

Capital Program Oversight Committee Meeting

November 2019

Committee Members

- P. Foye, Chair
- N. Zuckerman, Vice Chair
- A. Albert
- N. Brown
- S. Feinberg
- D. Jones
- L. Lacewell
- R. Linn
- D. Mack
- S. Metzger
- J. Samuelsen
- V. Tessitore

Capital Program Oversight Committee Meeting

2 Broadway, 20th Floor Board Room New York, NY 10004 Tuesday, 11/12/2019 2:30 - 3:30 PM ET

1. PUBLIC COMMENTS PERIOD

2. APPROVAL OF MINUTES OCTOBER 21, 2019

- Minutes from October '19 - Page 3

3. COMMITTEE WORK PLAN

- 2019-2020 CPOC Committee Work Plan - Page 7

4. UPDATE ON MINORITY, WOMEN AND DISADVANTAGED BUSINESS PARTICIPATION

- M/WBE, DBE, and SDVOB Participation on Capital Projects - Page 9

5. ANNUAL UPDATE ON MTA SMALL BUSINESS DEVELOPMENT PROGRAM

- Annual Update on MTA Small Business Development Program - Page 11

6. NYCT CAPITAL PROGRAM UPDATE

- Update on Track and Switch Program - Page 36

7. UPDATE ON OMNY PROGRAM

- Update on OMNY Program Page 51
- IEC Project Review on OMNY Page 63
- IEC OMNY Appendix Page 67

8. CAPITAL PROGRAM STATUS

- Commitments, Completions, and Funding Report - Page 68

9. CPOC CHARTER REVIEW

- CPOC Charter Review - Page 79

MINUTES OF MEETING MTA CAPITAL PROGRAM OVERSIGHT COMMITTEE October 21, 2019 New York, New York 2:30 P.M.

CPOC members present: Hon. Patrick Foye Hon. Andrew Albert Hon, Norman Brown Hon. David Jones Hon. Robert Linn CPOC members not present: Hon. Sarah Feinberg Hon. Linda Lacewell Hon. David Mack Hon. Susan Metzger Hon. John Samuelsen Hon. Vincent Tessitore, Jr. Hon. Neal Zuckerman MTA staff present: Ronnie Hakim Janno Lieber Tom Savio Don Spero LIRR staff present: Jim Allen Debbie Chin Paul Dietlin Philip Eng MNR staff present: John Kennard Cathy Rinaldi Independent Engineering Consultant staff present: Joe DeVito Nabil Ghaly Calvin Gordon Mohammad Mohammadinia Dianne Rinaldi Joe Torres

* * *

Chairman Foye called the October 21, 2019 meeting of the Capital Program Oversight Committee to order at 2:50 P.M.

Public Comments Period

There was one public speaker in the public comments portion of the meeting: Jason Pineiro.

Meeting Minutes

The minutes to the meeting held on September 23, 2019 were approved.

Committee Work Plan

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

LIRR and MNR Positive Train Control (PTC) Update

Ms. Chin provided an update on the Positive Train Control (PTC) initiative, and stated that both LIRR and MNR remain on target to implement PTC across their respective territories by December 31, 2020. With respect to budget, which stands at \$1.086 billion, Ms. Chin reported that due to the two-year extension, budgets for LIRR and MNR increased by \$30.4 million and \$18.8 million, respectively (and by \$6.8 million) for CDOT). In its oral remarks, the IEC stated that the project made good progress on the following fronts: advancing Revenue Service Demonstration on pilot lines and a number of other line segments; reaching agreement with Amtrak regarding the main design approach for interoperability; improving the quality of software development and factory testing; and submitting safety plans for approval to the FRA. The IEC then noted that the project did encounter a number of delays that reduced schedule contingency from 6 months to 3 months for the LIRR, including: software development timeline; transponder design and field testing activities; availability of wayside interface units (WIUs) for Harold; provision by Amtrak of data needed for interoperability testing; and with respect to Metro North, slow progress in developing a plan to integrate the M8 Fleet into PTC operation is impacting project schedule. According to the IEC, there are two main challenges that could have an impact on achieving the December 2020 deadline: for LIRR, there is a risk of additional delays in deployment of software release 3.7, due mainly to the complexity of the functions included in this release, and the likely need for multiple iterations (also, the delay by Amtrak in providing interface data and software needed for interoperability testing, which could delay the release of interoperability software beyond February 2020); with respect to Metro North, integrating the M8 fleet into PTC operation continues to present high risk to the MNR project completion schedule. Finally, the IEC offered its opinion that in view of current project risks and the challenges that need to be addressed, the project has a fair chance of meeting the December 2020 deadline, and that doing so is contingent on the following: the System Integrator deploys software release 3.7 on or close to the current schedule; Amtrak provides data and software required for interoperability within a reasonable time frame; and Metro North resolves issues related to the M8 Fleet integration into PTC operation in a timely manner. Further details of the presentations, and Committee Members' comments and questions with respect thereto are included in the video recording of the meeting maintained in MTA's records.

LIRR M-9 and LIRR/MNR M-9A Update

Mr. Allen updated the Committee on LIRR's M-9 car procurement, and noted that the M-9 Inaugural Run took place on September 11, 2019. He then provided highlights of the Procurement Process and Major Milestone Summary, the Manufacturing and Acceptance Process, and Final Assembly. Mr. Allen then provided an update on the LIRR/MNR M-9A program, including Car Requirements and the Joint Railcar Procurement. In its oral remarks, the IEC stated that based on its review of the schedule, the final acceptance of the M-9 vehicles will be 4 months later than last reported (which is in line with the negotiated schedule extension). With respect to budget, the IEC stated that, based on its budget review, the project is within the project budget of \$734 million, the EAC remains \$723 million, and that the current contingency of \$10.8 million appears adequate -- assuming no further scope changes. The IEC concluded its oral remarks with the following observation: while technical challenges encountered during testing are being addressed, maintaining the current delivery schedule is dependent on the contractor providing the necessary field and technical support throughout the project. Further details of the presentations, and Committee Members' comments and questions with respect thereto are included in the video recording of the meeting maintained in MTA's records.

LIRR Capital Program Update

Mr. Dietlin provided an overview of LIRR's 2019 Capital Program Goals, including Infrastructure Commitment, Start, Completion and Closeout Goals, as well as 2019 year-to-date figures. He then outlined the status of several active construction projects, including the Morris Park Locomotive Shop, Mid-Suffolk Yard, Jamaica Capacity Improvements -- Phases I and II, and the Annual Track Program Cyclical Track Renewal. In its oral remarks on the Morris Park Locomotive Shop, the IEC stated that based on its review of the project schedule (together with routine site visits) that the IEC verifies there is a two-month delay in drop table & turntable manufacturing and delivery. The IEC then concurred with the agency that the power supply tie in, and Con Edison approval of modifications, are risks to the project that may impact system testing and commissioning. Based on its review of the project's total budget and contingency, associated design, work in place and soft costs, the IEC stated that the project is within budget. In its oral remarks on the Mid-Suffolk Yard Project, the IEC stated that based on its review of the project's total budget, contingency and soft costs, that the project is within budget. With respect to schedule, and as also cited by the agency, some activities associated with the AC substation work have been mitigated since last report, but the IEC has determined in its schedule review that the DC substation work continues to be the main contributor to a six-month project delay. The IEC noted the following with respect to project risk: the project's main risks are associated with the DC and the remaining AC substation activities, as well as the new employee service building completion; it is essential that the AC substation commissioning is successful as it could directly impact the employee service building cutover and demolition of the old employee service building that follows. The IEC then concluded its oral remarks on the Mid-Suffolk Yard Project with the following observations: commissioning of all building systems before the current scheduled cutover date of December 2019 could be a challenge; because the employee service building cutover is planned in the cold weather, the project team should perform rigorous opposite-season functional testing of the HVAC system to ensure that nuisance tripping of low temperature devices can be detected early; and the project team has been proactive in performing weekly coordination meetings for the various departments that will reside in the building. In its oral remarks on Jamaica Capacity Improvements – Phase I, the IEC stated that its review of the project schedule verifies that the Platform F contract is on schedule for substantial completion by December 31, 2019, followed by closeout activities. The IEC then noted that the overall project completion is tied to signal procurement, installation, testing and commissioning, which are on schedule for completion by October 2021. The IEC then concluded its oral remarks on the project by citing a cost analysis that was performed on the design, construction, soft cost, and contingency, and that the IEC verifies that the project remains within budget. Further details of the presentations, and Committee Members' comments and questions with respect thereto are included in the video recording of the meeting maintained in MTA's records.

MNR Capital Program Update

Mr. Kennard cited MNR's 2019 Capital Program Goals, and progress against these goals through August 31, 2019. He then provided details on System-wide Track Projects, Customer Service Initiatives, and the Harmon Shop Replacement Design-Build Phase V - Stage I Project. In its oral remarks on the Harmon Shop Replacement project, the IEC stated that since its last report to the committee, the project team has resolved the issues that had delayed occupancy of the Stage 1 shops, and the major work of this stage has been completed. The IEC then confirmed that the project is on track to reach substantial completion by no later than December, as previously forecast. In its review of project budget and commitments, the IEC has determined that the Stage I Design-Build contract contingency has been depleted, but that the Stage I reserve may be sufficient to complete the contract work. The IEC concluded it oral remarks on the Harmon Shop Replacement project by stating that many of the issues that had impacted the design and schedule of Stage I have resulted in improvements to the safety and functionality of the completed shops, and that some of these changes are also expected to improve the efficiency of completing the remaining work of Stage II. Further details of the presentations, and Committee Members' comments and questions with respect thereto are included in the video recording of the meeting maintained in MTA's records.

MTA Capital Program Commitments & Completions and Funding

Ms. Hakim stated that in 2019, the agencies plan to commit a total of \$5.6 billion, including 36 major commitments that are being tracked throughout the year. By year end, the MTA forecasts meeting about

90% of its 2019 commitments goal, with 2 projects to be committed in January 2020, and one each in February and May. With respect to completions, in 2019 the agencies plan to complete a total of \$3.4 billion, including 24 major completions, and by year end, the MTA forecasts meeting all of its 2019 completions goal.

Adjournment

Upon motion duly made and seconded, Chairman Foye adjourned the October 21, 2019 meeting of the MTA Capital Program Oversight Committee at 3:51 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

December

MTACC Capital Program Update

- East Side Access
- Second Avenue Subway
- Penn Station Access
- LIRR Expansion Project
- Times Square Reconstruction, ADA, Shuttle

Quarterly Traffic Light Reports

<u>January</u>

NYCT Capital Program Update

- Signals and Train Control Division
- Systems and Security Division

NYCT Rolling Stock Procurement Program

February

B&T Capital Program Update

- Henry Hudson Bridge Program
- Verrazzano-Narrows Bridge Program
- Throgs Neck Bridge Program
- Harlem River Drive Connector Ramp at the RFK Bridge
- Overall Design-Build Program

Update on Capital Program Security Projects (in Executive Session)

<u>March</u>

NYCT Capital Program Update Quarterly Traffic Light Reports

<u>April</u>

MTACC Capital Program Update

<u>May</u>

LIRR Capital Program Update MNR Capital Program Update LIRR and MNR Update on Positive Train Control (PTC) Update on OMNY Program Update on Minority, Women and Disadvantaged Business Participation

<u>June</u>

NYCT Capital Program Update Quarterly Traffic Light Reports

<u>July</u>

MTACC Capital Program Update

September

NYCT Capital Program Update Quarterly Traffic Light Reports

<u>October</u>

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)

<u>November</u>

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

Metropolitan Transportation Authority Department of Diversity and Civil Rights

M/WBE, DBE, and SDVOB Participation on Capital Projects



MWDBE and SDVOB Participation on MTA Capital Projects with Goals*

Eederal Participation Goal: 10%

(Federal Fiscal Year 2019 (October 2018 to September 2019)

Total Awards: \$465M Total DBE Awards: \$95M (20%) Total Payments: \$803M Total DBE Payments: \$158M (20%)

Total Awards: \$347M Total MBE Awards: \$61M (18%)

New

Total Payments: \$746M Total MBE Payments: \$69M (9%)

New York State WBE Participation Goal: 15% (First and Second Quarter NYS Fiscal Year 2019-2020 (April 2019 to September 2019)

(First and Second Quarter NYS Fiscal Year 2019-2020 (April 2019 to September 2019)

Total Awards: \$347M Total WBE Awards: \$53M (15%)

Total Payments: \$746M Total WBE Payments: \$70M (9%)

Service Disabled Veteran Owned Business Participation C (First and Second Quarter NYS Fiscal Year 2019-2020 (April 2019 to September 2019)

Total Awards: \$223M Total SDVOB Awards: \$9M (4%) Total Payments: \$452M Total SDVOB Payments: \$1.04M (.23%)

*Report Is based on original contract amount provided by MTA agencies for third-party design and construction contracts (excluding rolling stock and signals).

Master Page #

Achieved 18% of the NYS Annual 30% MWBE Goal on state funded capital projects

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

SBDP Program is comprise of free tiers

- Small Business Mentoring Program Tier 1 (SBMP-Tier 1)
- Small Business Mentoring Program Tier 2 (SBMP-Tier 2)
- Small Business Federal Program (SBFP)
- SBDP Program in existence for ten years and has been extended for another ten years
- NY State and Federal funded prime contracts of up to \$3M

 Prequalified firms can participate in each program tier for up to 4 years

Owner Controlled Insurance Program (OCI

Small Business Mentoring Program - Tier 1 Status

- Bond requirements waived
- Participation for up to 4 years
- NY State funded prime contracts up to \$1M
- 436 firms prequalified since program inception
- 182 firms awarded projects since program inception
- 51 of the 182 firms were awarded 2 or more projects

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

SBMP-Tier 1 AwardsProjectsAmountAwarded to 182 Firms272\$165MFinal Completion220\$136MAchieved

Proposed Capital Program

2020 Award Goal is \$26 Million

2020-2024 Award Goal is \$144 Million



Small Business Mentoring Program - Tier 2 Status

- Program in existence for six years
- NY State funded prime contracts from \$1M to \$3M
- Participation for up to 4 years
- Payment and performance bonds required
- 40 SBMP-Tier 1 Graduates are currently active participants in the Tier 2

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

SBMP-Tier 2 AwardsProjectsAmountAwarded to 31 Firms66\$127MFinal Completion37\$68MAchieved\$127M\$68M

Proposed Capital Program

2020 Award Goal is \$20 Million

2020-2024 Award Goal is \$111 Million



Small Business Federal Program Status

- Program in existence for eight years
- Federally funded prime contracts of up to \$3 million
- Participation for up to 4 years
- Payment and performance bonds required
- 19 prequalified firms

59% of the projects were awarded to NYS-certified MWBEs

SBFP Total Awards

	Projects	Amount
Awarded to 30 Firms	57	\$108M
Final Completion Achieved	47	\$87M

Proposed Capital Program

2020 Award Goal is \$20 Million

2020-2024 Award Goal is \$111 Million



Program Year 10 (01/2019 - 12/2019) Progress to Date (09/30/2019)

Strategies to close the gap between Goals & Awards

- Have agencies identify projects in the planning phase.
- Developing projects that fit the capacity and capabilities of the contractor pool
- Recruiting and Maintaining a sufficient pool of qualified contractors

Program Year 10 Awards				
Program	PY 10 Goal	Awarded		
Tier 1	\$31.4M	\$6.5M		
Tier 2	\$34.3M	\$24.0M		
Federal Program	\$15.2M	\$15.6M		
Total	\$80.9M	\$46.1M		

As of October 31, \$46.1 Million Awarded and \$39.8 Million in Bidding



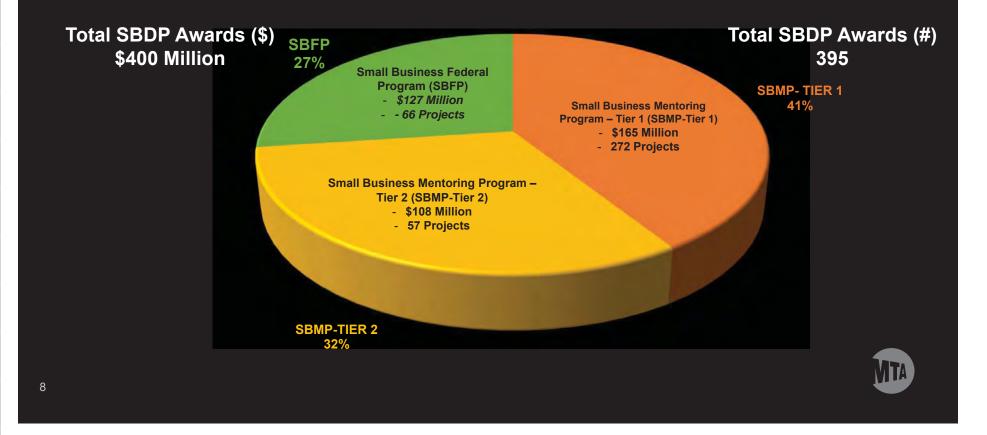
Typical SBDP Projects

Aodular Buildings

Stair replacements and station improvements

- --- Mechanical and electrical upgrades
- -Flood mitigation Installation of ous chassis week lift equipment
 - Bridge preservation project
 - Asphalt & concrete paving, site work and landscaping
 - Roofing
- Demolition

SBDP Contract Awards from the Inception



Tier 1 – Bridges & Tunnels Replacement of Garage Floor Protective Coating at the Throgs-Neck Bridge Service Building

Logan Stone Inc.

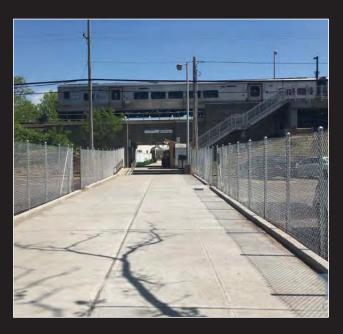




Tier 1 – Long Island Rail Road Pedestrian Walkway / Curb / Chain Link Fence – Locust Manor Station

DAFV Landscaping Corp.





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Master Page # 20 of 82 - Capital Program Oversight Committee Meeting 11/12/2019

Tier 2 – Metro North Railroad Roadway Improvement of Access Road at Brewster Yard

PSP Construction, Inc. (MBE, DBE)







Tier 2 – MTA Bus Company Window Replacement at LaGuardia Bus Depot

Litehouse Builders, Inc.





MTA



Tier 1 – MTA Capital Construction MTA PD New Modular Facility at the Harriman Station

Avenue Contracting Inc. (MBE)

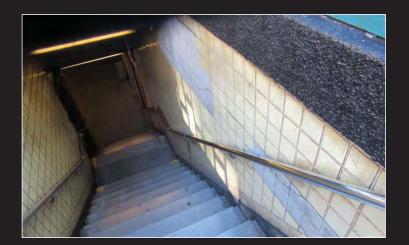


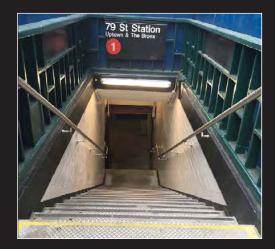


ΛTA

Tier 1 – New York City Transit Stair Rehabilitation @ 79 Street Broadway/7th Avenue Line in the Borough of Manhattan

10 November LLC(MBE)







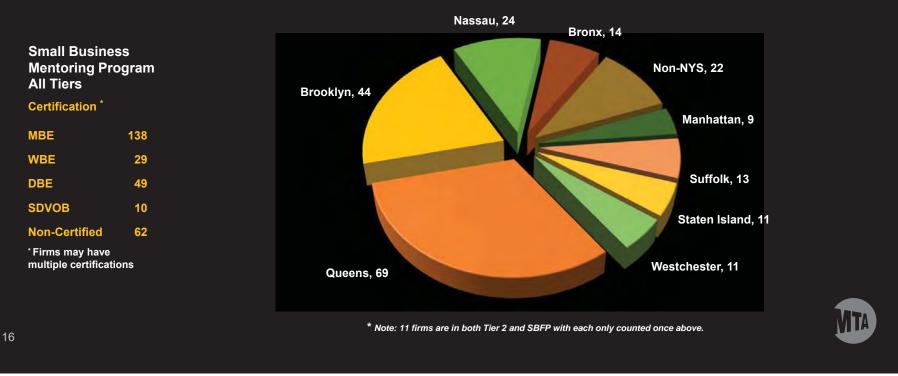
Business Development





SBDP Firms Distribution by Location

217* Prequalified Firms (as of September 30, 2019)



SBDP Loan Program

Year 1	1 Loan	totaling	\$ 100,000
Year 2	5 Loans	totaling	\$ 687,500
Year 3	9 Loans	totaling	\$ 900,000
Year 4	27 Loans	totaling	\$2,990,000
Year 5	16 Loans	totaling	\$3,020,000
Year 6	14 Loans	totaling	\$2,142,500
Year 7	18 Loans	totaling	\$2,770,500
Year 8	13 Loans	totaling	\$2,155,000
Year 9	8 Loans	totaling	\$ 697,000
Year 10	9 Loans	totaling	\$1,378,000
Total	120 Loans	Totals	\$16.840.500

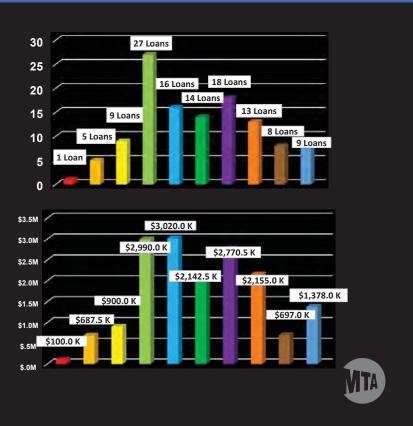
Maximum Loan Available

Tier 1 - up to \$150,000

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

Loan values shown are through September 30, 2019

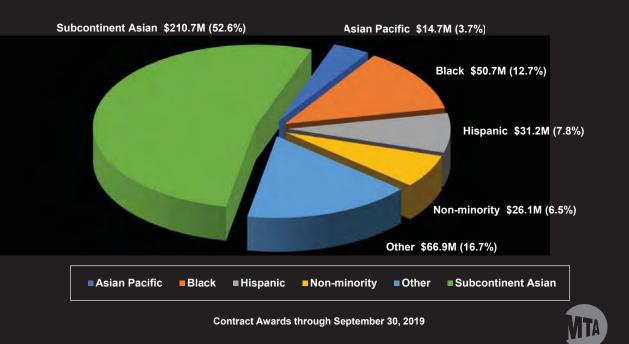
Note: On January 1, 2019 the SBDP began reporting on a Calendar year instead of a Fiscal year. **Year 9** now represents activity from August 1st 2018 to December 31st, 2018 **Year 10** represents calendar year 2019.



SBDP Firms Distribution by Location

Total SBDP Contract Awards by Ethnic Categories

Total SBDP Awards	\$400.3M Dollars)	
Asian Pacific	\$ 14.7M	
Hispanic	\$ 31.2M	
Black	\$ 50.7M	
Non-Minority/Other	\$ 93.0M	
Subcontinent Asian	\$210.7M	
Category	Awards	



Emerging Contractors Program

Prequalified Emerging Contractors

	Prequalified	Transitioned	Projects	Amount
Black American	24	6	3	\$1.57M
Subcontinent Asian American	16	7	3	\$1.51M
Hispanic American	10	6	4	\$1.56M
Asian Pacific American	2	0	0	\$0.00M
Other	12	3	1	\$0.29M
Totals for SBMP-Tier 1 Emerging Contractors	64	22	11	\$4.93M



SH5 Construction Corporation

Mentor contractor since 2010

- \$11.8M in MTA SBDP prime contract awards
- 7 SBDP contract awards



ИТА







Riggs Construction Co., Inc.

Mentor contractor since 2010

- \$5.2M in MTA SBDP prime contract awards
- 6 SBDP contract awards











Monpat Construction, Inc.

Mentor contractor since 2013

- \$6.3M in MTA SBDP prime contract awards
- 3 SBDP contract awards









ИТА

SBDP Training Program

As of FALL 2019, 490 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



Thanks to All MTA Agency Personnel and Our External Partners Who Worked Hard to Continue the Success of the

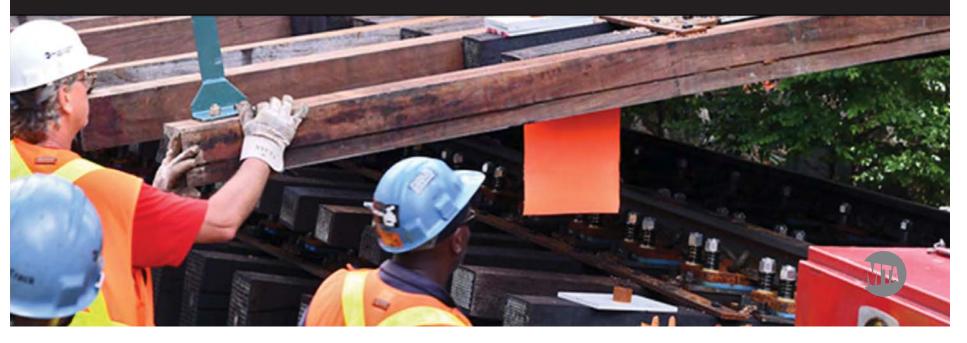
SBMP and SBFP!





NYCT Track & Switch Capital Program

Marva Brown Vice President & Chief Officer Subways – Capital Programs



Investments in Track Improved Service Reliability and Performance

Only one major subway incident related to Track in September 2019

- Major incidents attributed to track are down by more than half to 7.6, from a monthly average of 16.5 during the six months prior to the Subway Action Plan (January-June 2017).
- Delays related to Track conditions are down approximately 40% compared to 2018 Q3.

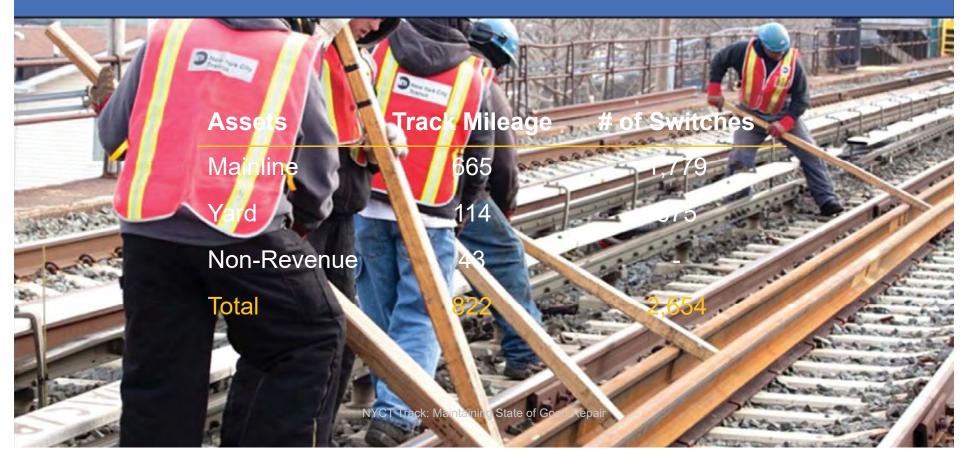
Investments in Track Improved Service Reliability and Performance

58% Track major incidents are down 58% since September 2016

- Total major incidents decreased 24% collectively in this period.
- Track incidents decreased by more than twice the rate of major incidents.



NYCT Track and Switch Inventory



Track & Switch Installation History

1984 – 2019

 423 miles of mainline track miles reconstructed

*State of Good Repair Achieved in 1991

• 1,328 mainline switches replaced *State of Good Repair Achieved in 1997

2004 - 2019

• 52 miles of Continuous Welded Rail (CWR) were installed under the CWR Initiative Program

*To date, the vast majority of weldable rail has been installed

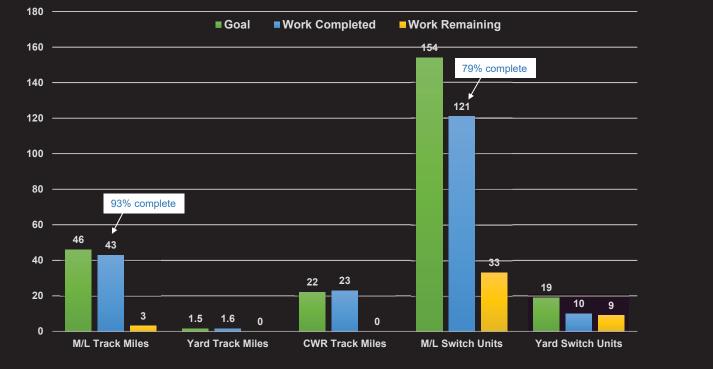
NYCT Track: Maintaining State of Good Repair





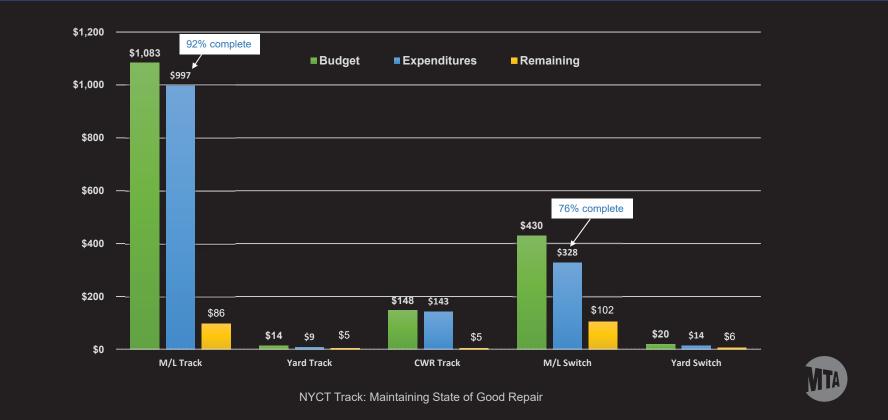


2015-2019 Capital Track & Switch Program – on track to meet production goals

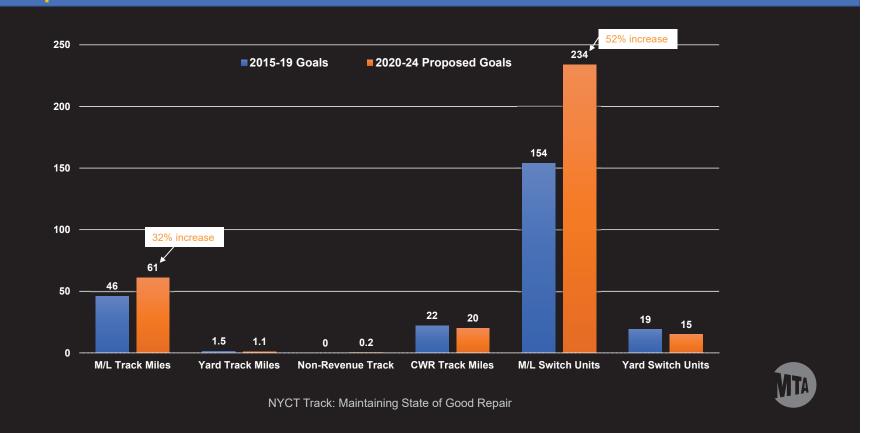


NYCT Track: Maintaining State of Good Repair

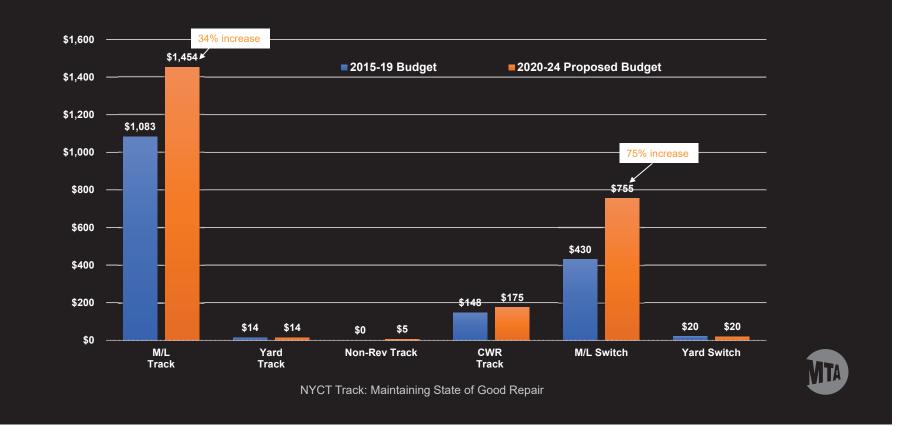
2015-2019 Capital Track & Switch – on track to achieve budgeted goals



2015-2019 vs 2020-2024 Capital Track & Switch Program – production

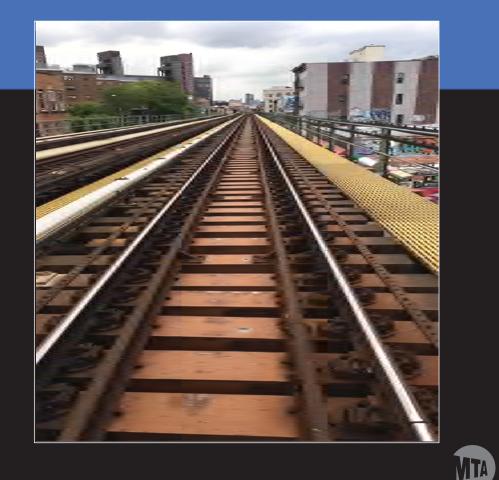


2015-2019 vs 2020-2024 Capital Track & Switch – investments



Elevated Panels

Jamaica Line Track J-2, between Myrtle and Flushing Avenues



NYCT Track: Maintaining State of Good Repair

Low Vibration Track

Brighton Line Ocean Parkway



MTA

NYCT Track: Maintaining State of Good Repair



Scheduled Component Replacement Program



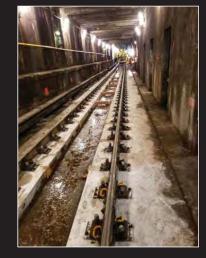


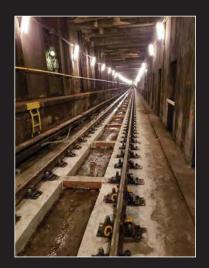
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Jamaica, Van Wyck Plate Renewals

NYCT Track: Maintaining State of Good Repair

Ekki Hilti and Plates Renewal







4 A

N/O Fordham Road Track C-2

NYCT Track: Maintaining State of Good Repair

Program Risks and Mitigations

Risks

- Site conditions
- Manpower
- Coordinating General Orders

Mitigations

- Independent Surveys
- Ability to deploy work forces to other locations
- Ability to change locations based on track access availability
- Piggybacking onto other projects

NYCT Track: Maintaining State of Good Repair

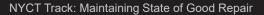
Improved Methods for Doing this Work

Continued Use of Mechanized Equipment

- Rail TRT (Trac Rail Transposer) Machine "Critter"
- Tie Remover / Inserter
- Robotic Hammering Machine
- Mini-meter SpikeFast Delivery System

New Strategies/Technologies

- Purchasing our own Flash-Butt Welder
- Purchasing a new Track Geometry Car





Flash-Butt Welder



Rail TRT Machine (Critter)



OMNY MTA's New Fare Payment System

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



Today's Presentation

Update to the May 2019 Capital Program Oversight Committee Briefing

- Recap of the OMNY design-build project
- Program status
- Six-month look-ahead
- Risks
- Solutions



OMNY System Timeline – Phased Approach

Customers begin using contactless open payment media Contactless open payment available on all buses and subways





Building a New Customer Experience

Roll out strategy supports a superior unified customer experience

New features are deployed to promote system usage

Key strategy elements – Business

- Open Payments first
- Digital experience, virtual over physical card
- Self-service website & App & Retail Network
- Sales in stations & onboard for RRs





Building a New Customer Experience

Key strategy elements – Customers

- Intuitive, easy to use features
- Simple, secure, convenient
- Communications, communications, communications
- Employee training, feedback, continual refresh of training







Program Status – Buses

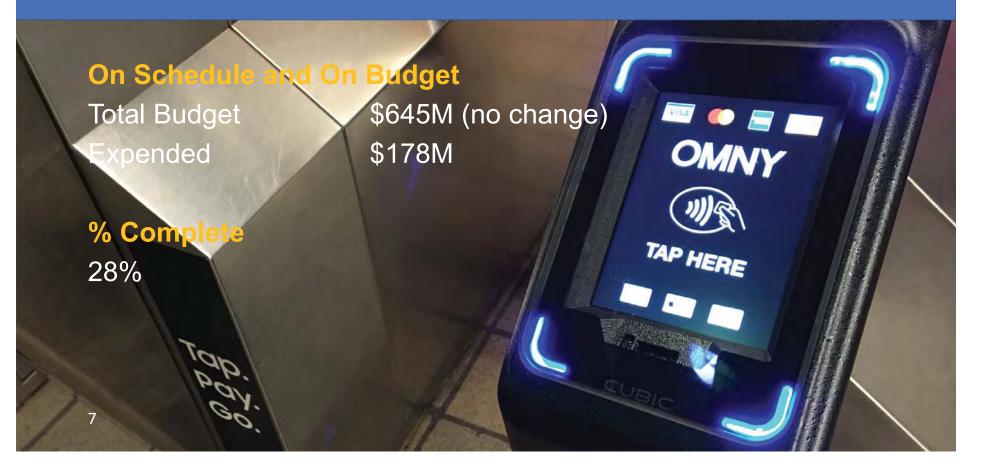
On Schedule

- Staten Island completed May 2019
- Expansion resumes 1Q2020 with Manhattan bus routes
- Routes in The Bronx, Queens and Brooklyn to follow





Program Status – Budget



Program Status – Public Pilot

Over 3 million

Taps to date

- Including acceptance of cards issued in 109 countries outside the US out of a possible 168
- First million taps made in 10 weeks
- · Second million taps made in 7 weeks
- Third million taps made in 6 weeks.
- Phase 1 Public Pilot nearly complete

460,000

Unique payment methods to date with over 2000 new methods seen daily

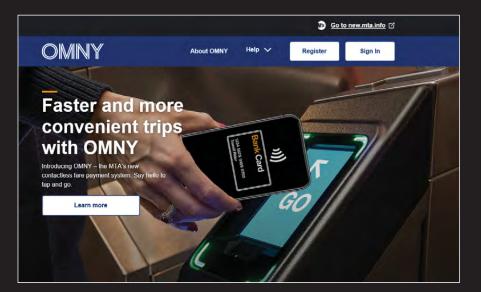
80%

Digital wallet has steady 80% market share vs. physical card



Program Status – Other Project Elements

- OMNY.info website updated and improved
- Focus on increased employee awareness, engagement and training in support of OMNY expansion
- Every OMNY element has now entered design review process
- Finalized negotiations for All-Door Boarding and Paratransit change orders





Six-Month Look-Ahead

- Introduce OMNY at more stations and bus routes
- Continue Subway LAN
 infrastructure construction
- Conduct SBS Pilot track boarding times and OVD test
- Introduce new OMNY self-service features
 - Account management, trip planning, service alerts and transit tracker
- Continuing design review process for remaining elements of OMNY system





Risks

- Software/hardware anomalies
- Technology dependencies on third parties
 - Mobile app
 - Virtual card
- Integration of non-MTA Agencies

Customer-related

- Customer communications and messaging
- Achieve a uniform customer experience

Solutions

- Continued testing and monitoring
- Ad hoc testing
- Overcommunicate





November 2019 CPOC IEC Project Review

OMNY (One Metro New York)

Master Page # 63 of 82 - Capital Program Oversight Committee Meeting 11/12/2019

Budget and Schedule Review

Budget

- Project remains on budget. The IEC's analysis of expenditures to date indicates that project is running at expected burn rate.
- All-Door Boarding (ADB) and Paratransit change orders are expected to be awarded within budget in November 2019.

Schedule

Project remains on track for each phase through to substantial completion.

Risk Review

- ADB change order could delay Phase 2 completion by two months. Approximately 12,000 validators are to be produced, installed and tested for ADB, instead of approximately 6,000 units originally planned for buses.
- Integration of affiliate agencies may impact decommissioning of MetroCard equipment, until all affiliate agencies are OMNY ready.

Observations and Recommendations

Observations

- OMNY provides the opportunity to harmonize fare policies across all agencies, in line with MTA's objectives.
- Project continues to benefit from well coordinated effort, led by MTA Fare Payment Program office, in meeting stakeholder requirements and key schedule dates.

Recommendations

- Implement dual control process and well established procedures for performing critical operations.
- Develop the strategy for a consolidated approach to integration of affiliate agencies into OMNY system.



Recommendation Log

OMNY – IEC Recommendations / Observations Log

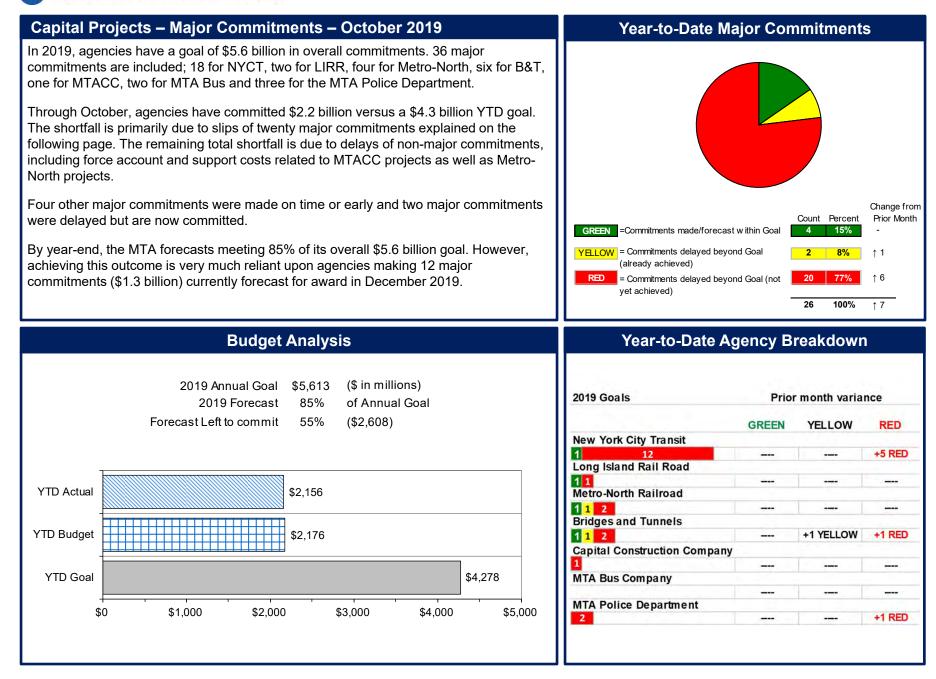
Recommendation	Agency Response/ Action	Status
Governance agreement should be finalized to formalize the way of working between MTA agencies.	We are currently working through this process with our stakeholders. The stakeholders also are directly involved with the day-to-day design/build process. Therefore the Governance MOU is not a high risk item.	Open

OMNY - Appendix

MTA Capital Program Commitments & Completions

through October 31, 2019





roject	Commitment	Goal	Forecast	Project	Commitment	Goal	Forecas
0 All-Agency Red Commit	ments (7 New Items)			Signals & Communications			
YCT				8th Ave CBTC and Interlockings	Construction Award	Jun- 19	Jan-20
assenger Stations						\$513.7	\$523.2
Replace 11 Hydraulic Elevators /	Construction Award	Jun- 19	Feb-20	Construction award delayed due to ch	ange in procurement strate	gy. Project cos	tincreased
Various		\$46.4	\$66.9	based on final engineer drawings.			
Construction award has been delay				UHF T-Band Radio System	Construction Award	Sep- 19	Jan-20
increased due to additional scope i			ine rooms and a	Replacement		\$61.2	\$62.2
new secondary machine room and	an increased construction du	ation.		Construction award delayed due to ch	ange in procurement strate	gy resulting in t	wo separate
Replace 8 Traction Elevators /	Construction Award	May- 19	May-20	procurements. Project cost reflects la	test estimate.		
Various		\$57.9	\$67.4	Life Cycle Replacement of	Construction Award	Oct- 19	Nov- 19
Construction award delayed due to	change in procurement strate	gy. Project cos	t increased due	Code Systems - Phase 1 (New		\$31.5	\$48.2
to additional scope including expar	ision of existing elevator mach	ine rooms and	a new secondary	ltem)			
machine room and an increased co	nstruction duration.			Award delayed due to change in proc	urement strategy. Project c	ost increased d	ue to additio
ADA Enhancements: 170 St / JER	Construction Award	May- 19	May-20	scope including brackets to support F			
		\$57.9	\$67.4	Myrtle line.			
Construction award delayed due to	extended RFP process Proje						
additional structural repair work.		0100311101043		Power			
ADA: Livonia Avenue /	Construction Award	Oct-19	Feb-20	Central Substation Renewal	Construction Award	Oct- 19	Nov- 19
Canarsie (New Item)	Construction Award	\$64.8	\$76.2	Including New Rectifier / 6AV	oonon ao non / mara	\$44.2	\$37.2
		Φ04.0	Φ70.Z	(New Item)		ψηη.2	ψ01.2
Drain at dalayed nanding NVC annu							
			ed ADA		aral hid extensions requeste	d by bidders B	ids were
			ed ADA	Project Schedule delayed due to seve		d by bidders. B	ids were
Enhancement stations. Project cos ne Structures	ts increased to reflect latest es	stimate.		Project Schedule delayed due to seve received 10/15. Project cost decrease		d by bidders. B	ids were
Project delayed pending NYC appr Enhancement stations. Project cos ine Structures Overcoating: 17 Bridges & Event 40 Struct Elyapor / Dura	ts increased to reflect latest er	Oct- 19	Apr-20	Project Schedule delayed due to seve received 10/15. Project cost decrease Shops & Yards	d to reflect favorable bids.	-	
Enhancement stations. Project cos ne Structures Overcoating: 17 Bridges & East 180 Street Flyover / Dyre	ts increased to reflect latest er	stimate.		Project Schedule delayed due to seve received 10/15. Project cost decrease Shops & Yards Sandy Mitigation: Sewer		Jul- 19	Dec- 19
Enhancement stations. Project cos ne Structures Overcoating: 17 Bridges & East 180 Street Flyover / Dyre Av (New Item)	ts increased to reflect latest es	Oct- 19 \$36.5	Apr-20 \$62.1	Project Schedule delayed due to seve received 10/15. Project cost decrease Shops & Yards Sandy Mitigation: Sewer Improvements at 207th Street	d to reflect favorable bids. Construction Award	Jul- 19 \$19.3	Dec-19 \$130.5
Enhancement stations. Project cos ne Structures Overcoating: 17 Bridges & East 180 Street Flyover / Dyre Av (New Item) Project award postponed to accom	ts increased to reflect latest ex Construction Award modate the re-packaging to d	Oct- 19 \$36.5 esign-build pro	Apr-20 \$62.1 ocurement.	Project Schedule delayed due to seve received 10/15. Project cost decrease Shops & Yards Sandy Mitigation: Sewer Improvements at 207th Street Construction advertisement delayed of	d to reflect favorable bids. Construction Award lue to issues with NYC DOT	Jul- 19 \$19.3 and the DSNY v	Dec- ۱۹ \$130.5 vhich were
Enhancement stations. Project cos ine Structures Overcoating: 17 Bridges & East 180 Street Flyover / Dyre Av (New Item) Project award postponed to accom Project cost increased due to exter	ts increased to reflect latest ex Construction Award modate the re-packaging to d	Oct- 19 \$36.5 esign-build pro o 24 months, au	Apr-20 \$62.1 ocurement. dditional scope	Project Schedule delayed due to seve received 10/15. Project cost decrease Shops & Yards Sandy Mitigation: Sewer Improvements at 207th Street Construction advertisement delayed of resolved in June. Project cost increase	d to reflect favorable bids. Construction Award lue to issues with NYC DOT ed due to the addition of Sig	Jul- 19 \$ 19.3 and the DSNY v gnal and Track ro	Dec-19 \$130.5 vhich were estoration w
Enhancement stations. Project cos ine Structures Overcoating: 17 Bridges & East 180 Street Flyover / Dyre Av (New Item) Project award postponed to accom	ts increased to reflect latest ex Construction Award modate the re-packaging to d	Oct- 19 \$36.5 esign-build pro o 24 months, au	Apr-20 \$62.1 ocurement. dditional scope	Project Schedule delayed due to seve received 10/15. Project cost decrease Shops & Yards Sandy Mitigation: Sewer Improvements at 207th Street Construction advertisement delayed of	d to reflect favorable bids. Construction Award lue to issues with NYC DOT ed due to the addition of Sig	Jul- 19 \$ 19.3 and the DSNY v gnal and Track ro	Dec-19 \$130.5 vhich were estoration we
Enhancement stations. Project cos ne Structures Overcoating: 17 Bridges & East 180 Street Flyover / Dyre Av (New Item) Project award postponed to accom Project cost increased due to exter including increased quantities of st condition.	ts increased to reflect latest ex Construction Award modate the re-packaging to d	Oct- 19 \$36.5 esign-build pro o 24 months, au	Apr-20 \$62.1 ocurement. dditional scope	Project Schedule delayed due to seve received 10/15. Project cost decrease Shops & Yards Sandy Mitigation: Sewer Improvements at 207th Street Construction advertisement delayed of resolved in June. Project cost increase and relocation of existing utility and elay	d to reflect favorable bids. Construction Award lue to issues with NYC DOT ed due to the addition of Sig	Jul- 19 \$ 19.3 and the DSNY v gnal and Track ro	Dec-19 \$130.5 vhich were estoration we
Enhancement stations. Project cos ne Structures Overcoating: 17 Bridges & East 180 Street Flyover / Dyre Av (New Item) Project award postponed to accom Project cost increased due to exter including increased quantities of st condition. Line Structure Repairs &	ts increased to reflect latest ex Construction Award modate the re-packaging to d	Oct- 19 \$36.5 esign-build pro o 24 months, au	Apr-20 \$62.1 ocurement. dditional scope	Project Schedule delayed due to severe ceeived 10/15. Project cost decrease Shops & Yards Sandy Mitigation: Sewer Improvements at 207th Street Construction advertisement delayed of resolved in June. Project cost increase and relocation of existing utility and elevert extended daily work shift.	d to reflect favorable bids. Construction Award lue to issues with NYC DOT ed due to the addition of Sig ectrical ducts, extended con	Jul- 19 \$ 19.3 and the DSNY v gnal and Track n nstruction durat	Dec- 19 \$ 130.5 vhich were estoration we ion, and
Enhancement stations. Project cos ne Structures Overcoating: 17 Bridges & East 180 Street Flyover / Dyre Av (New Item) Project award postponed to accom Project cost increased due to exter including increased quantities of st condition. Line Structure Repairs & Vents between Stations -	ts increased to reflect latest ex Construction Award modate the re-packaging to d nded project duration from 20 t teel repair, fiberglass walkway,	Oct- 19 \$36.5 esign-build pro o 24 months, ar and adjustmen	Apr-20 \$62.1 ocurement. dditional scope t for market	Project Schedule delayed due to seve received 10/15. Project cost decrease Shops & Yards Sandy Mitigation: Sewer Improvements at 207th Street Construction advertisement delayed of resolved in June. Project cost increas and relocation of existing utility and ele extended daily work shift.	d to reflect favorable bids. Construction Award lue to issues with NYC DOT ed due to the addition of Sig	Jul- 19 \$ 19.3 and the DSNY v gnal and Track ro	Dec-19 \$130.5 vhich were estoration wo
Enhancement stations. Project cos ne Structures Overcoating: 17 Bridges & East 180 Street Flyover / Dyre Av (New Item) Project award postponed to accom Project cost increased due to exter including increased quantities of st condition. Line Structure Repairs &	ts increased to reflect latest ex Construction Award modate the re-packaging to d nded project duration from 20 t teel repair, fiberglass walkway,	Oct- 19 \$36.5 esign-build pro o 24 months, ar and adjustmen Oct- 19	Apr-20 \$62.1 dditional scope t for market Jul-20	Project Schedule delayed due to severe ceeived 10/15. Project cost decrease Shops & Yards Sandy Mitigation: Sewer Improvements at 207th Street Construction advertisement delayed of resolved in June. Project cost increase and relocation of existing utility and elevert extended daily work shift.	d to reflect favorable bids. Construction Award lue to issues with NYC DOT ed due to the addition of Sig ectrical ducts, extended con	Jul- 19 \$ 19.3 and the DSNY v gnal and Track n nstruction durat	Dec- 19 \$ 130.5 vhich were estoration w ion, and

MTA Metropolitan Transportation Authority

Capital Projects – Major Commitments – October 2019 – Schedule Variances Project Commitment Goal Forecast MTACC East Side Access Electric Traction Catenary Work -Construction Award Aug- 19 Jan-20 Harold Systems \$29.8 \$29.8 Construction award delayed due to an extension to permit more time for prospective proposers to assemble qualified teams for bidding and the incorporation of contract modification to include additional scope. B&T Henry Hudson Bridge Structural Rehabilitation & Construction Award Aug- 19 Dec-19 Replacement of HHB Overcoat \$40.0 \$46.8 System Construction award delayed due to change in procurement strategy. Contract award is now forecast for December 2019. Throgs Neck Bridge Approach Viaduct Seismic Construction Award Oct- 19 Dec-19 Retrofit/Structural Rehab (New \$180.0 \$165.5 Item) As a result of the MTA-wide Cost Containment Initiative, project delivery methods were reevaluated and modified. This resulted in additional procurement time and reduced project budget, which are reflected in the revised award schedule. Forecast award value reflects an apparent good bid. MTA Police Department MTAPD Radio Project Phase 3 - MRRS Construction Award Sep- 19 Dec-19 System \$6.8 \$6.5 The construction award delayed due to the need to coordinate work with a separate Penn Station renovation project. MTAPD is exploring the possibility of coordinating the radio system work with the renovation project's 2nd phase. Public Safety Radio - Penn Construction Award Oct- 19 Dec-19

The delay is due to ongoing discussions with Amtrak to coordinate access to communications rooms and antenna systems in Penn Station.

\$16.8

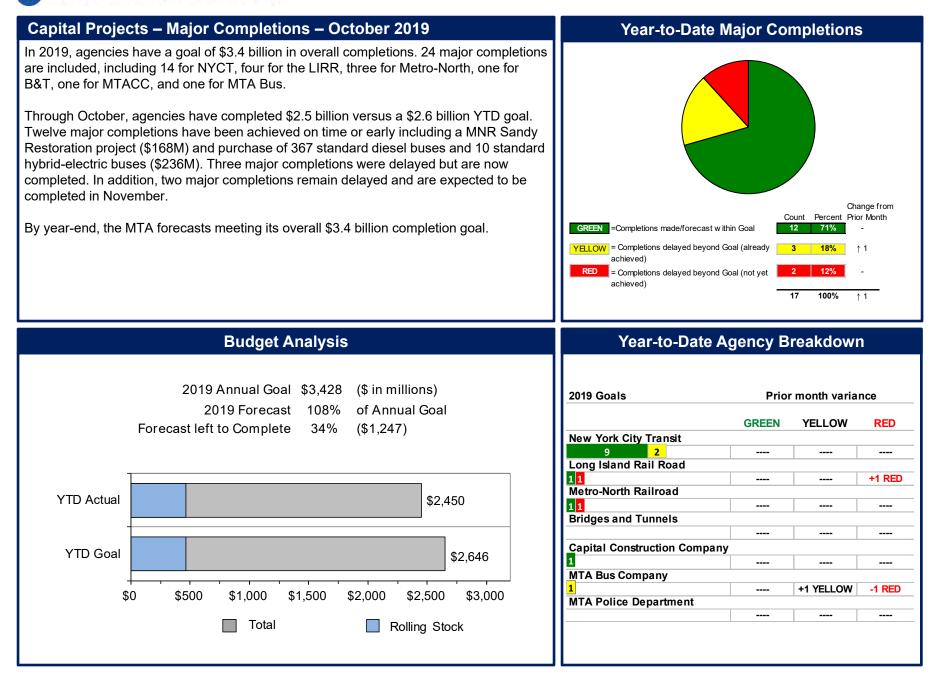
\$16.8

Station (New Item)

MTA Metropolitan Transportation Authority

Capital Projects – Major	Commitments -	- October	2019 – S	Schedule Variances	Actual Results Sha
roject	Commitment	Goal	Actual		
2 All-Agency Yellow Commitr	nents (1 New Item)				
NR					
Structures					
Overhead Bridge Program East of Hudson	Construction Award	Feb- 19	Mar- 19 (A)		
		\$23.4	\$25.6		
Award was delayed to March due to re- protracted approval process.	visions made to the notice of	of award which	resulted in a		
				_	
Bridges & Tunnels					
Bronx-Whitestone Bridge					
Tower and Pier Fender	Construction Award	Sep- 19	Oct- 19 (A))	
Protection & Install of Fire		\$40.5	\$18.6		
Standpipe Connections (New Item)					
Construction award delayed due to ch	ange in procurement strate	gy. Contract av	varded in		
October 2019.	angempresarenerate	g). contactat			
October 2019.					

Metropolitan Transportation Authority





Project	Completion	Goal	Forecast
2 All-Agency Red Comple	tions (1 New Item)	
MNR			
Stations			
Grand Central Terminal Utilities	Construction	Apr-19	Nov-19
		\$44.7	\$51.0
Field conditions required the modifi		troller cabinet.	The current
Field conditions required the modifi forecast for project completion has		troller cabinet.	The current
•		troller cabinet.	The current
forecast for project completion has		troller cabinet.	The current
forecast for project completion has		troller cabinet.	The current

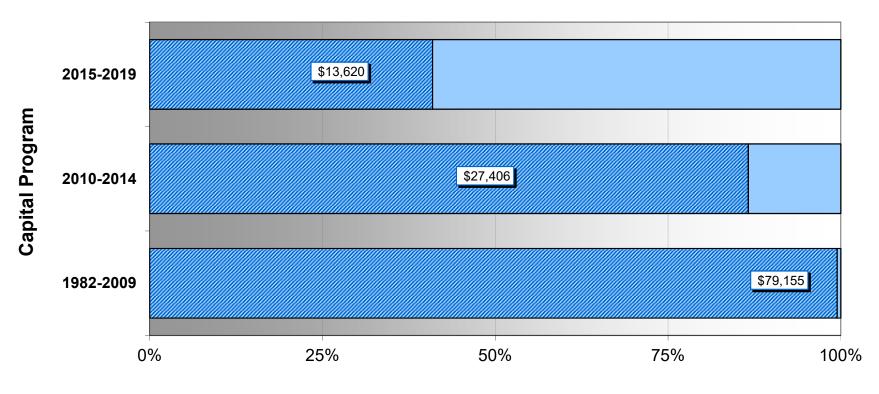


Capital Projects – Majo	or Completions -	- Octobe	r 2019 –	Schedule Variances	Actual Results Shaded
Project	Completion	Goal	Actual		
3 All-Agency Yellow Comple	tions (1 New Item)				
Bus Purchase					
Purchase 251 Standard Diesel	Bus Purchase	Jul-19	Aug-19 (A	x)	
Buses		\$161.0	\$160.1		
There w as an initial tw o month dela Later, delays during fleet productio delivered.					
Passenger Stations					
Station Component: 4 Stations /	Construction	Feb-19	Aug-19 (A	x)	
Jamaica		\$87.0	\$104.7		
deterioration. MTA Bus Company Facilities Security: JFK & Spring Creek	Construction	Aug-19	Sep-19 (A		
(New Item) Delayed due to an additional w ork o	order to replace a dow pe	\$8.5 d pole at JEK	\$8.5 depot		
	order to replace a downe		depot.		

Status of MTA Capital Program Funding



Capital Funding (October 2019) \$ in millions



☑ Received □ Remainder

Capital Funding Detail (October 31, 2019)

	\$ in millions			
	Funding Plan	Receipts		
	<u>Current</u>	<u>September</u>	<u>This month</u>	Received to date
1992-1999 Program	18,095	18,095	-	18,095
2000-2004 Program	21,668	21,668	-	21,668
2005-2009 Program	24,409	24,002	-	24,002

	Funding Plan		Receipts	
2010-2014 Program	<u>Current</u>	<u>September</u>	<u>This month</u>	Received to date
Federal Formula, Flexible, Misc	\$5,853	\$5,839	\$ -	\$5,839
Federal High Speed Rail	295	295	-	295
Federal New Start	1,257	1,257	-	1,257
Federal Security	189	101	-	101
Federal RRIF Loan	-	-	-	-
City Capital Funds	719	608	-	608
State Assistance	770	400	370	770
MTA Bus Federal and City Match	132	112	-	112
MTA Bonds (Payroll Mobility Tax)	11,483	9,606	-	9,606
Other (Including Operating to Capital)	1,365	1,239	-	1,239
B&T Bonds	2,026	1,812	-	1,812
Hurricane Sandy Recovery				
Insurance Proceeds/Federal Reimbursement	6,329	5,613	-	5,613
PAYGO	235	81	-	81
Sandy Recovery MTA Bonds	758	55	-	55
Sandy Recovery B&T Bonds	230	18	-	18
Total	31,640	27,036	370	27,406

	Funding Plan		Receipts	
2015-2019 Program	<u>Current</u>	<u>September</u>	<u>This month</u>	Received to date
Federal Formula, Flexible, Misc	\$6,704	\$4,456	\$ -	\$4,456
Federal Core Capacity	100	-	-	-
Federal New Start	500	-	-	-
Federal Security	3	3	-	3
State Assistance	8,640	979	-	979
City Capital Funds	2,667	790	-	790
MTA Bonds	7,968	4,793	-	4,793
Asset Sales/Leases	1,017	318	-	318
Pay-as-you-go (PAYGO)	2,145	1,730	-	1,730
Other	592	-	-	-
B&T Bonds & PAYGO	2,936	553	-	553
Tota	33,273	13,620	-	13,620



THE METROPOLITAN TRANSPORTATION AUTHORITY

CAPITAL PROGRAM OVERSIGHT COMMITTEE

This Charter for the Capital Program Oversight Committee was adopted by the Board Chair and a majority of the members of Board of the Metropolitan Transportation Authority, a public benefit corporation established under the laws of the State of New York (together with any other entity or corporation for which the members of the Metropolitan Transportation Authority serve as a board of directors, the "MTA"), as amended on March 21, 2018.

I. PURPOSE

The Capital Program Oversight Committee (the "Committee") shall assist the Board Chair and the Board in fulfilling their responsibility to monitor the effective and efficient implementation of the MTA's five-year capital program.

II. COMMITTEE AUTHORITY

In discharging its role, the Committee is empowered to investigate any matter brought to its attention. To facilitate any such investigation, the chairperson and/or vice-chairperson of the Committee shall have access to all books, records, facilities and staff of the MTA (including any of its subsidiary corporations or affiliates). The foregoing is not intended to alter or curtail existing rights of individual Board members to access books, records or staff in connection with the performance of their fiduciary duties as Board members.

III. COMMITTEE MEMBERSHIP

The Committee shall consist of 6 or more members of the Board, and shall include the Board Chair; the Chair of the Committee on Operations of the New York City Transit Authority, the Manhattan and Bronx Surface Transit Operating Authority and the Staten Island Rapid Transit Operating Authority and the MTA Bus Company; the Chair of the Committee on Operations of the Triborough Bridge and Tunnel Authority; the Chair of the Committee on Operations of the MetroNorth Commuter Railroad; and the Chair of the Committee on Operations of the Long Island Rail Road and Metropolitan Suburban Bus Authority. All other members of the Committee, each Vice-Chair of the Board Chair. If not otherwise a member of the Committee. The Board Chair shall serve as the chairperson of the Committee and shall appoint the vice-chairperson of the Committee. In the absence of the chairperson and vice-chairperson at a meeting of the Committee, the Board Chair shall appoint a temporary chairperson to chair such meeting. A member of the Committee may be removed, for cause or without cause, by the Board Chair.

IV. COMMITTEE MEETINGS

The Committee shall meet on a regularly-scheduled basis at least 11 times per year, and more frequently as circumstances dictate. The Committee shall cause to be kept adequate minutes of all its proceedings and records of any action taken. Committee members will be furnished with copies of the minutes of each meeting. Meetings of the Committee shall be open to the public, and the Committee shall be governed by the rules regarding public meetings set forth in the applicable provisions of the Public Authorities Law and Article 7 of the Public Officers Law that relate to public notice, public speaking and the conduct of executive session. The Committee may form and assign responsibilities to subcommittees when appropriate.

The Committee may request that any member of the Board, the Auditor General, any officer or staff of the MTA, or any other person whose advice and counsel are sought by the Committee, attend any meeting of the Committee to provide such pertinent information as the Committee requests. The Director of the Office of Construction Oversight and the Deputy Chief Financial Officer, and/or his or her designee, shall (1) furnish the Committee with all material information pertinent to matters appearing on the Committee agenda, (2) provide the chairperson of the Committee with all information regarding the MTA's five year capital program that is material to the Committee's monitoring and oversight of the MTA's five year capital program, and (3) inform the chairperson of the Committee of any matters not already on the Committee agenda that should be added to the agenda in order for the Committee to be adequately monitoring and overseeing the MTA's five year capital program. The Director of Security and/or his or her designee shall (1) furnish the Committee with all material information pertinent to matters appearing on the Committee agenda relating to MTA security projects and MTA-wide security issues, (2) provide the chairperson of the Committee with all information regarding MTA security projects that is material to the Committee's monitoring and oversight of security projects contained in the MTA's five year capital program, and (3) inform the chairperson of the Committee of any matters not already on the Committee agenda that should be added to the agenda in order for the Committee to be adequately monitoring and overseeing security projects contained in MTA's five year capital program.

V. COMMITTEE REPORTS

The chairperson of the Committee shall report on the Committee's proceedings, and any recommendations made.

VI. KEY RESPONSIBILITIES

The following responsibilities are set forth as a guide with the understanding that the Committee may diverge as appropriate given the circumstances. The Committee is authorized to carry out these and such other responsibilities assigned by the Board Chair or the Board from time to time, and take any actions reasonably related to the mandate of this Charter.

To fulfill its purpose, the Committee shall, with respect to any approved or proposed capital program plans:

- 1. monitor the current and future availability of funds to be utilized for such capital improvement programs and plans;
- 2. monitor the contracts awards of the MTA to insure that such awards are consistent with:
 - a. provisions of law authorizing United States content and New York State content;
 - b. any collective bargaining agreements;
 - c. provisions of law providing for participation by minority and women-owned businesses;
 - d. New York State labor laws;
 - e. competitive bidding requirements including those regarding sole source contracts; and
 - f. any other relevant requirements established by law.
- 3. monitor the award of contracts to determine if such awards are consistent with the manner in which the work was traditionally performed in the past;
- 4. review the relationship between capital expenditures pursuant to each such capital program plan and current and future operating budget requirements;
- 5. monitor the progress of capital elements described in each approved capital program plan;
- 6. monitor the expenditures incurred and to be incurred for each such element;
- 7. identify capital elements not progressing on schedule, ascertain responsibility therefor and recommend those actions required or appropriate to accelerate their implementation;
- 8. monitor the proposed benefits for approved projects in the capital program at appropriate points during the life of the capital project to ensure that the benefits materialize;
- 9. review capital elements and program management to improve the efficiency and effectiveness of the program, securing analytic resources as needed;
- 10. monitor awarded contracts to determine if the work is being implemented in the most efficient and effective manner possible;

- 11. consult as necessary with other New York State departments, agencies and divisions with respect to the foregoing;
- 12. provide guidance to the Board Chair and the Board with respect to the appointment (and if appropriate dismissal), evaluation, and compensation of an independent engineering firm to provide an independent review of reports by the MTA agencies with respect to the foregoing;
- 13. in consultation with the Office of Construction Oversight, oversee the work of such independent engineering firm;
- 14. together with the Office of Construction Oversight, review the periodic and/or special reports provided by such independent engineering firm; and
- 15. monitor the implementation of MTA security projects contained in approved capital programs, provide a forum for discussion of MTA-wide security issues among representatives of MTA and each of its subsidiaries and constituent agencies, and provide guidance to the Board Chair and the Board with respect to security on an MTA-wide basis.

In addition, the Committee shall have the following responsibilities:

- 1 set the annual work plan for the committee;
- 2 conduct an annual self-evaluation of the performance of the Committee, including its effectiveness and compliance with this Charter;
- 3 review and assess the adequacy of this Charter annually; and
- 4 report regularly to the Board Chair and the Board on Committee findings and recommendations and any other matters the Committee deems appropriate or the Board Chair or the Board requests, and maintain minutes or other records of Committee meetings and activities.