sandy Sandy Repairs: Mainline Track - 200 St - 207 St / 8th Ave (New Item)	ncial impact on the MTA as a sea addition of the platform com Construction Award	\$201.2 result of the CO ponent project Oct-20 \$122.8	\$220.6 VID-19 to the bundle. Jan-21 \$137.0	Construction The award is delayed due to the finance pandemic. Hurricane Sandy LIC Yard Restoration (wall/pump) (New Item) The award is delayed to allow more time issues. MNR	cial impact on the MTA as a l	\$18.0 result of the CO Oct-20 \$13.4	\$18.0 VID- 19 Mar- 21 \$13.4
8th Ave ROW (Misc.) Bundle (New Item) The award is delayed due to the finar pandemic. Cost increase reflects the Hurricane Sandy Sandy Repairs: Mainline Track - 200 St - 207 St / 8th Ave (New Item) The award is delayed due to the more COVID-19 pandemic. Cost increase reflects the contract of the same of the contract of the same of the s	ncial impact on the MTA as a sea addition of the platform com Construction Award	\$201.2 result of the CO ponent project Oct-20 \$122.8	\$220.6 VID-19 to the bundle. Jan-21 \$137.0	Construction The award is delayed due to the finance pandemic. Hurricane Sandy LIC Yard Restoration (wall/pump) (New Item) The award is delayed to allow more time issues. MNR Stations	cial impact on the MTA as a construction Award e to resolve project budget a	\$18.0 result of the CO Oct-20 \$13.4 and real estate	\$18.0 VID-19 Mar-21 \$13.4 acquisition
8th Ave ROW (Misc.) Bundle (New Item) The award is delayed due to the finar pandemic. Cost increase reflects the Hurricane Sandy Sandy Repairs: Mainline Track - 200 St - 207 St / 8th Ave (New Item) The award is delayed due to the more COVID-19 pandemic. Cost increase relationship.	ncial impact on the MTA as a sea addition of the platform com Construction Award	\$201.2 result of the CO ponent project Oct-20 \$122.8	\$220.6 VID-19 to the bundle. Jan-21 \$137.0	Construction The award is delayed due to the finance pandemic. Hurricane Sandy LIC Yard Restoration (wall/pump) (New Item) The award is delayed to allow more time issues. MNR	cial impact on the MTA as a l	\$18.0 result of the CO Oct-20 \$13.4 and real estate	\$18.0 VID-19 Mar-21 \$13.4 acquisition
8th Ave ROW (Misc.) Bundle (New Item) The award is delayed due to the finar pandemic. Cost increase reflects the Hurricane Sandy Sandy Repairs: Mainline Track - 200 St - 207 St / 8th Ave (New Item) The award is delayed due to the more COVID-19 pandemic. Cost increase relating to the COVID-19 pandemic.	ncial impact on the MTA as a addition of the platform com Construction Award atorium placed on all procure reflects latest estimates.	\$201.2 result of the CO ponent project Oct-20 \$122.8 ment actions as	\$220.6 VID-19 to the bundle. Jan-21 \$137.0 s a result of the	Construction The award is delayed due to the finance pandemic. Hurricane Sandy LIC Yard Restoration (wall/pump) (New Item) The award is delayed to allow more time issues. MNR Stations Harlem Line Station Improvements	Construction Award Construction Award e to resolve project budget a	\$18.0 result of the CO Oct-20 \$13.4 and real estate Apr-20 \$16.3	\$18.0 VID-19 Mar-21 \$13.4 acquisition Mar-21 \$16.3
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8th Ave ROW (Misc.) Bundle (New Item) The award is delayed due to the finar pandemic. Cost increase reflects the Hurricane Sandy Sandy Repairs: Mainline Track - 200 St - 207 St / 8th Ave (New Item) The award is delayed due to the more COVID- 19 pandemic. Cost increase relative to the More COVID- 19 pandemic. Phase 1A	acial impact on the MTA as a caddition of the platform come. Construction Award atorium placed on all procure reflects latest estimates. Construction Award	\$201.2 result of the CO ponent project Oct-20 \$122.8 ment actions as Jun-20 \$24.0	\$220.6 VID-19 to the bundle. Jan-21 \$137.0 s a result of the Nov-20 \$24.0	Construction The award is delayed due to the finance pandemic. Hurricane Sandy LIC Yard Restoration (wall/pump) (New Item) The award is delayed to allow more time issues. MNR Stations Harlem Line Station Improvements The award is delayed due to temporary amount of technical requests for inform	Construction Award Construction Award e to resolve project budget a Construction Award	\$18.0 result of the CO Oct-20 \$13.4 and real estate Apr-20 \$16.3	\$18.0 VID-19 Mar-21 \$13.4 acquisition Mar-21 \$16.3
8th Ave ROW (Misc.) Bundle (New Item) The award is delayed due to the finar pandemic. Cost increase reflects the Hurricane Sandy Sandy Repairs: Mainline Track - 200 St - 207 St / 8th Ave (New Item) The award is delayed due to the more COVID-19 pandemic. Cost increase relative to the More COVID-19 pandemic. The Ave (New Item) LIRR PSNY PNSY 33rd St Corridor-Phase 1A	acial impact on the MTA as a caddition of the platform come. Construction Award atorium placed on all procure reflects latest estimates. Construction Award	\$201.2 result of the CO ponent project Oct-20 \$122.8 ment actions as Jun-20 \$24.0	\$220.6 VID-19 to the bundle. Jan-21 \$137.0 s a result of the Nov-20 \$24.0	Construction The award is delayed due to the finance pandemic. Hurricane Sandy LIC Yard Restoration (wall/pump) (New Item) The award is delayed to allow more time issues. MNR Stations Harlem Line Station Improvements The award is delayed due to temporary	Construction Award Construction Award e to resolve project budget a Construction Award	\$18.0 result of the CO Oct-20 \$13.4 and real estate Apr-20 \$16.3	\$18.0 VID-19 Mar-21 \$13.4 acquisition Mar-21 \$16.3
8th Ave ROW (Misc.) Bundle (New Item) The award is delayed due to the finar pandemic. Cost increase reflects the Hurricane Sandy Sandy Repairs: Mainline Track - 200 St - 207 St / 8th Ave (New Item) The award is delayed due to the mora COVID-19 pandemic. Cost increase relating PSNY PNSY 33rd St Corridor-Phase 1A This award is the balance of Phase Ia Phase II award.	cial impact on the MTA as a addition of the platform come. Construction Award atorium placed on all procure reflects latest estimates. Construction Award and Il support costs. The award and Il support costs. The award	\$201.2 result of the CO ponent project Oct-20 \$122.8 ment actions as Jun-20 \$24.0 ard is delayed to	\$220.6 VID-19 to the bundle. Jan-21 \$137.0 s a result of the Nov-20 \$24.0 reflect timing of	Construction The award is delayed due to the finance pandemic. Hurricane Sandy LIC Yard Restoration (wall/pump) (New Item) The award is delayed to allow more time issues. MNR Stations Harlem Line Station Improvements The award is delayed due to temporary amount of technical requests for inform Network Expansion East Side Access	Construction Award Construction Award e to resolve project budget a Construction Award	\$18.0 result of the CO Oct-20 \$13.4 and real estate Apr-20 \$16.3	\$18.0 VID-19 Mar-21 \$13.4 acquisition Mar-21 \$16.3
8th Ave ROW (Misc.) Bundle (New Item) The award is delayed due to the finar pandemic. Cost increase reflects the Hurricane Sandy Sandy Repairs: Mainline Track - 200 St - 207 St / 8th Ave (New Item) The award is delayed due to the more COVID-19 pandemic. Cost increase relative to the More COVID-19 pandemic. The same statement of the COVID-19 pandemic. The same statement of the More Pondement of the More Pondemen	acial impact on the MTA as a caddition of the platform come. Construction Award atorium placed on all procure reflects latest estimates. Construction Award	\$201.2 result of the CO ponent project Oct-20 \$122.8 ment actions as Jun-20 \$24.0	\$220.6 VID-19 to the bundle. Jan-21 \$137.0 s a result of the Nov-20 \$24.0	Construction The award is delayed due to the finance pandemic. Hurricane Sandy LIC Yard Restoration (wall/pump) (New Item) The award is delayed to allow more time issues. MNR Stations Harlem Line Station Improvements The award is delayed due to temporary amount of technical requests for inform. Network Expansion	Construction Award Construction Award e to resolve project budget a Construction Award	\$18.0 result of the CO Oct-20 \$13.4 and real estate Apr-20 \$16.3	\$18.0 VID-19 Mar-21 \$13.4 acquisition Mar-21 \$16.3



Project	Commitment	Goal	Actual
9 All-Agency Yellow Comn	nitments (1 New Ite	em)	
NYCT			
Line Structures			
Eastern Parkway (Line Structures)	Construction Award	Apr-20	Jun-20(A)
		\$135.6	\$77.1
The original award was delayed due to 19 pandemic. Completion date was ac decrease reflects favorable bids.	•		
Rolling Stock			
Purchase 25 Hybrid Locomotives	Construction Award	Apr-20	Aug-20(A)
		\$225.3	\$257.8
The award was delayed due to addition increase reflects final negotiated bid passenger Stations		•	·
increase reflects final negotiated bid p		•	·
increase reflects final negotiated bid p	orice.	nate battery pro	posals. Cost
increase reflects final negotiated bid passenger Stations ADA: Tremont & 149 Street - Grand	Construction Award	Jun-20 \$161.8	Aug-20(A) \$160.4
increase reflects final negotiated bid passenger Stations ADA: Tremont & 149 Street - Grand Concourse Complex The award was delayed due to the final	Construction Award	Jun-20 \$161.8	Aug-20(A) \$160.4
increase reflects final negotiated bid passenger Stations ADA: Tremont & 149 Street - Grand Concourse Complex The award was delayed due to the final pandemic. Cost decrease reflects fav	Construction Award	Jun-20 \$161.8	Aug-20(A) \$160.4
increase reflects final negotiated bid passenger Stations ADA: Tremont & 149 Street - Grand Concourse Complex The award was delayed due to the final pandemic. Cost decrease reflects fav	Construction Award	Jun-20 \$161.8	Aug-20(A) \$160.4

Project	Commitment	Goal	Actual
LIRR	Commitment	Cour	Actual
PSNY			
PNSY 33rd St Corridor- Phase 1A	Construction Award	Mar-20	May-20(A
		\$24.0	\$24.0
This award is the first half of Phase Isu delayed to November to reflect timing	• •	Phase land IIs	support costs
PNSY 33rd St Corridor- Phase 1B	Construction Award	Mar-20	Jul- 20(A
		\$44.4	\$42.5
Harlem River Lift Bridge	Construction Award	Mar-20	Aug-20(<i>A</i>
SuperStructure/Pier Repair The award was delayed due to the fine		\$15.0	\$15.0
SuperStructure/Pier Repair The award was delayed due to the fin- pandemic.	ancial impact on the MTA as	\$15.0 a result of the C	\$15.0 COVID-19
SuperStructure/Pier Repair The award was delayed due to the fine		\$15.0	*
SuperStructure/Pier Repair The award was delayed due to the fin- pandemic. Harlem River Fender The award was delayed due to the fin- pandemic. Network Expansion	ancial impact on the MTA as Construction Award	\$15.0 a result of the 0 Mar-20 \$6.0	\$15.0 COVID- 19 Aug- 20(A \$6.0
SuperStructure/Pier Repair The award was delayed due to the fin- pandemic. Harlem River Fender The award was delayed due to the fin- pandemic. Network Expansion East Side Access	ancial impact on the MTA as Construction Award	\$15.0 a result of the 0 Mar-20 \$6.0	\$15.0 COVID- 19 Aug- 20(A \$6.0 COVID- 19
SuperStructure/Pier Repair The award was delayed due to the fin- pandemic. Harlem River Fender The award was delayed due to the fin- pandemic. Network Expansion	ancial impact on the MTA as Construction Award ancial impact on the MTA as	\$15.0 a result of the C Mar- 20 \$6.0 a result of the C	\$15.0 COVID- 19 Aug- 20(A \$6.0

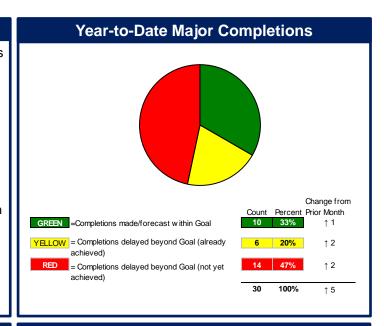


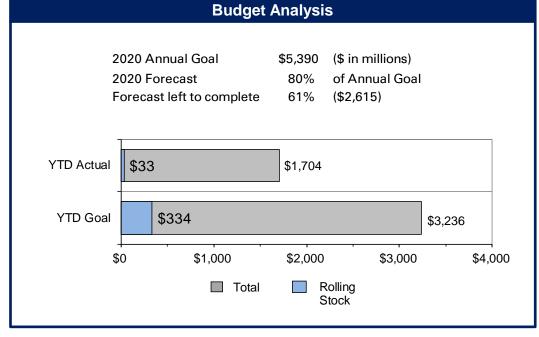
Capital Projects – Major Completions – October 2020

In 2020, agencies have a goal of \$5.4 billion in overall completions. 40 major completions are included, including 19 for NYCT, eight for the LIRR, seven for MNR, four for B&T, one for Network Expansion, and one for MTA PD.

Through October, agencies have completed \$1.7 billion versus a \$3.2 billion YTD goal. The shortfall is primarily due to slips of fourteen major completions explained on the following page.

Since the last report to the MTA Board in October 2020, the year end 2020 forecast has slipped from 94% to 80%, which is mainly due to the slippage of GCT Caverns (CM007) (\$724m) to 2021. The MTA still anticipates meeting 80% of its overall completions goal in 2020. This relies on achieving \$2 billion of completions in November and December 2020.









Capital Projects - Major Completions - October 2020 - Schedule Variances

Project Completion Goal Forecast

14 All-Agency Red Completions (4 New Items)

NYCT

Hurricane Sandy

Sandy Mitigation: 14 Fan Plants,	Construction	May-20	Nov-20
LT - 4 Locations		\$34.1	\$34.2

A request for Extension of Time is under review by NYCT & C&D due to fabrication and delivery delays related to the COVID-19 pandemic. Cost increase reflects latest estimates.

Passenger Stations

ADA: Begrorg Park Boulevarg/	Construction	Jul 1-20	1107-20
		\$32.6	\$32.7
Project completion slippage due to m	aterial delivery delays a	s a result of th	e COVID-19
pandemic Cost increase reflects late	est estimates		

ADA: Gun Hill Rd / Dyre Construction Jul-20 Nov-20 \$54.5 \$55.3

Project completion slippage due to material delivery delays as a result of the COVID-19 pandemic. Cost increase reflects latest estimates.

ADA: Greenpoint Avenue /	Construction	Oct-20	Dec-20
Crosstown (New Item)		\$38.3	\$36.4

Project delay due to COVID-19 pandemic impact on fabrication and delivery of elevator glass activity which lies on critical path of this project. Cost decrease reflects latest estimates.

Collinates.			
ADA: Eastern Parkway-	Construction	Oct-20	Nov-20
Brooklyn Museum / EPK (New		\$38.6	\$39.7
Item)			

Project completion delayed due to the COV ID-19 pandemic. Cost increase reflects latest estimates.

Staten Island Railway

SIR: Mainline & Clifton Yard	Construction	Oct-20	Aug-21
Track and Switch		\$63.0	\$63.3

Reconfiguration (New Item)

Project completion delayed due to the addition of two miles of track. Cost increase reflects latest estimates.

Project	Completion	Goal	Forecast
LIRR			
Shops and Yards			
Diesel Locomotive Shop	Construction	May-20	Nov-20
Improvements		\$89.8	\$94.4
Project completion delayed due to emergency generator as well as o	•	•	mp and

Track

Massapequa Pocket Track	Construction	Feb-20	Dec-20
		\$19.6	\$19.6

The cutover of the signal systems was completed on schedule. Additional work remains to resurface and realign track before putting this asset into service. A schedule for addressing this work is under development, but a delay to December has been forecast.

Rolling Stock

Rolling Stock: M-9 Procurement	Rolling Stock Purchase	May-20	Apr-22
		\$300.8	\$300.8

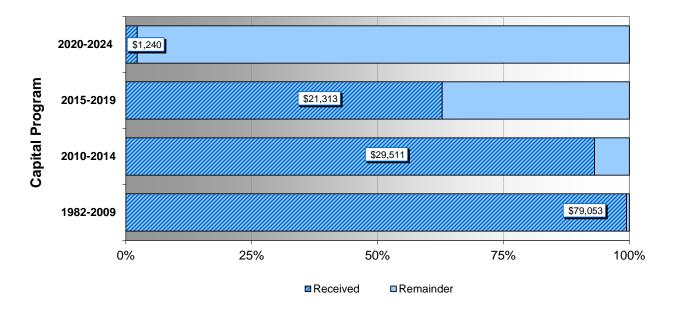
Project completion delayed due to issues in testing first cars and the production facility temporarily closing due to the COVID-19 pandemic.



	r Completions ·	– Octo <u>be</u>	r 2020 – <u>Sc</u>	 Schedule Variances Actual Results Sh 		haded	
Project	Completion	Goal	Forecast	Project	Completion	Goal	Actual
14 All-Agency Red Complet	tions (continued	1)	<u>.</u>	6 All-Agency Yellow Comp	letion (2 New Ite	ms)	
MNR				NYCT	(=	,	
Hurricane Sandy				Buses			
Power Infrastructure Restoration -	Construction	Jun-20	Jan-21	Purchase 15 Articulated Electric	Bus Purchase	Mar-20	Jun-20(A)
Substations		\$43.8	\$43.8	Buses and Depot Chargers		\$32.9	\$32.9
Project completion delayed due to the						¥32.5	¥
cutover/energization at Riverdale and	d impacts to be realized	I under the CC	VID-19	There was a delay due to the COVI	D-19 pandemic and the	related reduce	d w orkforce
pandemic.				at New Flyer Industries. All buses h			
Power				Pasenger Stations			
Substation Bridge 23 -	Construction	Jun-20	Nov-20	ADA: 86 Street / 4th Avenue	Construction	May-20	Aug-20(A
Construction		\$41.7	\$41.7			\$33.1	\$33.2
Project completion delayed due to the	e COVID-19 pandemic.			Project completion was delayed due	e to the COVID-19 pande	emic.	
H & H Pow er (86th St. / 110th St.)	Construction	Sep-20	Nov-20	ADA: Chambers Street /	Construction	Aug-20	Oct-20(A)
		\$12.3	\$12.3	Nassau Loop (New Item)		\$43.6	\$43.4
pandemic. Coordination of existing m	nanpow er levels is being	g done to aded	quately	of the COVID 10 pandamia Coat do	aragas reflects latest of	atimataa	
support on-going projects. Harlem & Hudson Lines Pow er	Construction	Sep-20	Nov-20	of the COVID-19 pandemic. Cost de Hurricane Sandy			San 20(A)
	Construction	Sep-20 \$42.5	Nov-20 \$42.5	Hurricane Sandy Sandy Mitigation: 9 Stations (9	Construction	May-20	. , ,
11 0 01 7		Sep-20 \$42.5	Nov-20 \$42.5	Hurricane Sandy Sandy Mitigation: 9 Stations (9 Stns BK/Q Initiative)	Construction	May-20 \$33.1	Sep-20(A) \$33.2
Harlem & Hudson Lines Pow er Project completion delayed due to the		•		Hurricane Sandy Sandy Mitigation: 9 Stations (9	Construction	May-20 \$33.1	. , ,
Harlem & Hudson Lines Power Project completion delayed due to the Network Expansion East Side Access	e COV ID-19 pandemic.	•		Hurricane Sandy Sandy Mitigation: 9 Stations (9 Stns BK/Q Initiative)	Construction	May-20 \$33.1	• • •
Harlem & Hudson Lines Power Project completion delayed due to the Network Expansion East Side Access GCT Caverns (CM007) (New		•		Hurricane Sandy Sandy Mitigation: 9 Stations (9 Stns BK/Q Initiative) Project completion w as delayed due	Construction	May-20 \$33.1 ase repairs.	\$33.2
Harlem & Hudson Lines Power Project completion delayed due to the Network Expansion East Side Access GCT Caverns (CM007) (New Item)	e COVID-19 pandemic. Construction	\$42.5 Oct-20 \$708.3	\$42.5 Feb-21 \$724.0	Hurricane Sandy Sandy Mitigation: 9 Stations (9 Stns BK/Q Initiative) Project completion w as delayed due	Construction e to additional column ba	May-20 \$33.1	\$33.2 Sep-20(A)
Harlem & Hudson Lines Pow er Project completion delayed due to the Network Expansion East Side Access GCT Caverns (CM007) (New Item) Project slippage due to delays in com	e COVID-19 pandemic. Construction npletion of ceiling installa	\$42.5 Oct-20 \$708.3 ation in the Eas	\$42.5 Feb-21 \$724.0 st Upper	Hurricane Sandy Sandy Mitigation: 9 Stations (9 Stns BK/Q Initiative) Project completion w as delayed due	Construction e to additional column ba Construction	May-20 \$33.1 ase repairs. Aug-20 \$100.4	\$33.2 Sep-20(A) \$100.4
Harlem & Hudson Lines Power Project completion delayed due to the Network Expansion East Side Access GCT Caverns (CM007) (New Item) Project slippage due to delays in com Cavern as a result of COVID-19, whi	e COVID-19 pandemic. Construction pletion of ceiling installicit is impacting testing	\$42.5 Oct-20 \$708.3 ation in the Eas	\$42.5 Feb-21 \$724.0 st Upper	Hurricane Sandy Sandy Mitigation: 9 Stations (9 Stns BK/Q Initiative) Project completion w as delayed due B&T Skew back Retrofit at HH	Construction e to additional column ba Construction	May-20 \$33.1 ase repairs. Aug-20 \$100.4	\$33.2 Sep-20(A) \$100.4
Harlem & Hudson Lines Pow er Project completion delayed due to the Network Expansion East Side Access GCT Caverns (CM007) (New Item) Project slippage due to delays in com	e COVID-19 pandemic. Construction pletion of ceiling installicit is impacting testing	\$42.5 Oct-20 \$708.3 ation in the Eas	\$42.5 Feb-21 \$724.0 st Upper	Hurricane Sandy Sandy Mitigation: 9 Stations (9 Stns BK/Q Initiative) Project completion w as delayed due B&T Skew back Retrofit at HH	Construction e to additional column ba Construction	May-20 \$33.1 ase repairs. Aug-20 \$100.4	Sep-20(A) \$100.4
Harlem & Hudson Lines Pow er Project completion delayed due to the Network Expansion East Side Access GCT Caverns (CM007) (New Item) Project slippage due to delays in com Cavern as a result of COVID-19, whi	e COVID-19 pandemic. Construction pletion of ceiling installicit is impacting testing	\$42.5 Oct-20 \$708.3 ation in the Eas	\$42.5 Feb-21 \$724.0 st Upper	Hurricane Sandy Sandy Mitigation: 9 Stations (9 Stns BK/Q Initiative) Project completion w as delayed due B&T Skew back Retrofit at HH Project completion w as delayed due	Construction e to additional column ba Construction	May-20 \$33.1 ase repairs. Aug-20 \$100.4	\$33.2 Sep-20(A) \$100.4
Harlem & Hudson Lines Pow er Project completion delayed due to the Network Expansion East Side Access GCT Caverns (CM007) (New Item) Project slippage due to delays in com Cavern as a result of COVID-19, whi	e COVID-19 pandemic. Construction pletion of ceiling installicit is impacting testing	\$42.5 Oct-20 \$708.3 ation in the Eas	\$42.5 Feb-21 \$724.0 st Upper	Hurricane Sandy Sandy Mitigation: 9 Stations (9 Stns BK/Q Initiative) Project completion w as delayed due B&T Skew back Retrofit at HH Project completion w as delayed due MTA Police Department	Construction e to additional column ba Construction	May-20 \$33.1 ase repairs. Aug-20 \$100.4	\$33.2 Sep-20(A) \$100.4 ing repair.
Harlem & Hudson Lines Pow er Project completion delayed due to the Network Expansion East Side Access GCT Caverns (CM007) (New Item) Project slippage due to delays in com Cavern as a result of COVID-19, whi	e COVID-19 pandemic. Construction pletion of ceiling installicit is impacting testing	\$42.5 Oct-20 \$708.3 ation in the Eas	\$42.5 Feb-21 \$724.0 st Upper	Hurricane Sandy Sandy Mitigation: 9 Stations (9 Stns BK/Q Initiative) Project completion w as delayed due B&T Skew back Retrofit at HH Project completion w as delayed due MTA Police Department MTA PD	Construction e to additional column ba Construction e to unforeseen steel co	May-20 \$33.1 ase repairs. Aug-20 \$100.4 anditions requir	\$33.2 Sep-20(A) \$100.4 ing repair.
Harlem & Hudson Lines Power Project completion delayed due to the Network Expansion East Side Access GCT Caverns (CM007) (New Item) Project slippage due to delays in com Cavern as a result of COVID-19, whi	e COVID-19 pandemic. Construction Appletion of ceiling installing in the contraction is impacting testing.	\$42.5 Oct-20 \$708.3 ation in the Eas	\$42.5 Feb-21 \$724.0 st Upper	Hurricane Sandy Sandy Mitigation: 9 Stations (9 Stns BK/Q Initiative) Project completion w as delayed due B&T Skew back Retrofit at HH Project completion w as delayed due MTA Police Department MTA PD Staten Island District Office	Construction e to additional column ba Construction e to unforeseen steel co	May-20 \$33.1 ase repairs. Aug-20 \$100.4 anditions requir Aug-20 \$13.5	\$33.2 Sep-20(A) \$100.4 ing repair. Oct-20(A) \$13.5

Status of MTA Capital Program Funding

Capital Funding (October 2020) \$ in millions



Capital Funding Detail (October 31, 2020)

\$ in millions

	Funding Plan		Receipts	
2010-2014 Program	<u>Current</u>	Thru Sept	This month	Received to date
Federal Formula, Flexible, Misc	\$5,844	\$5,839	\$ -	\$5,839
Federal High Speed Rail	173	173	-	173
Federal New Start	1,271	1,257	-	1,257
Federal Security	89	89	-	89
Federal RRIF Loan	-	-	-	-
City Capital Funds	719	608	-	608
State Assistance	770	770	-	770
MTA Bus Federal and City Match	132	112	-	112
MTA Bonds (Payroll Mobility Tax)	11,625	10,450	-	10,450
Other (Including Operating to Capital)**	1,303	1,273	-	1,273
B&T Bonds	2,175	2,019	-	2,019
Hurricane Sandy Recovery				
Insurance Proceeds/Federal Reimbursement	6,697	6,697	-	6,697
PAYGO	18	18	-	18
Sandy Recovery MTA Bonds	659	182	-	182
Sandy Recovery B&T Bonds	230	23	-	23
Total	31,704	29,511	-	29,511

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Federal Formula, Flexible, Misc
Federal High Speed Rail
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/Asset Sale

	Funding Plan	Receipts			
	<u>Current</u>	Thru Sept	This month	Received to date	
	\$6,704	\$4,989	\$ -	\$4,989	
	\$122	\$122	-	\$122	
	100	-	-	-	
	500	-	-	-	
	19	15	-	15	
	9,064	3,342	230	3,573	
	2,667	790	446	1,235	
	8,484	7,818	-	7,818	
	959	306	-	306	
	2,145	1,572	-	1,572	
	217	38	-	38	
	2,942	1,644	-	1,644	
tal	33,923	20,637	676	21,313	

2020-2024 Program

Capital from Central Business District Tolling
Capial from New Revenue Sources
MTA Bonds and PAYGO
Federal Formula
State of New York
City of New York
Federal New Start (SAS Ph2)
Federal Flexible
B&T Bonds (Self-Funded)

	Funding Plan		Receipts	
	<u>Current</u>	Thru Sept	This month	Received to date
	\$15,000	\$ -	\$	- \$-
	10,000	-	-	-
	9,792	80	-	80
	7,500	1,119	-	1,119
	3,000	-	-	-
	3,000	40	-	40
	2,905	-	-	-
	275	-	-	-
	3,327	1	-	1
Total	54,799	1,240	-	1,240