# MTA Capital Program 2020-2024

Rebuilding New York's Transportation System



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Amendment #2 As Proposed to the MTA Board July 27, 2022



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# **Overview** MTA Capital Program 2020-2024



The proposed MTA 2020-2024 Capital Program amendment encompasses \$55.442 billion of investments that renew, enhance, and expand the MTA network. Most of the program focuses on renewing the system to promote safe and reliable service. Enhancements are targeted toward improving system capabilities, network accessibility, and the customer experience. Expansion projects extend the reach of the network to address evolving regional mobility needs. The MTA Capital Program Review Board (CPRB) program amendment is subdivided into "core" investments that renew and enhance, and "expansion" investments that extend the MTA network. In the proposed program, approximately 82% of the capital program is dedicated to core investments in the existing system.

Changes to the program are summarized in Table 1 below. These changes include the limited changes in the prior amendment to this capital program which was fully approved in December 2021. That amendment (a "Letter Amendment") did not require detailed blue pages or a revised book.

	December 2019 Approved Program	December 2021 Letter Amendment	Amendment #1 Changes	Proposed Program	Amendment #2 Changes
CPRB Core					
NYC Transit	\$35,389	\$35,133	(\$256)	\$34,610	(\$523)
LIRR	3,737	3,710	(27)	3,623	(87)
Metro-North	3,558	3,536	(22)	3,457	(79)
MTA Bus	871	870	(1)	870	0
MTA Interagency	119	142	23	142	0
Core Subtotal	\$43,674	\$43,391	(\$283)	\$42,703	(\$689)
Expansion	7,798	8,616	818	9,413	797
CPRB Total	\$51,472	\$52,007	\$535	\$52,116	\$108
B&T	3,327	3,327	0	3,327	0
Total Program	\$54,799	\$55,334	\$535	\$55,442	\$108

 Table 1

 MTA 2020-2024 Capital Program Amendment All Agency Summary (\$ in millions)

Numbers may not total due to rounding.

# **Program Evolution and Proposed Changes**

The original \$54.799 billion MTA 2020-2024 Capital Program, which included \$51.472 billion for CPRB agencies and \$3.327 billion for the self-funded Bridges and Tunnels (B&T) program, which is not subject to CPRB approval, was approved by the MTA Board on September 25, 2019.

On December 15, 2021, the MTA Board approved a Letter Amendment (Amendment #1) to the originally approved 2020-2024 Capital Program. The amendment increased the capital program by \$535 million from \$54.799 billion to \$55.334 billion. The CPRB portion of the program increased from \$51.472 billion to \$52.007 billion. Changes to the capital program addressed the following: (a) budget adjustments in the New York City Transit (NYCT) program for a track and structures project; (b) increases to the sizes of the Long Island Rail Road (LIRR) and Metro-North Railroad (Metro-North) programs; (c) two new MTA Interagency elements to help administer the capital program; (d) budget adjustments within and to the MTA Network Expansion program to support the Penn Station Access (PSA) project; and (e) elements with 10% increases which require CPRB approval. The CPRB approved this Letter Amendment on December 23, 2021.

# **Investment Summary**

#### **Proposed Capital Program Amendment**

Including the approved Amendment #1 and this proposed amendment (Amendment #2), the overall 2020-2024 Capital Program increases from the originally approved level of \$54.799 billion to \$55.442 billion. The increase since the \$55.334 billion approved in December 2021 is \$108 million. The CPRB portion of the program increases from the originally approved \$51.472 billion to \$52.116 billion. The increase since the \$52.007 billion approved in December 2021 is also \$108 million. Finally, the MTA Bridges and Tunnels' program (which includes the Central Business District Tolling Program) remains at \$3.327 billion.

#### **Highlights of Proposed Program Changes**

Adjustments for Inflation, Supply Chain, and Labor Market: As underlying economic conditions have changed dramatically in the wake of the COVID-19 pandemic, so too must the Capital Program. When the 2020-2024 Capital Program was created in 2019, it was based on assumptions about annual inflation rates that were much lower than the reality that is now being experienced. Projects have been adjusted with more realistic inflation projections. In addition, supply chain issues and the tight labor market have also impacted contractor and manufacturer

capacity. Rolling stock is a prime example of this. While the MTA is working very closely with suppliers to manage contracts and ensure high-quality, some delays to future options have been unavoidable and are reflected in this amendment.

**New Projects.** The fundamental goals of the 2020-2024 program remain unchanged. New projects have been added, though, to further address safety, resiliency, and other key needs. To better safeguard riders, projects are added to implement recommendations of the Track Trespassing Task Force, including a pilot project to install and evaluate platform screen doors and other technologies. To address resiliency needs in the face of increasingly frequent extreme weather events, projects are added to mitigate stormwater flooding at various locations throughout the system. For key infrastructure improvements West of Hudson, Metro-North is creating a new project.

**Supporting Network Expansion Needs.** The network expansion program reflects additional needs for the Penn Station Access project which was awarded in December 2021. Penn Station Access is a key equity project for the MTA, delivering dramatically improved transportation access to the East Bronx and providing direct access to Penn Station for riders on Metro-North's New Haven Line. The amendment includes the needs realized at the time of the December 2021 amendment and includes additional budget support to address further scope, like the expansion of the New Rochelle Yard and some rolling stock needs. Budget support in this amendment comes from NYCT, the LIRR and Metro-North budget transfers. In addition, a new project has been created in Network Expansion to address design needs for the developing Penn Station Reconstruction project, supported by New York State funding.

**Revisions to Reflect Project Cost, Schedule, and Other Project Changes:** The amendment identifies project changes and additions derived from schedule updates, phasing opportunities, refined project scopes and estimates including market pricing, emerging needs, as well as administrative split-outs of scope and budget. The project changes and additions include budget increases and decreases, project deferrals, advancement of projects, and the administrative split-out of some work from existing projects into new individual projects.

Adapting to Changing Needs: Some project changes have been informed by ridership trends since the onset of the COVID-19 pandemic. A notable example of this is signal investments for NYCT, which have been reprioritized in favor of enhanced reliability.

**Metro-North Railroad's support from the State of Connecticut.** Consistent with past support from Connecticut for Metro-North, this amendment includes additional budget allocations to be funded by the Connecticut Department of Transportation.

**Agency Element 10% Issues.** Pursuant to the Public Authorities Law, increases to agencies' elements greater than 10% require approval of the CPRB. The individual agency sections show

those elements that grow by greater than 10% versus the original CPRB-approved plan. B&T is not subject to CPRB oversight and is exempt from this requirement.

**B&T Budget Adjustments.** Several project adjustments and budget re-estimates are included. Most prominently is the breakout of the Central Business District Tolling Program (CBDTP) at its award in 2019 using budget reserves that had been set aside within B&T's Miscellaneous budgetary reserves. The amount budgeted for the CBDTP remains constant in its new category.

# **Program Funding**

Funds currently projected to be available for the proposed 2020-2024 Capital Program amendment total \$55.442 billion (Table 2). The narrative below includes funding adjustments previously recognized in the December 2021 Letter Amendment.

Program Funding Plan	December 2019 Approved Program	Proposed Program	Change
Capital from Central Business District Tolling Sources	\$15,000	\$15,000	0
Capital from New Revenue Sources	10,000	10,000	0
MTA Bonds & PAYGO	9,792	8,037	(1,755)
Federal Formula	7,500	9,171	1,671
State of New York	3,000	3,100	100
City of New York	3,000	3,007	7
Federal New Starts (2 <sup>nd</sup> Ave Subway Phase 2)	2,905	2,905	0
Federal Flexible	275	275	0
Federal Other	0	79	79
Other Contributions	0	542	542
Total CPRB Program	\$51,472	\$52,115	\$643
Bridges and Tunnels Bonds & PAYGO/Cash	3,327	3,327	0
Total 2020-2024 Program	\$54,799	\$55,442	\$643

Table 2MTA 2020-2024 Capital Program Amendment Funding Plan (\$ in millions)

Numbers may not total due to rounding

#### Capital from Central Business District Tolling Sources

#### No funding change

No funding change

The Capital from Central Business District Tolling Sources assumption remains unchanged.

#### Capital from New Revenue Sources

The Capital from New Revenue Sources assumption remains unchanged.

#### MTA Bonds & PAYGO

The proposed amendment reduces the MTA Bonds and PAYGO assumption by \$1.755 billion. This reduction/offset is primarily due to the increase of \$1.681 billion to the Federal formula assumption from the Infrastructure Investment and Jobs Act (IIJA), which reduces the amount of MTA debt needed to support the plan.

Other factors reducing the MTA Bonds and PAYGO assumption include: \$33 million in discretionary Federal funding secured for bus and bus facilities, \$0.2 million in discretionary Federal research funding from the Accelerating Innovative Mobility grant program, and \$30 million in Federal Transit Security Grant program funds not originally included in the plan. In addition, offsets are generated by \$7 million in funding secured from the City of New York for bus purchases for the SIM 23/24 bus routes, a \$0.3 million earmark from the State of New York for Metro-North Harlem Line improvement projects, and \$3.3 million transferred from security operating to capital for MTA-wide security projects.

#### **Federal Formula**

The proposed amendment adds \$1.681 billion to the Federal Formula assumption, due to the significant increase in funding expected from the 2021 IIJA compared to MTA's initial projections for transportation reauthorization.

Offsetting this increase is a reduction of \$10.5 million of planned formula funding transferred to the 2010-2014 Capital Program for eligible projects. In exchange, MTA local dollars of equal value are transferred from the 2010-2014 Capital Program.

#### State of New York Capital

The proposed amendment adds \$100 million in State funds to advance initial preparations for the Penn Station Reconstruction effort. Also included is \$0.3 million for an earmark for improvements on the Metro-North Harlem Line.

#### City of New York Capital

The proposed amendment adds \$7 million in City Capital funds for bus purchases associated with the MTA's takeover of the SIM 23/24 express bus routes previously operated by the City of New York.

#### **Federal New Starts**

The Federal New Starts assumption for Second Avenue Subway Phase 2 in the 2020-2024 Capital Program remains unchanged.

14

#### \$1.671 billion

#### \$7 million

\$100 million

#### No funding change

#### \$1.07 I Dimorr

#### -\$1.755 billion

#### Federal Flexible

The Federal Flexible assumption in the 2020-2024 Capital Program remains unchanged.

#### **Federal Other**

The proposed amendment adds \$79 million in Federal Other funding to the 2020-2024 Capital Program. The increase reflects \$33.3 million in discretionary funding secured from the bus and bus related facilities grant program (+\$21 million for bus purchases and \$12.3 million for the Michael J. Quill depot); \$30.2 million in funding received from the Transportation Security Grant Program; and \$0.2 million if discretionary funds from the Accelerating Innovative Mobility grant program. Also included is \$15 million in Federal Railroad Administration (FRA) funding for the Penn Station platform project (note: this increase was already reflected in the 2021 Letter Amendment).

#### Other

The proposed amendment adds a total of \$542 million in other sources. Of this amount, \$520 million was previously recognized in the 2021 Letter Amendment and reflects anticipated contributions of Amtrak funds for the Penn Station Access project (\$500 million) and \$20 million from the Connecticut Department of Transportation (CTDOT) for Metro-North Railroad administrative assets (New Fare Payment, Maintenance of Way equipment purchase, PBX Replacement/Upgrade and radio system investments). New to this amendment: \$10.5 million transferred from the 2010-2014 Capital Program, which received an equal amount in Federal formula funds previously planned for the 2020-2024 program and \$3 million from MTA Operating for capital security initiatives, and an additional \$8 million from CTDOT for Metro-North Railroad administrative assets in the following projects: Network Infrastructure, Station PA System, security initiatives, and Enterprise Asset Management.

#### **Bridges and Tunnels Program Funding**

The B&T Program Funding category remains unchanged.

#### No funding change

#### No funding change

#### \$542 million

#### \$79 million

# New York City Transit MTA Capital Program 2020-2024



# **Overview – New York City Transit**

This proposed amendment adjusts the content of NYCT's 2020-2024 Capital Program. The total value of the revised program is \$34.610 billion, which is a net decrease of \$779 million from the program approved by the MTA Board in September 2019. (-\$256 million of this reduction was previously approved via Amendment #1 in December 2021.) The net decrease is mostly due to budget support (\$763 million) for Network Expansion needs for the Penn Station Access project.

The principal change presented in this amendment is a re-sequencing of signal modernization projects and related changes to investments in subway cars and power infrastructure. As background, NYCT is transitioning to a state-of-the-art modernized signal system, which will provide enhanced reliability and other operational benefits compared to conventional fixed-block signals. With complementary investments in power infrastructure, modernized signals can also enable more frequent subway service on capacity-constrained lines. The transition to modern signals might also require the purchase of new subway cars, because new signal equipment must be installed onboard each train and NYCT's oldest subway cars cannot be practically adapted to receive this equipment.

Two of the locations for signal modernization in the approved 2020-2024 Capital Program, line segments along the Lexington Avenue line (456 trains from 149 St to Nevins St) and the Astoria line (NM from Ditmars Blvd to 57 St), were originally prioritized because of a need to expand capacity to accommodate growing ridership. However, due to ridership reductions because of the COVID-19 pandemic, those lines no longer need expanded capacity in the near term. This amendment reschedules the signal investments on these lines, and related power investments on the Lexington Avenue line, to a future capital program.

Instead, this amendment advances signal modernization for line segments that have the greatest state of good repair need and that serve populations who are highly dependent on mass transit reliability. The 6<sup>th</sup> Avenue line (**DCM** from 47-50 St-Rockefeller Center to Jay St) is funded under this amendment. With much of its signal system between 83 and 90 years old, 6<sup>th</sup> Avenue is a higher priority for achieving a state of good repair. Similarly, the amendment extends the previously funded Fulton line (**AC** from Euclid to High St) to include the Hoyt-Schermerhorn to Jay St corridor. Modernizing signals in this corridor, with the Hoyt and Jay St interlockings, addresses key reliability choke points in the system and provides vital flexibility by linking modern signals for the **ACF** trains in Brooklyn and Manhattan.

Industry capacity constraints, particularly in the production of subway cars, also support this rebalancing. As these investments build on existing B-Division modern signaling lines, they can more easily be accommodated within existing constraints. The Lexington Avenue signal modernization, on the other hand, was set to depend on new A-Division subway cars; the timeline for receiving these cars has been extended, based on recent experience with car

manufacturing issues related to the COVID-19 pandemic. To better align funding with anticipated railcar production, this amendment reschedules a portion of the A-Division subway car purchases to a future capital program.

This amendment also includes adjustments to reflect refined project scopes and cost estimates, bid experiences, schedule changes, and market conditions since the last update to the Board. When the 2020-2024 Capital Program was created in 2019, it was based on assumptions about annual inflation rates that were much lower than the reality that is now being experienced. Due to increased inflation and other factors, there are notable cost increases in certain categories of the capital program, particularly Passenger Stations and Line Structures.

This amendment also includes the addition of new projects to address emerging needs. Notably, projects are added to implement recommendations of the Track Trespassing Task Force and to mitigate stormwater flooding at various locations throughout the system. In addition, this amendment reflects the administrative split-out of some work from existing projects into new individual projects. These split-outs are being implemented at the time of contract award to provide better budget control and transparency.

Table 3 and the discussion that follows summarize the proposed changes to NYCT's 2020-2024 Capital Program by investment category.

Category	December 2019 Approved Program	Proposed Program	Change
Subway Cars	\$6,056.8	\$4,659.4	(\$1,397.4)
Buses	1,820.0	1,865.9	46.0
Passenger Stations	9,203.7	9,777.9	574.2
Track	2,558.2	2,558.2	0.0
Line Equipment	412.3	380.6	(31.7)
Line Structures	2,383.9	3,004.8	620.9
Signals & Communications	7,119.4	6,743.1	(376.3)
Traction Power	2,600.4	1,792.8	(807.6)
Shops & Yards	562.8	561.2	(1.6)
Depots	821.0	857.2	36.2
Service Vehicles	353.7	226.4	(127.3)
Miscellaneous	1,123.2	1,809.9	686.6
Staten Island Railway	373.5	372.7	(0.8)
Total New York City Transit Program	\$35,389.0	\$34,610.2	(\$778.9)

# Table 3NYCT 2020-2024 Capital Program Amendment by Category (\$ in millions)

Numbers may not total due to rounding

## New York City Transit Subway Cars Category T-801

The decrease in this category reflects the rescheduling of the Purchase A Division Cars (Option) project (-\$1,400 million) to a future capital program (-\$241 million of this reduction was executed previously via Amendment #1 approved by the MTA Board in December 2021). The timeline for the purchase of A-Division railcars has been revised, in light of production delays experienced in other railcar purchases because of the COVID-19 pandemic. The New/Upgrade Car Investments base order remains funded in the 2020-2024 Capital Program with a minor reduction (-\$163 million), but the option is now expected to be exercised beyond 2024. To better align funding with production schedules and needs, the option project will be reprogrammed in the next capital program. As a result of these adjustments, budgetary support is provided to other needs within the NYCT program as well as a transfer of \$523 million to support Network Expansion's Penn Station Access project.

The capital program planned to purchase new subway cars concurrent with Lexington Line signal modernization. Since this amendment reschedules the signal modernization project on the Lexington Avenue line to a future capital program (as discussed in the Signals & Communications category), the more immediate need for new railcars to support this signal investment is also rescheduled so that these related investments remain in alignment. NYCT is also now exploring the retrofit of existing rolling stock for modernized signals instead of buying new cars.

Partially offsetting this decrease are increases in the options to the R211 contract to purchase railcars for the B-Division. This includes increases in Option 1 for 640 cars (+\$125 million) and in Option 2 for 437 cars (+\$41 million). These increases reflect current expectations for contract escalation based on inflation, as well as revised estimates for in-house support.

### New York City Transit Buses Category T-803

NYCT remains committed to Zero Emission Fleet Transformation (ZEFT), specifically a goal of converting to a 100% zero-emission bus fleet by 2040, including the purchase of 475 electric buses in the 2020-2024 Capital Program (with an additional 25 electric buses purchased for MTA Bus Company). These commitments have not changed, but this amendment repackages several projects to implement these ZEFT commitments, based on the latest strategies for procuring electric buses and associated charging infrastructure.

Originally, the purchase and installation of battery-electric bus charging equipment was programmed within the budgets of the related bus purchase projects. Other upgrades for reconfiguration of depots to accommodate electric bus operations were programmed in the Depots category. This amendment revises that arrangement to create separate charging infrastructure projects, which now encompass both charging equipment and other depot upgrades as needed. These new charging infrastructure projects are programmed in the Buses category, separate from the bus purchase projects. As a result, this amendment transfers a portion of ZEFT-related funding (+\$44 million) from the Depots category to the Buses category. There is a net increase in the Buses category because of this transfer, but there is no net increase to the overall cost of the ZEFT program across both categories. Indeed, this amendment results in a slight reduction (-\$36 million) in overall ZEFT funding in the 2020-2024 Capital Program, realized in the Depots category, due to the transfer of some charging infrastructure costs to the 2015-2019 Capital Program (-\$28 million), as well as a minor reduction based on the latest estimates (-\$8 million).

The newly established Electric Bus Charging Infrastructure project (+\$361 million) is planned to be carried out in multi-location phases timed to support the growth of the battery-electric fleet. A separate project is established for an initial charging installation at Jamaica Depot in advance of its reconstruction (+\$7 million).

There is also a change in the composition of the 475 electric buses to be purchased. Based on the latest bus service plans, the number of articulated electric buses is reduced from 100 to 90, and the number of standard electric buses is increased from 375 to 385. The project to purchase articulated electric buses is reduced (-\$70 million) due to both the change in quantity and the breakout of the charging infrastructure work as described above. Likewise, the project to purchase standard electric buses is reduced (-\$271 million) as a net result of the change in quantity, the breakout of charging infrastructure, the administrative split-out of the Purchase 15 Standard All-Electric Buses project (+\$17 million), and the administrative split-out of projects for design of bus purchases.

As ZEFT ramps up, NYCT is continuing to purchase a final generation of buses of more conventional fuel types. Four projects to purchase a total of 210 hybrid and 348 diesel buses (+\$419 million) have been administratively split out from the project to purchase 713 Standard Buses. The later project name has been changed to reflect the remaining purchase of 155 Standard CNG Buses.

The project to purchase 23 express buses was reduced at award to 19 buses with an associated budget reduction (-\$4 million), as the remaining four buses were purchased via an alternate funding source outside the capital program. The Advanced Tech Bus Development project budget is increased (+\$6 million) due to the latest estimates for a portion of the work.

## New York City Transit Passenger Stations Category T-804

The increase in this category is primarily due to the addition of several new station initiatives, as well as increases based on recent estimates reflecting current market conditions and inflation.

There is an increase in the Fare Collection element (+\$2 million) for the purchase of 80 Automatic Farecard Access System (AFAS) units. This equipment will be installed in various stations as part of the routine scope of accessibility projects, but it is purchased separately in advance.

There is a net increase in the Station Escalators / Elevators element (+\$33 million). The total number of elevators to be replaced remains at 78. The total number of escalators to be replaced increases from 65 to 68. This amendment also reflects the administrative split-out of several projects to provide better budget control and transparency. The new split-out projects include projects for design (+\$27 million), two projects to replace 8 elevators (+\$61 million), and two projects to replace 12 escalators (+\$136 million). The budgets for these projects were also adjusted at the time of award based on bids received, and to fund 3 additional escalators not originally included in the 2020-2024 Capital Program. Funding was also split out for Passenger Station Local Area Networks (PSLAN) at various elevator and escalator locations (\$1 million).

There is a net increase in the Station Work element (+\$539 million). This includes projects added for new initiatives (+\$210 million), projects added to address additional costs in awarded projects from the 2015-2019 Capital Program (+\$68 million), and a net increase (+\$261 million) in all station component/renewal projects and other station work in the element.

The new initiatives include a pilot project to construct platform screen doors (+\$175 million) and a project for other track safety initiatives in stations (+\$15 million). These projects will implement recommendations from the MTA Track Trespassing Task Force, with complementary projects also added to the Signals & Communications category. Another new initiative is a project to mitigate stormwater intrusion at various stations (+\$20 million). Along with complementary projects in the Line Structures category, this project represents a comprehensive approach to reducing flooding from severe rainfall events.

Other new projects are added to address additional costs for recently awarded station work that was originally planned and funded in the 2015-2019 Capital Program, based on bids received for this work. This includes platform component investments at the 14<sup>th</sup> Street-6<sup>th</sup> Avenue station complex (+\$38 million) and the station renewal at Woodhaven Blvd on the Jamaica line (+\$24 million). Similarly, a new project is added (+\$6 million) for platform component repairs at 68

Street-Hunter College on the Lexington Avenue line, which will be performed in concert with accessibility upgrades that are funded in prior capital programs.

The remaining net increase in this element (+\$261 million) reflects increases in the Miscellaneous Station Component/Renewal Work project (+\$276 million) and the Other Station Work project (+\$40 million), offset by a net savings (-\$56 million) in other station component and miscellaneous projects. The increases are based on recent estimates reflecting current market conditions and are indicative of the inflation being experienced. The increases include additional funding for upcoming station renewal projects on the Flushing and Jamaica lines that are budgeted in the 2015-2019 Capital Program, based on recent estimates for these projects that exceed the prior program budgets. The net savings in other projects reflects refined criteria for identifying station components that qualify for capital investment, to focus investments more closely on the highest-priority needs system-wide. This is a net savings, reflecting the fact that various projects have been administratively split-out from the original Station Components, Station Ventilators, and Water Condition Remedy projects in this element, to provide better budget control and transparency. The split-out projects include packages of work that have been awarded, as well as funds programmed for design.

There is no net change to total budget of the Accessibility element; NYCT remains committed to maintaining this historically significant level of investment to make stations accessible under the Americans with Disabilities Act (ADA). This amendment reflects the administrative split-out of several projects at the time of contract award to provide better budget control and transparency. ADA projects at 8 stations (+\$350 million) were split out from the ADA: 63 Stations project. This amendment also reflects the administrative split-out of design funding for ADA investments (+\$44 million) and two projects for related investments in elevator communications infrastructure (+\$4 million). The MTA will continue to split out ADA projects as they are awarded.

Other new ADA projects are added to address additional costs for four recently awarded stations that were originally planned and funded in the 2015-2019 Capital Program, based on the bids received for these stations. This includes projects at 6 Avenue on the Canarsie line (+\$33 million), 14 St on the Broadway-7<sup>th</sup> Avenue line (+\$30 million), Woodhaven Blvd on the Jamaica line (+\$27 million), and Westchester Square on the Pelham line (+\$32 million). Notwithstanding these added projects, based on recent bid experience for all ADA projects awarded since the inception of the 2020-2024 Capital Program, it is anticipated that the balance of funding in this element is sufficient to complete the remaining 55 planned stations that are not yet awarded.

# New York City Transit Track Category T-805

There is no overall budget change in the Track category.

This amendment also reflects the administrative split-out of location-specific projects for 2020, 2021, and 2022 with funding transferred from the programmatic reserves. These split-outs provide better budget control and transparency. The focus of track and switch investments continues to be on addressing state of good repair needs.

# New York City Transit Line Equipment Category T-806

In this amendment there is an overall reduction to the Line Equipment category (-\$32 million). Line Equipment includes tunnel lighting, fan plants, pump rooms/deep wells and other areas of investment. In the amendment, investments in two of these areas increase and two decrease.

There is a net decrease (-\$2 million) in tunnel lighting projects based on bids received. This net decrease reflects the administrative split-out of the Tunnel Lighting, 8 Ave project (\$19 million), as well as funds for tunnel lighting design, from the Tunnel Lighting: Various Locations project.

There is a net increase (+\$49 million) in fan plant projects. This budget increase is due to an administrative transfer of funds (+\$65 million) from the Additional Work: Line Equipment project, with no net change to the category, utilizing funds originally allocated in that project for fan plant work. Partially offsetting this transfer is a decrease (-\$16 million) based on bids received. The overall net increase reflects the administrative split-out of several projects (+\$77 million) from the Fan Plants: Various Locations project.

There is a net increase (+\$21 million) in pump room and deep well projects due to an administrative transfer of funds from the Additional Work: Line Equipment project, with no net change to the category, utilizing funds originally allocated in that project for deep well work. This net increase reflects the administrative split-out of several projects (+\$37 million) from the Pump Rooms & Deep Wells: Various Locations project.

There is a decrease (-\$101 million) in the Additional Work: Line Equipment project because of the aforementioned administrative transfers (-\$86 million) and a further decrease (-\$14 million) based on latest estimates for additional pump room work that remains budgeted in this project.

## New York City Transit Line Structures Category T-807

The overall increase in this category reflects refined project scopes and cost estimates, bid experiences, and market conditions since the last update to the Board. Among the factors, causing these increases is the inflation now being experienced, which is significantly higher than what was assumed when the 2020-2024 Capital Program was created in 2019.

There is a net increase (+\$338 million) in subway structure repair projects based on the latest scopes, estimates, and bids received for work on the Concourse line and other locations. NYCT is implementing a new contractual vehicle to implement subway structure repairs more quickly and flexibly throughout the system. The budget increase in this amendment is premised on the ability to address a larger scope of subway structure defects because of this new delivery method. This net increase reflects the administrative split-out of numerous projects (+\$297 million) from the Subway Structure Repairs: Various Locations project.

There is a net increase (+\$201 million) in elevated structure repair projects based on the latest estimates. The increase includes additional funding for emerging priority structural work on the Flushing line, to be awarded in coordination with upcoming station renewal work (discussed in the Passenger Stations section). This net increase reflects the administrative split-out of a project for the repair of priority column bases on the Jerome and White Plains Road lines (+\$7 million) from the Elevated Structure Repairs: Various Locations project, as well as the administrative split-out of projects for design.

There is a net increase (+\$296 million) in line structure overcoating based on the latest estimates, as well as additional funding for ongoing overcoating investment that was originally budgeted in in the 2015-2019 Capital Program, based on a recent estimate to complete the work that exceeds the prior program budget. This net increase also reflects the administrative split-out of projects for initial overcoat painting on the Culver line (+\$6 million) from the Line Structure Overcoating: Various Locations project, as well as the administrative split-out of a project for design.

Another increase is the addition of a new project (+\$55 million) for stormwater mitigation at various locations. Along with complementary projects in the Passenger Stations category, this project represents a comprehensive approach to reducing flooding from severe rainfall events.

There is also a net increase (+\$6 million) in miscellaneous line structure investments based on the latest estimates. This net increase reflects the administrative split-out of a project for Special/Miscellaneous Structures Design (+\$7 million) and Demolition of Abandoned Structures (+\$1 million) from the Miscellaneous Line Structure Investments project. These increases are partially offset by a decrease (-\$275 million) in the Elevated Structure Netting project. NYCT is evaluating the performance of netting that has been installed at several pilot locations. Based on that review, criteria are being developed to determine the locations for the continued rollout of the program. \$50 million is retained in addition to monies in an earlier capital program for locations where it will be feasible and beneficial.

## New York City Transit Signals & Communication Category T-808

There is a decrease in the Signals element (-\$494 million), partially offset by an increase (+\$118 million) in the Communications element.

In the Signals element, the decrease is primarily driven by a re-sequencing of signal modernization projects. NYCT's signal modernization program has the dual objectives of achieving a state of good repair and enhancing capacity. Two of the line segments for signal modernization in the approved 2020-2024 Capital Program, the Lexington Avenue line and the Astoria line, were originally prioritized because of a need to expand capacity to accommodate growing ridership. However, due to ridership reductions because of the COVID-19 pandemic, those lines no longer need expanded capacity in the near term. This amendment reschedules the signal investments on these lines to a future capital program. Instead, this amendment advances signal modernization on a line segment along the 6<sup>th</sup> Avenue line into this capital program, which is a higher priority for achieving a state of good repair and enhancing reliability based on the age and condition of its existing conventional signals. Another reason for rescheduling the Lexington Avenue signal modernization is to align with revised timeline for receiving new A-Division subway cars (discussed in the Subway Cars section). This capital plan continues to include signal modernization on line segments of the Queens Boulevard East, Crosstown, Fulton, and 63<sup>rd</sup> Street lines, in addition to the 6<sup>th</sup> Avenue line.

The overall budget for signal modernization projects is reduced (-\$403 million), which reflects the re-sequencing of projects as well as an updated estimate for the Fulton Line. This amendment also reflects the administrative split-out of several projects to provide better budget control and transparency. The new split-out projects include signal modernization on the Queens Boulevard East line (+\$510 million), which was also adjusted at the time of award based on bid experience and refined limits of work. Other administrative split-outs from the Signal Modernization project are projects for design, consultant services, and technology proof of concept (+\$64 million).

There is a decrease in the Signal Modernization Equipment for Cars and Locomotives project (-\$82 million) to align with NYCT's latest fleet strategies, namely rescheduled purchases of A-Division subway cars and work locomotives (discussed in the Subway Cars and Service Vehicles sections, respectively). There is also an administrative split-out of the project for signal equipment for the 640 subway cars purchased through the R211 Option 1 car purchase contract (+\$14 million).

This element also includes reductions in the System-Wide Signal Improvements project (-\$7 million) and the Miscellaneous Signal Modernization Supporting Investments project (-\$2

million) based on bid experience. This amendment reflects the administrative split-out of some work into new individual projects to provide better budget control and transparency. The removal of wayside signals on the Flushing Line and the installation of signal cable brackets on the Brighton Line were split out from the Miscellaneous Signal Modernization Supporting Investments project (\$23 million) and the replacement of mechanical plug-in timer relays was split-out from the System-Wide Signal Improvements project (\$13 million).

The increase in the Communications element (\$118 million) is due to the addition of new projects (\$60 million) and a net increase in existing projects (\$58 million). The new projects address track trespassing, including Track Intrusion Detection (\$35 million), Laser Intrusion Detection (\$15 million), and other track safety initiatives (\$10 million). These projects will implement recommendations from the MTA Track Trespassing Task Force, with complementary projects also added to the Stations category.

Changes to existing communications projects are as follows.

There is a net decrease (-\$6 million) in communications network upgrade projects, based on bids received. This net decrease reflects the administrative split-out of the Asynchronous Fiber Optic Network Ring F project (-\$27 million) from the Comm Network Upgrades: Various Locations project.

There is a net increase (\$4 million) in antenna cable projects, based on bids received. This net increase reflects the administrative split-out of the Antenna Cable Concourse Line (IND) project (\$10 million) from the Antenna Cable Replacement: Various Locations project.

There is a decrease (-\$13 million) in the Subway Radio Equipment Replacement project since a portion of the scope is now being addressed by an MTA IT operating initiative.

There is a net increase (\$41 million) in station information systems projects. This includes an increase (\$52 million) based on the latest scopes and estimates for public address and customer information screens (PA/CIS), LiftNet elevator and escalator monitoring system upgrades, and related work. Partially offsetting this increase is a transfer (-\$11 million) to the Small Business Mentoring Program – Communications project, to fund related communication room upgrades. This net increase reflects the administrative split-out of several projects (\$18 million) from the Station Information Systems: Various Locations project.

There is a net decrease (-\$11 million) in passenger identification camera projects, based on bids received. This net decrease reflects the administrative split-out of the Passenger ID CCTV – 88 Locations project (\$66 million) from the Passenger ID: Various Locations project.

There is a net increase (\$31 million) in security technology upgrades projects, based on the latest locations of work, estimates, and bids received. This net increase reflects the

administrative split-out of several projects (\$26 million) from the Security Technology Upgrades: Various Locations project for location-specific work, including design work.

There is a net increase (\$13 million) in the Small Business Mentoring Program – Communications project due to the aforementioned transfer of funds from the Station Information Systems: Various Locations project (\$11 million), plus adjustments at the time of award based on bids received (\$2 million).

## New York City Transit Traction Power Category T-809

The large net decrease in this category is primarily due to the rescheduling of the power improvements on segments of the Lexington Avenue line (-\$1.0 billion) to a future capital program. This reduction reflects the timing of the signal modernization on the Lexington Avenue line which is being rescheduled to a future capital program. This decrease is partially offset by an increase in the Power Improvements: Various Locations project (+\$163 million) to ensure that funding is available for power improvements related to other signal modernization projects in the capital program and to respond to emerging traction power needs throughout the subway system.

This amendment reflects the addition of low resistance contact rail and negative side feeder projects on the Archer Avenue, Jamaica, and 63<sup>rd</sup> Street lines, which were awarded in conjunction with the direct fixation track replacement projects on those lines. Accomplishing the track and power work at the same time avoids duplicative service outages in the future.

In addition, this amendment reflects the administrative split-out of work into new individual projects to provide better budget control and transparency as projects are advanced into construction. The negative cable project on the Fourth Avenue Line (+\$49 million), projects for the rehabilitation of five circuit breaker house (CBH) enclosures (+\$6 million), and the Upgrade SCADA BMT project (+\$51 million) were split out from the Traction Power Cable: Various Locations project, and the Rebuild Ducts: Central Platform project (+\$7 million) was split out from the Miscellaneous Power Investments project. Budgets were also adjusted at the time of award based on bid experience. In addition, several projects were split out for design of substation and power distribution projects.

## New York City Transit Shops and Yards Category T-810

There is an increase in the Shop Component Repairs: Various Locations project (+\$30 million) based on a refined scope, including additional work to address deficient heating system components at various facilities. There is also an increase in the Yard/Fencing/Lighting/Misc. Investments project (+\$9 million) based on an updated cost estimate. Another increase in this category is the addition of a new project (+\$2 million) that funds the Shops & Yards portion of NYCT's investment in the MTA's Small Business Mentoring Program.

There is a decrease in the Shop Rehab/Reconstruct: Various Locations project (-\$34 million) based on favorable bid experience for a portion of the work. There is also a decrease in the Yard Switch Replacement project (-\$9 million) due to a reassessment of priorities for the inhouse track replacement program. Due to manpower limitations because of the COVID-19 pandemic, the in-house program is focusing its resources primarily on mainline track and switch replacement rather than work in yards that is less critical to service reliability and passenger safety.

In addition, this amendment reflects the administrative split-out of some work into new individual projects, with no net change to the total budget of the category. These split-outs occurred at the time of contract award to provide better budget control and transparency. Most notably, several projects were split out from the Yard/Non-Revenue Track Replacement and Yard Switch Replacement projects to provide separate budgets for work performed in specific years. The Livonia Maintenance Shop Phase 1 project (+\$22 million) was split out from the Shop Rehab/Reconstruct: Various Locations project. Design funds were also split out from that same project, and from the Shop Component Repairs: Various Locations project, into a new Shop Components Design project (+\$2 million).

#### New York City Transit Depots Category T-812

The Depot Rehab & Reconstruction element has a net increase (+\$22 million). This is primarily due to an increase in the Jamaica Depot Reconstruction project (+\$156 million) based on updates to the design scheme to improve bus circulation and better accommodate charging infrastructure for electric buses. The latest estimate also reflects higher costs to acquire property adjacent to the depot to facilitate reconstruction, as well as increases based on current market conditions and inflation.

Part of this budget increase is an administrative transfer of funds (+\$36 million) from the Depot Component Repairs: Various Locations project, with no net change to the category, utilizing funds originally allocated in that project for Jamaica Depot related work. There is also a further decrease in the Depot Component Repairs: Various Locations project based on an administrative split-out for investments at Kingsbridge Depot at the time of award to provide better budget control and transparency (\$5 million), as well as a net reduction (-\$19 million) based on the latest estimates for work at other locations. In all, the Depot Component Repairs: Various Locations project is reduced (-\$61 million).

To implement the latest plans for ZEFT funds are reallocated from the original Electric Fleet Modifications project. Funds are transferred to the Buses category (\$44 million) to create new projects in that category for electric bus charging and related depot upgrades. There is also a reduction due to the transfer of some charging infrastructure costs to the 2015-2019 Capital Program (-\$28 million), as well as a minor reduction based on the latest estimates for the overall ZEFT program (\$8 million). Funds remain in the Depots category for a Zero Emission Fleet Transformation Study (\$20 million), which will evaluate the evolving state of electric bus technology and assess potential impacts to service plans, facilities, power supply, and bus purchases as the MTA transitions to a zero-emission bus fleet by 2040.

The Depot Improvements element has an increase (+\$14 million). This reflects an increase to the Miscellaneous Depot Investments project (+\$14 million) to fund additional scope items for depot investments currently in construction. There are also administrative splits out from this project for design of depot improvements (\$1 million) a Small Business Mentoring Program (SBMP) project to replace the chassis wash at Ulmer Park Depot (\$2 million).

### New York City Transit Service Vehicles Category T-813

This category is reduced by \$127 million overall. There is a reduction (-\$152 million) in the Purchase Various Work Train Cars project with its budget being mostly transferred to support other NYCT needs in this program. This project originally included the purchase of locomotives, flat cars, and selected other classes of work train cars. NYCT now plans to increase the number of flat cars purchased under this project, to support both routine maintenance activities as well as the execution of capital work. The Purchase 27 Flat Cars project (+\$23 million) was split out from the Purchase Various Work Train Cars project to achieve this aim. However, the originally planned locomotive purchase is now rescheduled to a future capital program. The locomotive will be purchased by exercising an option to an ongoing locomotive contract, but locomotive deliveries under that base contract are now expected to extend beyond 2024. As such, the option can be exercised in the next capital program without interrupting the manufacturer's production line or the delivery of locomotives to NYCT.

## New York City Transit Miscellaneous Category T-816

The Employee Facilities element has a net increase (+\$37 million), primarily due to the bid received for the Livingston Plaza Electrical, Mechanical, Generator Phase B project, which was split out from the Subway Employee Facility Repairs: Various Locations project.

In addition, this amendment reflects the administrative split-out of some other work in the Employee Facilities element into new individual projects, to provide better budget control and transparency. Several projects were split out from the Subway Employee Facility Repairs: Various Locations project, including the project for Employee Facility Repairs and Consolidation at Second Avenue on the 6<sup>th</sup> Avenue line (+\$18 million), two projects for Employee Facility Repairs at Bathrooms and Breakrooms (+\$7 million), a project for Employee Facility Repairs at 4 Stations on the 8<sup>th</sup> Avenue line (+\$3 million), and a project for repairs to the Electronics Maintenance Division (EMD) Facility at Hoyt-Schermerhorn Streets on the Fulton line (+\$14 million). Likewise, a project for Electrical Distribution Room (EDR) Water Remedy and Equipment Replacement (+\$6 million) was split out from the Misc./Administrative Facility Investments project.

The Management Information Systems element has an increase (+\$25 million) in the Upgrade Information Systems / Data Centers project. The scope of this project has been expanded to address emerging new emerging needs, such as upgrades needed at the Rail Control Center (RCC) data center.

The other elements in this category contain investments to support the implementation of the capital program. The Miscellaneous element has a net increase (+\$439 million) due to additional funding for insurance and other capital program support funding. The Engineering Services element has a net increase (\$219 million) due to additional funding for capital program development (scoping and a design reserve to support project development for projects likely to progress in future capital plans. The Environmental Safety element has a net reduction (-\$33 million) primarily because the Asbestos/Lead Air Monitoring project is no longer required to support the capital program because separate funding is available for these activities. In these elements this amendment also reflects the administrative split-out of some work into new individual projects with no net change to the total budget of the category, such as the split-out of certain program support projects into annual allocations.

## Staten Island Railway SIR Category S-807

The small net decrease in this category is the result of changes to two projects. There is an increase in the Purchase Various Work Train Cars project (+\$1 million) based on the latest estimate for the purchase of flat cars. This is more than offset by a decrease (-\$2 million) in the Station Components: Various Locations project.

In addition, this amendment reflects the administrative split-out of some work into new individual projects, with no net change to the total budget of the category. These split-outs occurred at the time of contract award to provide better budget control and transparency. The ADA project at New Dorp (+\$35 million) was split out from the ADA: 3 Stations project. Funding remains in the latter project for ADA work at two stations, Clifton, and Huguenot. Likewise, the Components: New Dorp project (+\$1 million) was split out from the Station Components: Various Locations project; and the Track and Switch Rehab: SIR Mainline (Additional Work) project (+\$51 million) was split out from the Track and Switch Replacement project.

## Elements Exceeding 10 Percent of the Approved Program

Pursuant to the Public Authorities Law, changes to elements that are greater than 10% require approval of the Capital Program Review Board to be progressed. Table 4 shows those elements of the program that have grown by greater than 10% versus the last CPRB-approved program amendment. CPRB approval is necessary to progress these work elements, to the extent element amounts have increased by greater than 10%.

Element	December 2019 Approved Program	Proposed Program	Change
Station Work	\$2,525.0	\$3,064.4	\$539.4
Line Structure Rehabilitation	2,383.9	3,004.8	620.9
Depot Improvements	110.1	124.4	14.3
Miscellaneous	185.9	624.8	438.9
Management Information Systems	67.9	92.9	25.0
Engineering Services	312.6	531.6	219.0

 Table 4

 NYCT Elements with Increases Exceeding 10 Percent (\$ in millions)

# Long Island Rail Road MTA Capital Program 2020-2024



## **Overview – Long Island Rail Road**

This proposed amendment adjusts the value and content of the LIRR's 2020-2024 Capital Program.

The total value of the revised program is \$3.623 billion, which is a net decrease of \$114 million from the originally approved program (\$3.737 billion). Among the largest factors in this reduction is revised rolling stock schedules, which put the purchase of Dual-Mode Locomotives out of this capital program's timeframe. Central Branch electrification has also been removed from the plan, leading to a significant reduction in the power category.

LIRR riders also stand to gain from the amendment, however. Most prominently, 11 stations will be made ADA-accessible, an increase of four from the plan as adopted. The four added stations are Amityville, Laurelton, Lindenhurst, and Massapequa Park.

As a result of these changes, the net decrease in the LIRR's envelope allows for a transfer of budgets to support Network Expansion needs for Penn Station Access.

Table 5 summarizes the proposed changes by category and the following narrative highlights the major changes in each of LIRR's program categories.

Category	December 2019 Approved Program	Proposed Program	Change
Rolling Stock	\$242.2	\$155.2	(\$87.0)
Stations	909.5	868.6	(40.9)
Track	1,018.0	1,077.3	59.3
Line Structures	343.5	329.5	(14.0)
Communications and Signals	363.9	451.5	87.6
Shops and Yards	202.9	200.2	(2.7)
Power	426.0	313.0	(113.0)
Miscellaneous	231.0	227.6	(3.4)
Total Long Island Rail Road Program	\$3,737.0	\$3,622.9	(\$114.1)

## Table 5 LIRR 2020-2024 Capital Program by Category (\$ in millions)

Numbers may not total due to rounding

-\$87 million

## Long Island Rail Road Rolling Stock Category L-801

The LIRR's Rolling Stock category has been reduced because of the Purchase Dual-Mode Locomotives project being phased to reflect revised timing of unit purchases. The \$87 million reduction is being used to support needs in Network Expansion's Penn Station Access project.

### Long Island Rail Road Stations Category L-802

As the LIRR's ADA improvement efforts have progressed, this plan amendment reflects additional project break-outs for construction at specific station locations. This includes new ADA construction projects for Amityville, Laurelton, Lindenhurst, and Massapequa Park stations. These four stations will be packaged together with three previously split-out stations (St. Albans, Locust Manor, and Copiague) as part of the ADA Package 1 Design-Build contract, which will be making seven LIRR stations ADA accessible. In addition, the LIRR is accelerating design of other station ADA investments and is progressing preliminary design of Forest Hills, Hollis, Douglaston, and Cold Spring Harbor stations.

A project split-out has also been undertaken for Northport Station Improvements (+\$16 million). New projects have also been created for Valley Stream Escalator / Elevator Replacement (+\$18 million) and for Auburndale Elevator Replacement (+\$6 million). A newly created project – Mets-Willets Extraordinary Interior Cleaning (EIC) Relocation (+\$29 million) allows for the relocation of train cleaning function to Ronkonkoma. This relocation effort will support future improvements at the Mets-Willets Point site.

The overall reduction in the Stations category (-\$41 million), reflects the latest needs for project sequencing and external coordination, with funding being re-directed to address needs elsewhere in the program.

The Penn Station Element reflects a newly created project for Penn Station Platform 7 & 8 Stair Replacement and Ceiling Improvements (+\$30 million), which is partly funded with FRA grant funds.

## Long Island Rail Road Track Category L-803

As part of this plan amendment, separate annual track program projects have been broken out to handle the management and administration of the annual track cyclical replacement programs. Separate projects have also been broken out for the Concrete Tie Program (+\$55 million), Right of Way Fencing (+\$5 million), and Track Rehabilitation – West Side Storage Yard (+\$6 million).

Investments in Other Track Improvements increases by \$63 million. A newly renamed project, Jamaica Capacity Improvements (JCI) - Hall Interlocking Expansion, represents the next stage of progressing Jamaica Capacity Improvements by constructing a major track connection at Hall Interlocking, which will greatly improve train routing flexibility east of Jamaica station. This \$150 million project is a long-planned split-out from the Jamaica Capacity Improvements companion project. In addition, a new reserve for track improvements is established in the Other Track Improvements element as part of this amendment. This reserve will support LIRR track needs.

## Long Island Rail Road Line Structures Category L-804

Newly established projects for Webster Avenue (+\$24 million), Cherry Valley Road (+\$23 million), and Wreck Lead Bridge (+\$7 million) have been split out from the Replacement and Rehabilitation of Bridges project which is reduced (-\$75 million) to support this split-outs as well as support needs elsewhere in the LIRR's plan. A new project to replace the west overpass at the Hillside Support Facility (+\$3 million), has also been created. The larger Replacement & Rehabilitation of Bridges and Miscellaneous Bridge Work projects have been reduced (-\$13 million), to address high priority capital needs elsewhere in the program.

Within the Tunnels Element, a newly created project for Small Business Mentoring Program – Tunnels (+\$12 million), supports ongoing hatchway replacements and upgrades within the Atlantic Avenue Tunnels in Brooklyn and Queens.

## Long Island Rail Road Communications and Signals Category L-805

In the Communications element, the budget for Fiber Optic Network has been reduced by \$6 million, with the funding being transferred to the Radio Head-End Replacement project. Otherwise, the Communication project budgets remain unchanged.

The Signals element increases by \$88 million. Within the Signal element, \$32 million in funding has been added to the Babylon Interlocking Renewal project to reflect increased project costs. For the Babylon to Patchogue project, the budget has been reduced (-\$40 million) to address larger project sequencing, resource constraints and overall delivery of signal projects. Additional funds were also identified to support additional FRA requirements for the ongoing Positive Train Control (PTC) implementation. The Signal Replacement and Interlocking Improvements project was increased (+\$55 million) to address LIRR core systemwide PTC needs. In addition, two newly created projects for PTC will address implementation within East Side Access territory (+\$33 million) and new and additional FRA mandates for the LIRR's PTC system (+\$8 million).

-\$3 million

## Long Island Rail Road Shops and Yards Category L-806

The net reduction of \$3 million reflects a re-sequencing of several yard investments and the current schedule status of the yard initiatives, allowing funding to be re-directed to high priority needs elsewhere in the category. Notably, the Fire Protection Improvements project has been increased by \$18 million to address critical fire protection improvements such as sprinklers at the Hillside Support Facility.

## Long Island Rail Road Power Category L-807

Power investments are reduced by \$113 million as the LIRR seeks to address other budgetary needs in the capital program. A newly created project for Jamaica Substation Replacement (+\$48 million) has been broken out from the overall Substation Replacement project, to address substation replacement needs at a location critical to operations, just west of the LIRR's Jamaica station. Funding for the Substation Replacement project has been increased by \$49 million to support ongoing substation replacement work. In support of emerging needs to address transformer replacement, substation feeder replacements, and other components, a newly broken-out project for Substation Component Renewal has been established (+\$10 million).

The budget for the Central Branch Electrification project has been removed from the program (-\$230 million) to address high priority capital needs for Substation Replacements as well as needs in other areas of the LIRR's program such as new projects and higher estimates for scope additions and the impacts of inflation.

## Long Island Rail Road Miscellaneous Category L-809

The Security Camera Replacement Program was reduced by \$1 million, with the funding being transferred to MTA Construction & Development in support of security cameras being installed as part of the Penn Station reconstruction project.

Funding reductions within insurance and administrative projects in the Miscellaneous category (-\$2 million) reflect a shifting of funds to address needs elsewhere in the program.

## Elements Exceeding 10 Percent of the Approved Program

Pursuant to the Public Authorities Law, changes to elements that are greater than 10% require approval of the Capital Program Review Board to be progressed. Table 6 shows those elements of the program that have grown by greater than 10% versus the approved program. CPRB approval is necessary to progress these work elements, to the extent element amounts have increased by greater than 10%.

Element	December 2019 Approved Program	Proposed Program	Change
Penn Station *	\$44.4	\$60.8	\$16.4
Other Track Improvements	335.0	397.7	62.7
Signal Improvements *	288.9	376.5	87.6
Employee Facilities	84.0	102.0	18.0

## Table 6LIRR Elements with Increases Exceeding 10 Percent (\$ in millions)

Numbers may not total due to rounding

Note (\*) these 10% issues were previously identified and approved as part of the December 2021 Letter Amendment, approved by the MTA Board and the CPRB.

# Metro-North Railroad MTA Capital Program 2020-2024



## **Overview – Metro-North Railroad**

The proposed amendment decreases Metro-North's 2020-2024 Capital Program from \$3.558 billion to \$3.457 billion. This overall decrease reflects the transfer of \$127 million to support Network Expansion needs for Penn Station Access and another \$2 million transferred to support MTA-wide capital program administrative initiatives. These reductions are partially offset by the addition of \$28 million from the CTDOT for administrative assets, \$20 million of which was included in the December 2021 Letter Amendment and \$8 million is included in this current amendment.

This full program amendment modifies the originally approved plan to focus scopes on critical needs in line with customer benefits, to reflect recent bids, and to align resources for updated funding, project schedules, track access, and updated procurement processes. Replacement of the Park Avenue Viaduct is being accelerated, with the scope of the current project expanded to include 7 full blocks of the critical right-of-way. Metro-North is also adding a \$40 million project to address state of good repair needs on the Port Jervis branch.

As a result, some planned work is rescheduled into a future capital program. This includes construction of the next set of additional power substations on the Harlem Line, the construction phase of the Centre Avenue overhead bridge replacement in New Rochelle on the New Haven Line, and the construction phase of Park Avenue Tunnel egress improvements. Work which is already underway in this program, such as the phased replacement of the Grand Central Terminal (GCT) train shed and replacement of AC switchgear in aged, deteriorated substations at select locations throughout the system, will also continue in the next capital program.

Table 7 and the discussion that follows summarize the proposed changes to Metro-North's 2020-2024 Core Capital Program by investment category.

Category	December 2019 Approved Program	Proposed Program	Change
Rolling Stock	\$852.7	\$725.7	(\$127.0)
Stations	1,129.2	899.1	(230.1)
Track and Structures	1,021.4	1,226.6	205.2
Communications and Signals	182.2	315.6	133.4
Power	202.2	154.5	(47.7)
Shops and Yards	23.0	12.8	(10.3)
Miscellaneous	147.5	123.3	(24.2)
Total Metro-North Railroad Program	\$3,558.2	\$3,457.4	(\$100.8)

Table 7MNR Proposed 2020-2024 Capital Program by Category (\$ in millions)

Numbers may not total due to rounding

## Metro-North Railroad Rolling Stock Category M-801

The Metro-North investments in this area continue the replacement and modernization of the fleet that supports East of Hudson service on the Hudson and Harlem Lines, including the ongoing purchase to replace the 27-unit dual-mode locomotive fleet, as well as the base order of electric cars to begin replacing the current M-3 fleet which has exceeded its useful life.

The overall reduction to this category is \$127 million. \$87 million has been used to help support needs in Network Expansion's Penn Station Access project. Another \$40 million is also transferred to address state of good repair needs on Metro-North's Port Jervis Line with a new project. The transfers come exclusively from the Locomotive Replacement project which is reduced from \$368 million to \$241 million due to a reduced locomotive purchase in this program. The budget for the M-3 fleet replacement remains unchanged.

#### Metro-North Railroad Stations Category M-802

In the Grand Central Terminal element, three project budgets are being reduced. Investments to address the GCT Trainshed and Park Avenue Tunnel continue, along with the second phase of the GCT fire standpipe system replacement under the GCT Building Component Repairs/Replacements project. The GCT Building Component Repairs/Replacement project is reduced (-\$77 million) and will be moved into the next capital program while Metro-North continues to perform a utility assessment that will inform the future phase. Four additional emergency exits in the Park Avenue Tunnel are removed from this program (-\$149 million) and will be addressed in the next capital program to reflect the updated schedule, currently progressing in design. Finally, construction of priority repairs to the GCT train shed will also be phased to continue work in the next capital program (-\$46 million). All other work, including GCT train shed replacement construction coordinated with JP Morgan Chase at 270 Park Avenue, and the phased improvements to the existing Park Avenue Tunnel Exits continue.

The Outlying Stations element is reduced by \$3 million. The budget for the Upper Hudson and Harlem Line priority repairs project was increased to reflect construction bids (+\$16 million). The Harlem Line Station renewals project was reduced to allow for these priority repairs to proceed (-\$16 million), along with the repairs at North White Plains station broken out into a separate project (-\$12 million). In addition, Metro-North forces are conducting component-level station inspections which will inform the upcoming Twenty-Year Needs, taking the place of the engineering assessment in this capital program (+\$12 million), and the New Fare Payment project budget was adjusted for the addition of CTDOT Administrative Asset funds (+\$8 million). All other Metro-North stations investments in this program remain the same.

In the Parking element, the project budget for the first phase of the multi-phased Brewster Yard improvements project to relocate and construct a new parking facility at Southeast station was increased to reflect updated costs identified during the design phase (+\$46 million). Other Metro-North parking investments in this program remain the same.

## Metro-North Railroad Track and Structures Category M-803

Updated schedules for several projects in the Track element produced a net savings of \$28 million, including the Cyclical Track and Turnout Programs. This was partially offset by an increase in Maintenance of Way equipment purchases (+\$13 million), including the addition of CTDOT Administrative Asset funds (+\$7 million).

In the Structures element, the project to begin replacing the Park Avenue Viaduct was expanded to extend from the north side of E. 115<sup>th</sup> Street to the south side of E. 123<sup>rd</sup> Street, as well as a project to perform interim priority steel repairs to the viaduct (+\$212 million). This is partially offset by several projects updated to reflect timing of implementation, including bridge walkways, undergrade bridge timbers, right-of-way fencing, and the allowance for small business mentoring projects (+\$12 million). Finally, to allow for completion of the overhead bridge freight clearance study, construction of the Centre Avenue bridge in New Rochelle moves to the future 2025-2029 Capital Program (+\$20 million).

Metro-North investments in West of Hudson infrastructure increase by \$40 million to address backlogged state of good repair needs on the Port Jervis Line.

## Metro-North Railroad Communications and Signals Category M-804

The Harmon to Poughkeepsie Signal System project on the Hudson Line was increased to include the remaining cost to complete the express cable installation in phase one as well as revised estimate for phase two signal equipment purchase/installation (+\$107 million). A new project is also added to design and install added PTC safety features as required by the FRA (+\$25 million); the LIRR is also impacted by this FRA requirement. To reflect these priority investments, several cyclical component replacement projects are moved to a future capital program, including Fire Alarm & Suppression Systems, Hot Box & Dragging Equipment, Replace High Cycle Rate Relays, and Track Circuit Reliability (+\$6 million). In addition, several projects were increased to recognize CTDOT Administrative Asset funds, including network infrastructure, radio and Station PA system improvements, and upgrades to the PBX radio equipment (+\$8 million).

## Metro-North Railroad Power Category M-805

Several projects in this category were adjusted based on current estimates to complete, including the Hudson Line Track 1 Electrification and the New Haven Line substation improvements, which were broken into separate projects to replace the Pelham Substation and to rebuild two AC traction powered substations at Harrison and Mamaroneck. The result was an overall increase of \$51 million. To offset this increase, several projects are moved to a future capital program, including the project to rehabilitate various substations throughout the system, third rail component replacement and Harlem Line Power improvements (-\$81 million) and the project to replace motor alternators in signal substations was updated to reflect current design schedule with construction in the next program (-\$17 million).

-\$10 million

## Metro-North Railroad Shops and Yards Category M-806

The Upgrade Automotive Fuel System project was increased to reflect the revised cost to complete (+\$5 million). The project to progress planning and environmental studies for non-Penn Station Access-related New Haven Line Yard improvements is eliminated (-\$15 million).

### Metro-North Railroad Miscellaneous Category M-808

In this category, revised estimates to complete for several systemwide projects produced a net savings of \$22 million, including insurance, engineering support services, small business mentoring program administration, scope development, lead and asbestos abatement and environmental remediation. In addition, MTA-wide program administration and support activities were consolidated, resulting in a reduction of \$2 million. A reserve for future capital Enterprise Asset Management initiatives was also reduced, partially offset by the addition of CTDOT Administrative Assets (+\$3 million). Finally, the project to advance systemwide security initiatives was increased to include CTDOT Administrative Assets (+\$3 million). Both CTDOT Administrative Assets increases have been made since the December 2021 Letter Amendment.

## Elements Exceeding 10 Percent of the Approved Program

Pursuant to the Public Authorities Law, changes to elements that are greater than 10% require approval of the Capital Program Review Board to be progressed. Table 8 shows those elements of the program that have grown by greater than 10% versus the last CPRB-approved program amendment. CPRB approval is necessary to progress these work elements, to the extent element amounts have increased by greater than 10%.

Element	December 2019 Approved Program	Proposed Program	Change
Parking	\$138.4	\$184.0	\$45.6
Structures	572.9	752.8	180.0
West of Hudson Infrastructure	187.0	227.0	40.0
Communications and Signals	182.2	315.6	133.4

## Table 8MNR Elements with Increases Exceeding 10 Percent (\$ in millions)

Numbers may not total due to rounding

# MTA Bus Company MTA Capital Program 2020-2024



## **Overview – MTA Bus Company**

This proposed amendment does not substantially change the MTA Bus Company's overall 2020-2024 Capital Program but reflects a slight decrease reflecting an administrative change. The total value of the revised program is \$870.4 million.

Table 9 and the discussion that follows summarize the proposed changes to the MTA Bus Company's 2020-2024 Capital Program.

## Table 9MTA Bus Company 2020-2024 Capital Program by Category (\$ in millions)

Category	December 2019 Approved Program	Proposed Program	Change
MTA Bus Company Projects	\$870.7	\$870.4	(\$0.3)
Total MTA Bus Program	\$870.7	\$870.4	(\$0.3)
		<b>+</b> 01011	(+0.0)

Numbers may not total due to rounding

## MTA Bus Company Bus Company Projects Category U-803

There is a minor net budget reduction in the MTA Bus Company program. Previously, \$0.3 million was administratively transferred to a new MTA Construction and Development administrative project in the MTA Interagency portion of the capital program.

# **Interagency** MTA Capital Program 2020-2024



### **Overview – MTA Interagency**

The proposed amendment increases the overall value of the Interagency portion of the 2020-2024 Capital Program (Table 10). Two new projects have been broken out within the MTA Planning Initiatives category and are discussed below.

Category	December 2019 Approved Program	Proposed Program	Change
MTA Mentoring Program Administration	\$0.0	\$4.2	\$4.2
MTA Police Department	38.9	38.9	0.0
MTA Planning Initiatives	80.0	80.0	0.0
MTA Construction and Development	0.0	18.8	18.8
Total MTA Interagency Program	\$118.9	\$141.9	\$23.0

## Table 10MTA Interagency 2020-2024 Capital Program by Category (\$ in millions)

Numbers may not total due to rounding

\$4 million

#### MTA Interagency MTA Mentoring Program Administration Category N-800

This category was established with transfers totaling \$4.2 million from MTA agencies' budgets to support the administration of the MTA's Mentoring Program. This administrative project also exists in the ongoing 2015-2019 Capital Program and was similarly established and maintained with transfers from MTA agencies' budgets.

This new capital program category and element were highlighted and approved as part of the December 2021 Letter Amendment to the 2020-2024 Capital Program.

#### MTA Interagency MTA Police Department Category N-810

This category is not changing as a part of this capital program amendment. The overall budget for the MTA Police Department remains at \$38.9 million. Within the program of projects for the MTA PD there have been some adjustments to individual projects. The amendment also recognizes a new project that was split out and awarded to address facility needs at 1825 Park Avenue.

#### MTA Interagency \$0 million MTA Planning Initiatives and Program Support Category N-811

This category is not changing as a part of this capital program amendment. The overall budget of \$80.0 million includes Core Planning Support of \$10.0 million, Corridor Planning Support of \$10.0 million and a provision to support the overall MTA capital program of \$60.0 million.

#### MTA Interagency MTA Construction and Development Category N-813

This category was created with administrative transfers from the CPRB portions of the program. The purpose of this project is to establish and maintain and administrative area to support C&D's activities for program support across the agencies and business units. The initial budget is based on two years' worth of needs. It is expected that additional transfers will be required to maintain this budget for the remaining years of the 2020-2024 Capital Program.

This new capital program category and element were highlighted and approved as part of the December 2021 Letter Amendment to the 2020-2024 Capital Program.

A similar category was established in the MTA Interagency area of the 2015-2019 Capital Program for MTA Bridges and Tunnels.

#### Elements Exceeding 10 Percent of the Approved Program

Pursuant to the Public Authorities Law, changes to elements that are greater than 10% require approval of the Capital Program Review Board to be progressed. Table 11 shows those elements of the program that have grown by greater than 10% versus the last CPRB-approved program amendment. CPRB approval is necessary to progress these work elements, to the extent element amounts have increased by greater than 10%.

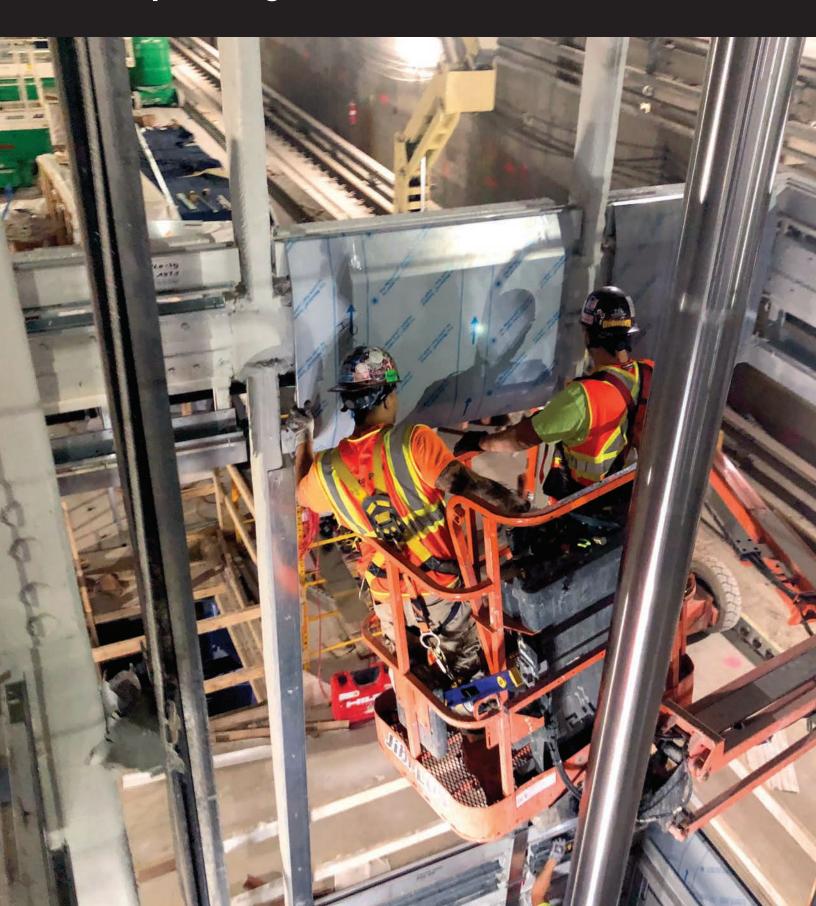
## Table 11 MTA Interagency Elements with Increases Exceeding 10 Percent (\$ in millions)

Element	December 2019 Approved Program	Proposed Program	Change
MTA Mentoring Program Administration *	\$0.0	\$4.2	\$4.2
MTA Construction & Development *	0.0	18.8	18.8

Numbers may not total due to rounding

Note (\*) these 10% issues were previously identified and approved as part of the December 2021 Letter Amendment, approved by the MTA Board and the CPRB.

# **Network Expansion** MTA Capital Program 2020-2024



### **Overview – Network Expansion**

The overall budget for the Network Expansion program increases from \$7.798 billion to \$9.413 billion. The \$1.615 billion increase reflects the increased cost for the Penn Station Access (PSA) project and an associated transfer of surplus funds from the LIRR Expansion Project. In Amendment #1 the Network Expansion program had a net increase of \$818 million as budget needs for PSA were initially addressed. In the current amendment \$797 million is added.

The additional funding for PSA reflects additional scope, as outlined as necessary at the time of the Letter Amendment in 2021. This includes exercising the option on the New Rochelle Yard, a critical operational piece of the project, as well as beginning the purchase of rolling stock equipment that is necessary for Metro-North to provide service into Penn Station.

In addition, a \$100 million budget has been established to support Penn Reconstruction in a new capital program category. The amendment also reflects a reduction to the Miscellaneous/ Administration project and transfers to a new MTA Interagency element and project.

Table 12 and the discussion that follows summarize adjustments to the proposed 2020-2024 Capital Program by investment category.

Category	December 2019 Approved Program	Proposed Program	Change
East Side Access	\$798.2	\$798.2	\$0.0
Second Avenue Subway Phase 2	4,555.0	4,555.0	0.0
Penn Station Access	1,131.1	2,748.7	1,617.6
LIRR Expansion Project	538.5	438.5	(100.0)
Regional Investments	540.5	540.5	0.0
Penn Reconstruction	0.0	100.0	100.0
Miscellaneous/Administration	234.6	231.8	(2.9)
Total MTA Network Expansion Program	\$7,798.0	\$9,412.7	\$1,614.7

## Table 12MTA Network Expansion Proposed 2020-2024 Capital Program by Category (\$ in millions)

Numbers may not total due to rounding

\$0 million

#### Network Expansion East Side Access Category G-809

The \$798.2 million of funding in the 2020-2024 Capital Program for East Side Access remains unchanged. There have been changes to estimates and the timing of commitments within the program, but the overall budget and the December 2022 revenue service forecast remain unchanged.

\$0 million

#### Network Expansion Second Avenue Subway Category G-810

The \$4.555.0 billion of funding in the 2020-2024 Capital Program for phase 2 of Second Avenue Subway remains unchanged.

#### Network Expansion Penn Station Access Category G-811

The \$1.131 billion of funding in the 2020-2024 Capital Program allocated to Penn Station Access increases by \$1.618 billion, for a revised total of \$2.748 billion. The \$1.618 billion increase is a result of bids received, extended project schedule due to limitation on track outages and labor support committed to by Amtrak, and additional Amtrak scope (fourth track, expanded power and communications upgrades), as well as market price increases in labor and construction materials.

Of this increase, \$920.8 million is already approved as part of the December 2021 Letter Amendment. At that time \$500 million reflected anticipated support from Amtrak, \$100 million of surplus budget was transferred from the Network Expansion LIRR Expansion project, and \$321 million was transferred from NYCT, the LIRR and Metro-North.

The remaining \$696.8 million increase reflects the inclusion of previously deferred project costs (portion of contingencies and support costs as well as the delay of the option of the New Rochelle Yard) that were noted in the December 2021 Letter Amendment (\$384.8 million). In addition, \$312.0 million is being added in this amendment as the initial investment to begin the purchase of rolling stock equipment necessary for Metro-North to provide service into Penn Station.

#### Network Expansion LIRR Expansion Project Category G-813

The \$538.5 million of funding in the 2020-2024 Capital Program allocated to the LIRR Expansion Project decreases by \$100 million, for a revised total of \$438.5 million. This decrease reflects the updated estimate to complete and was used as a source for the increased cost of the Penn Station Access project.

The decrease (-\$100 million) was approved as part of the December 2021 Letter Amendment.

\$0 million

#### Network Expansion Regional Investments Category G-814

The \$540.5 million of funding in the 2020-2024 Capital Program for Regional Investments remains unchanged.

#### Network Expansion Penn Reconstruction Category G-815

A new \$100 million project is included in this proposed amendment to advance initial preparations for the Penn Station Reconstruction effort which will be coordinated with multiple partner agencies. The \$100 million represents the budget for a General Engineering Consultant (GEC) design contract to support the State of New York's effort to rebuild Penn Station. The GEC is to perform pre-design, preliminary engineering, stakeholder outreach support and other preparatory work in support of this effort. The funding for this project will be provided by the State of New York.

#### Network Expansion Miscellaneous Category G-816

The \$234.6 million of funding in the 2020-2024 Capital Program allocated to the Miscellaneous/Administration project decreases by \$2.9 million, for a revised total of \$231.8 million. This decrease reflects a budget transfer to a new MTA Interagency element and project to help administer MTA Construction & Development activities needed to administer the capital program.

The decrease was approved as part of the 2020-2024 Capital Program Letter Amendment in December 2021.

#### Elements Exceeding 10 Percent of the Approved Program

Pursuant to the Public Authorities Law, changes to elements that are greater than 10% require approval of the Capital Program Review Board to be progressed. Table 13 shows those elements of the program that have grown by greater than 10% versus the last CPRB-approved program amendment. CPRB approval is necessary to progress these work elements, to the extent element amounts have increased by greater than 10%.

## Table 13 Network Expansion Elements with Increases Exceeding 10 Percent (\$ in millions)

Element	December 2019 Approved Program	Proposed Program	Change
Penn Station Access *	\$1,131.1	\$2,748.7	\$1,617.6
Penn Reconstruction	0.0	100.0	100.0

Numbers may not total due to rounding

Note (\*) this 10% issue was partly identified and approved as part of the December 2021 Letter Amendment, approved by the MTA Board and the CPRB.

## Bridges & Tunnels MTA Capital Program 2020-2024



#### **Overview – Bridges and Tunnels**

With this proposed amendment, B&T's 2020-2024 Capital Program totals \$3.327 billion. Within the B&T program \$503 million was transferred out of the Miscellaneous Category of the Core Program in 2020 to support the establishment of the Central Business District Tolling Program. This funding was previously accounted for in the Miscellaneous category and does not represent an increase in the funds allocated for the program. As the agency reaches the midpoint of the capital planning period for this program, the Authority now benefits from more current information from facility inspections, interagency and regional coordination efforts, as well as more current cost estimates for planned projects. In addition, there is an increased focus within MTA on both pedestrian and bicycle accessibility in alignment with New York law, Chapter 802 of 2021. As a result, the Authority has reprioritized its capital investments within the current program to address current repair/rehabilitation priorities, while also addressing pedestrian and bicycle accessibility improvements, where feasible and cost-effective in alignment with the MTA's Strategic Action Plan for Bike and Pedestrian Accessibility. Table 14 outlines the Authority's updated 2020-2024 needs for its bridges and tunnels by category; details are shown in the following sections.

Category	September 2019 Approved Program *	Proposed Program	Change
Structures	\$1,005.3	\$1,119.5	\$114.2
Roadways & Decks	829.8	808.9	(20.9)
Toll Plazas & Traffic Management	64.6	55.3	(9.3)
Utilities	216.8	195.6	(21.3)
Buildings & Sites	90.9	77.7	(13.2)
Miscellaneous	713.6	173.0	(540.7)
Structural Painting	405.9	393.7	(12.2)
Central Business District Tolling Program	0.0	503.0	503.0
Total Bridges and Tunnels Program	\$3,327.1	\$3,326.7	(\$0.4)

Table 14
Bridges and Tunnels 2020-2024 Capital Program by Category (\$ in millions)

\* B&T's capital program only requires MTA Board approval and was fully approved September 2019.

Numbers may not total due to rounding

The primary focus of this amendment is the reallocation of project budgets across the program to ensure the comprehensive, integrated rehabilitation of the RFK Bridge's suspended span that maximizes bundling efficiencies and minimizes overall customer impacts while also improving resiliency and pedestrian and bicycle accessibility in a cost-effective manner.

Beyond this strategic reallocation at the RFK Bridge, there are three completely new projects being added to the 2020-2024 Capital Program:

- Shared Use Path at the Henry Hudson Bridge (HHB) (HH-07) this project is being added to modify the HHB lower-level bridge sidewalk to improve pedestrian and bicycle accessibility in alignment with MTA's Strategic Action Plan for Bike and Pedestrian Accessibility.
- Electrical Resiliency Preparatory Work at the TNB (TN-58) this project is being added to improve electrical resiliency at the TNB in the near term and to prepare for future electrical upgrades planned at the TNB in the next capital program.
- Reserve for Preliminary Designs for the 2025-2029 Capital Program (AW-29) this reserve is being added to allow for accelerated delivery of projects in the future 2025-2029 capital program via early completion of preliminary designs within the 2020-2024 program.

In addition, two projects represent reallocations of projects between capital programs or reallocations of budgets between capital projects to minimize customer impacts:

- Main Cable and Suspender Rope Investigation at the Throgs Neck Bridge (TNB) (TN-49) – this work was originally planned to be implemented under an ongoing project within the 2015-2019 program. To minimize customer impacts, the work was removed from the ongoing TN-49 project and it is being repackaged into the 2020-2024 program to be bundled with the already planned TN-87 tower work lane closures.
- Structural Painting at the Verrazzano-Narrows Bridge (VNB) (VN-81P) this
  project is a spin-off of the existing VNB Facility-wide Painting Project to take
  advantage of the bundling opportunity provided by the lane closures necessary
  for the planned lower-level deck rehabilitation project in this program. These
  lane closures will provide the painting crews with efficient access to the structural
  steel beneath the upper level of the bridge, thereby minimizing impacts to MTA
  customers.

As mentioned above, seven projects from the existing 2020-2024 Capital Program are proposed to be either cancelled or deferred to reallocate these resources to other needs. These projects are:

• Storage Facility for Spare Parts and Equipment at the RFK Bridge (RK-82) is proposed to be deferred to allow the use of the planned building site area as a contractor staging area for upcoming construction projects at the RFK.

- Install Fire Standpipe System at the RFK Bridge (RK-21): A significant build out of the RFK fire standpipes has already been accomplished under earlier phases of this project. RK-21 in the 2020-2024 program is proposed to be deferred due to the need for an agreement with FDNY on some design parameters as well as coordination with other construction work at the RFK.
- Preliminary Design for New Major Deegan to Bronx Approach Ramp at the RFK (RK-80): Based on further refinements of the RFK Master Plan and the resultant resequencing of projects, this preliminary design project will be deferred until after RK-90 (widening of the Southbound FDR Drive near the RFK Bridge Ramp) has been completed and the resulting benefits to traffic throughput from RK-90 can be evaluated.
- Preliminary Design for Rehabilitation of the Fire Standpipe System at the VNB (VN-94): Repairs to fire standpipe system at the VNB were recently completed under VN32/49 under the 2015-2019 program and additional rehabilitation of the fire standpipe system will be performed as part of the Lower-Level Deck Rehabilitation project, deferring the need for full standpipe system replacement; therefore, the VN-94 preliminary design is being deferred to a later program.
- Preliminary Design for Rehabilitation/Reconstruction of the Rockaway Crossings (CB-24):-Proposed to be deferred based on the success of the prototype for the Structural Rehabilitation of the CBB (CB-30). The CB-24 budgets are proposed to be reallocated to fund CB-30 construction.
- Tunnel Rehabilitation (HC-28) preliminary design: Significant rehabilitation of the tunnel was recently completed in 2018 and no new significant needs have been identified. These funds are proposed to be reallocated to support a new construction phase specifically for Rehabilitation of Tunnel Entrance/Exit – Manhattan (HC-48)
- Deck Rehabilitation and Resurfacing for the Henry Hudson Parkway (HH-14) was deferred to a future program and necessary maintenance resurfacing was performed using operating funds.

In addition to the above-mentioned deferrals, the portion of the VNB Operational Improvement Reserve not previously used for the installation of the VNB safety fence is also proposed to be eliminated to offset other needs. Beyond these changes, several projects within the program have been awarded with good-bid-savings, resulting in more than \$30 million being reallocated to other needs. In addition, the scope of one awarded project was reduced based on further investigation during preliminary design, thereby reducing the required budget for this project (HH-36) by approximately \$70 million.

#### Bridges and Tunnels Structures Category D-801

Structural improvements on Bridges and Tunnels' facilities focus on maintaining the structural integrity of the facilities, while ensuring safety and minimizing customer inconvenience. The projects address either the components of the bridge superstructure, i.e., that part of the bridge above the foundation, such as the suspension system and roadway deck supporting system, or the substructure, i.e., those elements that support the superstructure, such as anchorages, piers, abutments, and the foundations themselves.

The \$114 million increase in this category reflects the increased budget for: 1) RFK Bridge Suspended Span Retrofit (\$349 million overall) which will ensure that the comprehensive, integrated rehabilitation of the RFK'S suspended span addressing not only structural rehabilitation needs but also making significant resiliency and accessibility improvements; and 2) the expansion of the scope for the replacement of the Randall's Island ramps for the RFK Bridge (RK-93) to include necessary reconstruction of the pedestrian walkways at the RFK Manhattan Plaza to facilitate the reconstruction of the vehicular ramps and at the same time improve pedestrian and bicycle accessibility in alignment with the MTA's Strategic Action Plan for Bike and Pedestrian Accessibility (+\$32 million). This increase is partially off-set by a reduction in the expected need for the RFK Bridge Anchorage Rehabilitation (-\$123 million), RFK Structural Repairs/Flag Repairs (-\$39 million), and the Dyckman Street Bridge Abutment Replacement at the Henry Hudson Bridge (-\$70 million). MTA C&D intends to bundle the suspended span retrofit and the anchorage rehabilitation at the RFK Bridge under a single contract to obtain best value for the agency.

The other main contribution to the increase in this category is the inclusion of the Main Cable and Suspender Rope Investigation at the TNB (TN-49), which was eliminated from the TN-49 project in the 2015-2019 program to minimize customer impacts and is being repackaged into the 2020-2024 program to be bundled with the TN-87 tower work already contained within the 2020-2024 program.

#### Bridges and Tunnels Roadways and Decks Category D-802

Deck replacement and rehabilitation work focuses on preserving primary bridge elements, upgrading to modern design standards, and enhancing regional mobility through improved traffic capacity and access to facilities. The rehabilitation of roadways, decks, approaches, and drainage systems range from large-scale resurfacing to total replacement of the roadway deck, or construction of new access ramps.

The \$21 million decrease primarily reflects the reduction in scope (-\$44 million) for the Widening of the Belt Parkway's VNB approach roadway, which was value-engineered to maximize the benefit to the Authority and minimize the cost. Further reductions in this category were obtained by deferring Roadway Replacement on the Henry Hudson Parkway by substituting a maintenance resurfacing (-\$12 million), along with the good bid savings obtained at the RFK Bridge (-\$14 million) for the RFK Deck Rehabilitation and Overlay project.

The decrease within this category is partially offset by the advancement of the construction phase for the widening of the Southbound FDR Drive near the RFK Bridge Ramp (\$28 million) into the current program to improve traffic flow and safety on the RFK Bridge Harlem River Lift Span and facilitate the replacement of the former Manhattan Plaza in a future program. It is also being offset by the addition of a new project to add a Shared Use Path at the HHB (\$16 million), which will improve pedestrian and bicycle accessibility at this crossing in alignment with MTA's Strategic Action Plan for Bike and Pedestrian Accessibility.

-\$9 million

#### Bridges and Tunnels Toll Plazas & Traffic Management/Safety Systems Category D-803

Projects in this category focus on the B&T toll/revenue collection system, through the rehabilitation, replacement, installation, and maintenance of elements such as overhead gantries, toll collection equipment, lighting, utilities, and the toll plazas. Advanced traffic management systems (ATMS) and Intelligent Transportation Systems (ITS) projects encompass electronic messaging, information gathering, processing, communications, and control systems.

The \$9 million net decrease in this category primarily reflects the reallocation of funds from reserves contained within this category to other projects planned within the program to support ITS and SCADA work at the facilities.

#### Bridges and Tunnels Utilities Category D-804

Investments in this category address replacing, rehabilitating, or upgrading mechanical, electrical, and power distribution systems, including tunnel ventilation equipment, and replacing lighting systems.

This category's \$21 million net reduction primarily reflects the deferral of fire standpipe work at the RFK Bridge (-\$32 million) to support other priorities at this facility and good-bid-savings for the elevator work at the Marine Parkway Bridge (MPB) (-\$10 million). These savings are partially offset by the following: 1) The addition of a new project to improve electrical resiliency and prepare for substation upgrades at the TNB in a future capital program (\$6.5 million); and 2) The expansion of the scope for electrical upgrades at the VNB to include the installation of additional lane control signals and replacement of the obsolete SCADA system (\$12 million transferred from the previous category). This expanded scope improves traffic operations and the reliability of the motorist messaging systems, thereby improving traffic safety on the VNB.

-\$13 million

#### Bridges and Tunnels Buildings and Sites Category D-805

Investments in this category address assets such as service buildings, ventilation buildings, and garages, while also removing hazardous materials.

The net reduction of \$13 million in this category can primarily be attributed to the deferral of the project to construct a new Storage Building for Spare Parts and Equipment at the RFK Bridge (-\$19 million) to allow the planned building site area to be utilized as a contractor staging area for upcoming construction at the RFK. This decrease is partially offset by a minor increase required to support the Relocation of the Refueling Station and Service Building Switchgear at the Queens Midtown Tunnel (+\$6 million).

#### Bridges and Tunnels Miscellaneous Category D-806

Projects in this category provide for costs associated with the support and management of the capital program, and include protective liability / insurance coverage, independent engineer services, value engineering services, scope development, New York City traffic enforcement agent support, and the MTA-wide Enterprise Asset Management system.

The net reduction of \$541 million in this category can primarily be attributed to the transfer of \$503 million to support the CBDTP. The balance of the reduction can be attributed to the release of unused budget reserves after the award of the Safety Fence Installation project at the VNB (-\$40 million) in this category. It also reflects the minor reduction in multiple programmatic projects (e.g., TEA Agents, Protective Liability Insurance, etc.) based on actual usage during the first two years of the program (-\$6 million), off-set by the addition of the new project reserve for preliminary designs for the next capital program.

#### Bridges and Tunnels Structural Painting Category D-807

Projects in this category primarily focus on replacement of paint systems for various bridge elements to provide vital corrosion protection and maintain the structural integrity of all facilities.

The \$12 million decrease in this category in large part reflects good bid savings from the previously awarded Bronx-Whitestone Bridge (BWB) Facility-wide Painting Program. These savings were also used to partially offset increases in structural work costs at the same facility.

#### Bridges and Tunnels Central Business District Tolling Program Category C-801

In 2019, legislation was signed into law enabling the Triborough Bridge and Tunnel Authority (TBTA) to implement the nation's first ever Congestion Pricing Program, known as Central Business District Tolling Program. The planning, design, construction, operations, and maintenance of CBDTP is primarily the responsibility of TBTA and requires the involvement of various other regional agencies and stakeholders.

CBDTP anticipates an investment of \$503 million to reduce congestion and enhance mobility in Manhattan's Central Business District (south of, and inclusive of 60<sup>th</sup> Street\*), while also allowing TBTA to collect net revenue sufficient to generate \$15 billion for the MTA Capital Program.

The proposed amendment reflects the previous transfer of \$503 million from the Miscellaneous category of MTA B&T's 2020-2024 Core Capital Program into the 2020-2024 CBDTP category as a stand-alone element.

The CBDTP 2020-2024 Capital Program includes Exploratory Work, Program Management, Design-Build Integration, Customer Service Center Build-Out, Inter-Agency Agreements, and Program Contingency.

CBDTP will be delivered through the Design-Build and Customer Services Center projects and include Infrastructure, Toll Collection and Back Office Systems.

The infrastructure will be designed to mount tolling equipment and to provide electricity and communications to the Toll Collection System, which comprises hardware, software, communications network, and power systems. Both the Infrastructure and Toll Collection System was procured through a single Design Build Operate and Maintain (DBOM) contract.

The Back Office Systems (BOS) will include all back-office software and hardware to manage customer accounts, transactions, and payment processing. The BOS will utilize the existing and recently awarded New York Customer Service Center (NYCSC) contracts. The delivery of CBDTP is being supported and monitored by existing TBTA employees as well as other key employees at other MTA agencies.

The Program Management project includes the Federal Environmental review process, which is ongoing and will consider all applicable regulations, such as the National Environmental Policy Act (NEPA).

# **Project Listings** MTA Capital Program 2020-2024

### **Capital Program Organization**

Capital investments are organized and coded according to an Agency / Category / Element / Project (ACEP) hierarchy:

- Agency: MTA Agency identified with the project budget (e.g., "New York City Transit");
- Category: Agency subset, typically focused on an asset type (e.g., "Stations" or "Track");
- Element: Category subset containing related projects (e.g., "Signal Modernization" element in "Signals & Communications" category);
- Project: Basic unit of the Capital Program, reflecting a specific scope.

For example, the first project listing page is identified in the upper-left corner as Agency "New York City Transit," and in the upper-right corner as Category "Subway Cars." Below that, "T - 801" represents the Agency ("T" for New York City Transit) and the category code ("801" for subway cars). Further down the page, "01 Subway Cars" refers to the element, which in this case happens to have the same name as the parent category. Finally, this element has a single project with identifier code "01" to "New/Upgrade Car Investments." Combining all the codes, the unique ACEP for this project is T8010101.

#### Needs Codes

The focus of each project is indicated by its needs code:

- State of Good Repair (SGR) projects renew assets that have surpassed their useful life, to achieve SGR;
- Normal Replacement (NR) projects renew assets that are nearing the end of their useful life, to preserve SGR;
- System Improvement (SI) projects enhance the network, providing new capabilities and a better customer experience;
- Network Expansion (NE) projects extend the reach of the MTA network, expanding the service offering;
- Various (VAR) projects include multiple needs codes in one project;
- Administrative projects (e.g., insurance, scope development) are not assigned needs codes.

#### Commitments

Columns indicate the share of the project budget that is planned to be committed by element (i.e., started) in each year of the 2020-2024 program period, along with the total for all years.

### SUBWAY CARS T- 801

Commitments (\$ in millions)

ELEM DESC	ENT RIPTION/PROJECT	Needs Code	2020	2021	2022	2023	2024	Total All Years
01	SUBWAY CARS							
01	New/Upgrade Car Investments	NR	.0	.0	.0	.0	1,336.9	1,336.9
02	Purchase 640 B-Division Cars (R211 Option 1)	NR	.0	.0	.0	1,967.1	.0	1,967.1
03	Purchase 437 B-Division Cars (R211 Option 2)	SI	.0	.0	.0	.0	1,355.4	1,355.4
	Element Total 01		\$.0	\$.0	\$.0	\$1,967.1	\$2,692.3	\$4,659.4
(	Category Total 801		\$.0	\$.0	\$.0	\$1,967.1	\$2,692.3	\$4,659.4

### BUSES T- 803

Commitments (\$ in millions)

ELEM DESC	ENT RIPTION/PROJECT	Needs Code	2020	2021	2022	2023	2024	Total All Years
02	BUS REPLACEMENT							
01	Purchase 370 Standard Electric Buses	NR	.0	.0	15.7	416.8	.0	432.6
02	Purchase 155 Standard CNG Buses	NR	.0	.0	.0	.0	124.4	124.4
03	Purchase 90 Articulated Electric Buses	NR	.0	.0	.0	135.8	.0	135.8
04	Purchase 245 Articulated Buses	NR	.0	.0	.0	.0	266.0	266.0
05	Purchase 92 Express Buses	NR	.0	.0	.0	.0	70.2	70.2
06	Purchase 19 Express Buses	SI	.0	14.3	.0	.0	.0	14.3
07	Advanced Tech Bus Development	SI	.0	.0	11.0	.0	7.1	18.1
08	Purchase 126 Hybrid (Nova)	NR	7.1	.2	100.6	.0	.0	107.9
09	Purchase 209 Standard Diesel (Nova)	NR	10.5	.4	130.4	.0	.0	141.2
10	Purchase 84 Hybrid-Electric (New Flyer)	NR	.0	71.2	.0	.0	.0	71.2
11	Purchase 139 Standard Diesel (New Flyer)	NR	2.8	96.0	.0	.0	.0	98.8
13	Purchase 15 Standard Electric Buses	NR	.0	17.3	.0	.0	.0	17.3
14	Bus Purchase Design	SGR	.0	.0	.4	.0	.0	.4
15	Purchase 5 Stand Battery Elec Buses Test/Eval DES	SI	.0	.0	.5	.0	.0	.5
17	AEB Charging Infrastructure - Jamaica	SI	.0	.1	6.6	.0	.0	6.7
30	Electric Bus Charging Infrastructure	SI	.0	.0	.0	167.4	193.3	360.7
. <u> </u>	Element Total 02		\$20.4	\$199.4	\$265.1	\$720.0	\$661.0	\$1,865.9
	Category Total 803		\$20.4	\$199.4	\$265.1	\$720.0	\$661.0	\$1,865.9

## PASSENGER STATIONS

T- 804

Commitments (\$ in millions)

ELEM DESC	ENT RIPTION/PROJECT	Needs Code	2020	2021	2022	2023	2024	Total All Years
04	FARE COLLECTION							
01	New Fare Payment System (NFPS): Add Support Costs	SI	.0	.0	.0	.0	87.6	87.6
02	Turnstiles: Refurbishment (excl. electronics)	NR	.0	.0	.0	.0	3.4	3.4
03	Low Turnstiles: Procurement	SI	.0	1.1	.0	6.6	.0	7.7
04	Wide Turnstiles: Procurement/Installation	SI	.0	3.3	.0	21.7	.0	25.0
05	Additional Work: Fare Collection	SGR	.0	.0	.0	55.4	.0	55.4
06	Purchase 80 Auto Farecard Access Syst Units	SI	.0	.0	2.3	.0	.0	2.3
	Element Total 04		\$.0	\$4.4	\$2.3	\$83.7	\$91.0	\$181.3
01	Replace 17 Hydraulic Elevators	SGR	.0	.0	111.8	.0	.0	111.8
07	STATION ESCALATORS / ELEVATORS							
02	Replace 53 Hydraulic Elevators	NR	.0	.0	152.8	.0	261.3	414.1
03	Replace 27 Escalators	SGR	.0	.0	39.3	105.1	175.2	319.5
04	Replace 29 Escalators	NR	.0	.0	4.8	233.2	114.2	352.3
05	Escalator Design	NR	11.9	3.6	6.3	.0	.0	21.9
06	Elevator Design	NR	.7	4.8	.0	.0	.0	5.5
07	Replace 3 Hydraulic Elevators: 34th BW7 PSNY-33rd	NR	21.2	.2	.3	.0	.0	21.6
08	Replace 5 Hydraulic Elevators at 2 Locations JAM	NR	.0	35.5	4.1	.0	.0	39.6
10	PSLAN Various E&E Locations	SI	.0	1.3	.0	.0	.0	1.3
11	4 Escalators at 2 Locs Dekalb 4Av & 161 St BXC	NR	.0	47.2	2.3	.0	.0	49.5
12	17 Escalators at 6 Locations	NR	.0	.1	.0	.0	.0	.1
13	Replace 8 Escalators: Grand Central - 42 St / FLS	NR	.0	76.7	9.8	.0	.0	86.5
13								

## PASSENGER STATIONS

T- 804

<b>12</b> 01	STATION WORK Station Renewals at 10 ADA Locations							All Years
	Station Renewals at 10 ADA Locations							
01	Station Renewals at 10 ADA Locations							
		SGR	.0	.0	150.8	.0	478.6	629.4
02	Station Renewals at 3 Locations	SGR	.0	.0	.0	.0	195.6	195.6
03	Plat, Mezz, & Interior Stair Comps: ADA Locations	SGR	.0	.0	.0	21.9	99.7	121.6
04	Platform Components: Various Locations	SGR	.0	.0	322.9	.0	232.4	555.3
05	Station Ventilators: Various Locations	SGR	.0	.0	12.3	.7	.0	13.0
06	Small Business Mentoring Program - Stations	SGR	3.0	16.6	72.6	83.6	9.7	185.5
07	Station Painting: Various Locations	SGR	.0	.0	5.0	.0	27.4	32.4
08	Misc. Station Component/Renewal Work	SGR	.0	.0	340.3	106.8	275.5	722.6
09	Livonia Av-Junius St Station Connector	SI	.0	.6	37.8	.0	.0	38.4
10	Water Condition Remedy: Various Locations	SGR	.0	7.0	.3	20.0	.0	27.3
11	Miscellaneous Station Investments	NR	.0	.0	26.0	29.8	.5	56.3
12	Other Station Work	SI	.0	.0	.0	116.2	.0	116.2
13	Station Components Main St FLS	SGR	.0	3.3	.5	.0	.0	3.8
15	Station Components Design	SGR	4.5	11.3	2.9	.0	.0	18.8
16	Platform Components: E Broadway 6AV	SGR	13.9	.5	.1	.0	.0	14.6
19	Leak Remediation 34 St BW7 PSNY-33rd	SGR	2.4	.0	.0	.0	.0	2.4
20	Miscellaneous Stations Work Design	SGR	.7	1.5	1.4	.0	.0	3.6
21	Station Ventilators 8 Av CNR	SGR	.0	2.1	.0	.0	.0	2.1
22	Station Ventilators Ph 18 2 Locs/FUL	SGR	.0	5.2	.0	.0	.0	5.2
23	Station Ventilators Ph 21 - 4 Locs/ Manh & BX	SGR	.0	10.3	.0	.0	.0	10.3
24	Renewal: Borough Hall LEX	SGR	.0	.4	.0	.0	.0	.4
25	Platform Components: 68 St Hunter College LEX	SGR	.0	5.7	.5	.0	.0	6.2
26	Station Ventilators: Grand Central / FLS	SGR	.0	15.7	1.9	.0	.0	17.6
29	Platform Components: 6 Avenue / Canarsie	SGR	.0	32.8	.0	.0	.0	32.8
30	Platform Components: 14th Street / 6 Ave	SGR	.0	5.0	.0	.0	.0	5.0
31	Components: Metropolitan Ave XTN	SGR	.0	3.1	.0	.0	.0	3.1
32	Station Renewal: Woodhaven Boulevard JAM	SGR	.0	16.0	8.4	.0	.0	24.4
35	Station Ventilators Ph 20 - 4 Locations MHTN	SGR	.0	.0	10.5	.0	.0	10.5
36	Grand Central: Widening Stairs U2/U6/Lex	SI	.0	.0	.2	.0	.0	.2
37	Platform Screen Doors Pilot	SI	.0	.0	6.2	168.8	.0	175.0
41	Track Safety Stations Initiatives Reserve	SI	.0	.0	.0	.0	15.0	15.0
53	Stormwater Mitigation: Various Stations	SI	.0	.0	20.0	.0	.0	20.0
	Element Total 12		\$24.5	\$136.9	\$1,020.7	\$547.8	\$1,334.5	\$3,064.4

## PASSENGER STATIONS

T- 804

Commitments (\$ in millions)

ELEM DESC	ENT RIPTION/PROJECT	Needs Code	2020	2021	2022	2023	2024	Total All Years
13	ACCESSIBILITY							
03	ADA: Dyckman St (NB) BW7	SI	16.2	.2	3.8	.0	.0	20.3
04	ADA: 6 Ave / Canarsie (Additional Support)	SI	.0	33.4	.0	.0	.0	33.4
05	ADA: 14 St / Broadway/ 7th Ave (Additional Support)	SI	.0	29.9	.0	.0	.0	29.9
13	ADA: Avenue H (NB) BRT	SI	9.5	.1	14.5	.0	.0	24.2
17	ADA: Grand St CNR	SI	21.8	.7	4.8	.0	.0	27.2
19	ADA: 7th Ave CUL	SI	30.7	1.1	11.2	.0	.0	42.9
27	ADA: Lorimer St CNR	SI	48.9	.7	11.3	.0	.0	60.9
28	ADA: Metropolitan Ave XTN	SI	36.9	1.3	8.8	.0	.0	47.0
29	ADA: Woodhaven Blvd JAM (Additional Support)	SI	.0	20.3	7.2	.0	.0	27.5
30	ADA & Station Improvmnts: Westchstr. Sq/PEL (Add'I)	SI	.0	22.1	10.3	.0	.0	32.4
32	ADA: East 149th St PEL	SI	31.7	.5	6.4	.0	.0	38.7
37	ADA: Beach 67th St FAR	SI	34.6	.3	6.8	.0	.0	41.7
45	ADA: 181 St 8AV	SI	.0	42.5	4.6	.0	.0	47.2
69	PSLAN at Various ADA Locations	SI	.0	3.0	.1	.0	.0	3.1
70	ADA Emergency Elevator 2 Way Radio Comm System	SI	.0	1.3	.0	.0	.0	1.3
DD	ADA Design	SI	23.3	18.1	2.2	.0	.0	43.6
RR	ADA: 55 Stations	SI	.0	.0	1,020.5	1,157.3	2,409.5	4,587.4

The following stations are also identified in the 2020-2024 program and will be broken out as awarded.

Brooklyr	1	Manhatta	an
10	ADA: Myrtle Ave JAM	01	ADA: 42nd St - Bryant Park - 5th Ave 6AV/FLS
11	ADA: Borough Hall LEX	02	ADA: 96th St 8AV
12	ADA: Junius St NLT	06	ADA: 86th St LEX
14	ADA: Sheepshead Bay BRT	07	ADA: Essex St NAS
15	ADA: Kings Hwy SEA	08	ADA: Delancey St 6AV
16	ADA: Norwood Ave JAM	45	ADA: 81 St - Museum of Natural History 8AV
18	ADA: Hoyt - Schermerhorn Sts FUL	51	ADA: 168th St BW7
20	ADA: Avenue I CUL	71	ADA: 137th St BW7
21	ADA: Kings Hwy CUL		
22	ADA: Classon Ave XTN	Bronx	
23	ADA: New Lots Av NLT	31	ADA: Parkchester PEL
24	ADA: Broadway Junction JAM	33	ADA: Mosholu Pkwy JER
25	ADA: Broadway Junction CNR	34	ADA: 242 Street BW7
26	ADA: 36th St 4AV	35	ADA: Brook Av PEL
48	ADA: Church Avenue BRT		
50	ADA: Neptune Ave CUL	Queens	
		36	ADA: Rockaway Blvd LIB
Location	is to be identified	38	ADA: Woodhaven Blvd QBL
42	ADA: 2 Stations to be Identified	39	ADA: Steinway St QBL
43	ADA Advance Planning / Design / Real Estate	40	ADA: Briarwood QBL
44	ADA:19 Additional Stations	41	ADA: Broadway AST

Element Total 13	\$253.6	\$175.5	\$1,112.6	\$1,157.3	\$2,409.5	\$5,108.6
Category Total 804	\$311.9	\$486.2	\$2,467.1	\$2,127.1	\$4,385.6	\$9,777.9

\* Represents values less than \$50,000

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### TRACK T- 805

Commitments

Co	m	mitments
(\$	in	millions)

ELEM DESC	ENT RIPTION/PROJECT	Needs Code	2020	2021	2022	2023	2024	Total All Years
02	MAINLINE TRACK REHABILITATION							
01	Mainline Track Replacement	NR	.0	.0	25.7	255.7	251.1	532.5
02	Continuous Welded Rail	SI	.0	.0	42.9	35.0	35.0	112.9
03	Track Force Account	NR	.0	.0	35.0	35.0	35.0	105.0
04	2020 Mainline Track Repl: Rutgers	NR	17.2	.2	.1	.0	.0	17.5
05	Mainline Track Replacement 2020 / Queens	NR	7.7	.0	.0	.0	.0	7.7
06	Mainline Track Replacement 2020 / 8th Avenue	NR	20.7	.0	.0	.0	.0	20.7
07	Mainline Track Replacement 2020 / Broadway-7th Ave	NR	35.3	.0	.0	.0	.0	35.3
08	Mainline Track Replacement 2020 / Flushing	NR	59.9	.0	.0	.0	.0	59.9
09	Mainline Track Replacement 2020 / Lexington	NR	22.0	.0	.0	.0	.0	22.0
10	Mainline Track Replacement 2020 / Brighton	NR	15.2	.0	.0	.0	.0	15.2
11	Mainline Track Replacement 2020 / Jamaica	NR	28.1	.0	.0	.0	.0	28.1
12	Mainline Track Replacement 2020/ Lenox-White Plain	NR	15.0	.0	.0	.0	.0	15.0
13	Mainline Track Replacement 2020 / 6th Avenue	NR	19.9	.0	.0	.0	.0	19.9
14	Mainline Track Replacement 2020 / Astoria	NR	.0	21.0	.0	.0	.0	21.0
15	Mainline Track Replacement 2020 / Dyre	NR	.0	7.8	.0	.0	.0	7.8
16	Mainline Track Replacement 2020 / Concourse	NR	3.3	.0	.0	.0	.0	3.3
17	Mainline Track Replacement 2020 / 63rd St	NR	.1	.0	8.6	.0	.0	8.7
18	Mainline Track Replacement 2020 / West End	NR	.0	6.7	.0	.0	.0	6.7
19	Mainline Track Replacement 2020 / Rockaway	NR	3.6	.0	.0	.0	.0	3.6
20	Mainline Track Replacement 2020 / 7th Avenue	NR	3.1	.0	.0	.0	.0	3.1
21	Mainline Track Replacement 2020 / Pelham	NR	.0	4.3	.0	.0	.0	4.3
22	Mainline Track - 2020 Support Costs	NR	8.8	1.2	.0	.0	.0	10.0
23	Continuous Welded Rail 2020	NR	17.5	.0	17.5	.0	.0	35.0
24	2020 Track Force Account	NR	35.0	.0	.0	.0	.0	35.0
25	Mainline Track Repl (Direct Fixation)/ Archer	NR	41.2	.0	.0	.0	.0	41.3
26	Mainline Track Replacement 2021 / Myrtle-Wyckoff	NR	2.0	.0	.0	.0	.0	2.0
20	Mainline Track Replacement 2021 / 11th St Cut	NR	.0	.0 19.9	.0	.0	.0	19.9
29	Mainline Track Replacement 2021 / Broadway	NR	.0	5.7	.0	.0	.0 .0	5.7
29 30		NR	.0	15.6	.0	.0	.0 .0	15.6
	Mainline Track Replacement 2021 / Concourse	NR	.0 .0	19.4	.0 7.8			27.2
31	Mainline Track Replacement 2021 / Bway-7th				.0	.0	.0	27.2
32	Mainline Track Replacement 2021 / Jamaica	NR	.0	27.0		.0	.0	
33	Mainline Track Replacement 2021 / Eastern Parkway	NR	.0	.0	8.1	.0	.0	8.1
34 25	Mainline Track Replacement 2021 / Jerome		.0	8.6	.0	.0	.0	8.6
35	Mainline Track Replacement 2021 / Flushing	NR	.0	29.1	.0	.0	.0	29.1
36	Mainline Track Replacement 2021 / Pelham	NR	.0	8.2	.0	.0	.0	8.2
37	Mainline Track Replacement 2021 / Lenox - WPR	NR	.0	8.1	.0	.0	.0	8.1
38	ML Track Replacement 2021 / JAM (Crecent-Cypress)	NR	.0	3.4	.0	.0	.0	3.4
39	ML Track Replacement 2021 / 86th St (Bway-7th Ave)	NR	.0	0.	5.9	.0	.0	5.9
40	Mainline Track - 2021 Support Costs	NR	.0	11.3	2.9	.0	.0	14.2
41	Mainline Track Repl (Direct Fixation)/ Jamaica	NR	.0	55.7	1.9	.0	.0	57.6
42	Mainline Track Repl (Direct Fixation)/ 63rd Street	NR	.0	103.4	4.2	.0	.0	107.5
43	Mainline Track Replacement 2021 / Lexington	NR	.0	19.1	.0	.0	.0	19.1
44	Mainline Track Replacement 2021 / Hunter College	NR	.0	3.9	.1	.0	.0	4.0
45	2021 Track Force Account	NR	.0	35.0	.0	.0	.0	35.0
46	ML Track Replacement: Westchester Square /Pelham	NR	.0	1.2	.0	.0	.0	1.2

\* Represents values less than \$50,000

Numbers may not add due to rounding

2020-2024 Capital Program

### TRACK T- 805

ELEM DESC	ENT RIPTION/PROJECT	Needs Code	2020	2021	2022	2023	2024	Total All Years
02	MAINLINE TRACK REHABILITATION							
47	Mainline Track Replacement 2022 / 6th Ave-Culver	NR	.0	.0	26.0	.0	.0	26.0
48	Mainline Track Replacement 2022 / 8th Avenue	NR	.0	.0	26.3	.0	.0	26.3
49	Mainline Track Replacement 2022 / 7th Avenue	NR	.0	.0	16.0	.0	.0	16.0
50	Mainline Track Replacement 2022 / Brighton	NR	.0	.0	33.0	.0	.0	33.0
51	Mainline Track Replacement 2022 / Support Costs	NR	.0	.0	25.0	.0	.0	25.0
52	Mainline Track Replacement 2022 / Myrtle	NR	.0	.0	9.2	.0	.0	9.2
53	Mainline Track Replacement 2022 / Jamaica	NR	.0	.0	4.0	.0	.0	4.0
54	Mainline Track Replacement 2022 / Astoria	NR	.0	.0	18.6	.0	.0	18.6
55	Mainline Track Replacement 2022 / Concourse	NR	.0	.0	4.0	.0	.0	4.0
56	Mainline Track Replacement 2022 / Broadway-7th Ave	NR	.0	.0	3.1	.0	.0	3.1
57	Mainline Track Replacement 2022 / West End	NR	.0	.0	9.3	.0	.0	9.3
58	Mainline Track Replacement 2022 / Liberty	NR	.0	.0	23.7	.0	.0	23.7
60	Mainline Track Replacement 2022 / Rockaway	NR	.0	.0	9.1	.0	.0	9.1
63	Mainline Track Replacement 2022 / Culver	NR	.0	.0	17.1	.0	.0	17.1
	Element Total 02	:	\$355.5	\$415.9	\$385.2	\$325.7	\$321.1	\$1,803.5

### TRACK T- 805

ELEM DESC	ENT RIPTION/PROJECT	Needs Code	2020	2021	2022	2023	2024	Total All Years
•••								
03			0	0	44 5	04.5	0	00.0
01	Switch Replacement: SigMod Locations	NR NR	.0 .0	.0	44.5	21.5 180.8	0.	66.0 389.4
02 03	Switch Replacement: Various Locations Mainline Track Switches 2020 / Brighton	NR	.0 13.8	.0 .0	.0		208.6 .0	309.4 13.8
03	Mainline Track Switches 2020 / Bighton	NR	4.2	.0 .0	.0 .0	0. 0.	.0 .0	4.2
04	Mainline Track Switches 2020 / Stea Beach Mainline Track Switches 2020 / 8th Avenue	NR	4.2 4.5	.0 .0	.0 .0	.0 .0	.0 .0	4.2
05	Mainline Track Switches 2020 / Sur Avenue Mainline Track Switches 2020 / Queens	NR	4.5 7.5	.0 .0	.0	.0 .0	.0 .0	4.5 7.5
00	Mainline Track Switches 2020 / Queens Mainline Track Switches 2020 / Pelham	NR	7.5 5.5	.0 .0	.0	.0 .0	.0 .0	7.5 5.5
08	Mainline Track Switches 2020 / 1 emain Mainline Track Switches 2020 / 4th Avenue	NR	25.8	.0	.0	.0	.0 .0	25.8
09	Mainline Track Switches 2020 / Lexington	NR	7.3	.0	.0	.0	.0	7.3
10	Mainline Track Switches 2020 / White Plains Rd	NR	21.1	.0	.0	.0	.0	21.1
11	Mainline Track Switches 2020 / Broadway	NR	12.4	.0	.0	.0	.0	12.4
12	Mainline Track Switches 2020 / Rockaway	NR	5.3	.0	.0	.0	.0	5.3
13	Mainline Switches - 2020 Support Costs	NR	5.3	.0	.0	.0	.0	5.3
14	Mainline Track Switches 2021 / 8th Ave	NR	.0	4.4	.0	.0	.0	4.4
16	Mainline Track Switches 2021 / Jerome	NR	.0	3.9	.0	.0	.0	3.9
17	Mainline Track Switches 2021 / Pelham	NR	.0	11.5	.0	.0	.0	11.5
18	Mainline Track Switches 2021 / 6th Ave / Culver	NR	.0	9.0	.0	.0	.0	9.0
19	Mainline Track Switches 2021 / Brighton	NR	.0	3.0	.0	.0	.0	3.0
20	Mainline Track Switches- 2021 Support Costs	NR	.0	12.2	.0	.0	.0	12.2
21	SigMod: Queens Blvd East - Switch Replacement	NR	.0	22.1	.0	.0	.0	22.1
22	Mainline Track Switches 2021 / Support Costs	NR	.0	.0	15.7	.0	.0	15.7
23	Mainline Track Switches 2022 / Canarsie	NR	.0	.0	6.5	.0	.0	6.5
24	Mainline Track Switches 2022 / 8th Avenue	NR	.0	.0	32.6	.0	.0	32.6
25	Mainline Track Switches 2022 / Jamaica	NR	.0	.0	8.2	.0	.0	8.2
26	Mainline Track Switches 2022 / Myrtle	NR	.0	.0	13.5	.0	.0	13.5
27	Mainline Track Switches 2022 / 6th Ave-Culver	NR	.0	.0	17.6	.0	.0	17.6
28	Mainline Track Switches 2022 / Brighton	NR	.0	.0	21.3	.0	.0	21.3
29	Mainline Track Switches 2022 / Broadway	NR	.0	.0	5.0	.0	.0	5.0
	Element Total 03		\$112.9	\$66.1	\$164.9	\$202.3	\$208.6	\$754.7
	Category Total 805	:	\$468.4	\$482.0	\$550.1	\$528.0	\$529.7	\$2,558.2

### LINE EQUIPMENT T- 806

Commitments (\$ in millions)

ELEM DESC	ENT RIPTION/PROJECT	Needs Code	2020	2021	2022	2023	2024	Total All Years
05	LINE EQUIPMENT							
02	Fan Plants: Various Locations	VAR	.0	.0	20.2	.0	111.1	131.3
03	Pump Rooms & Deep Wells: Various Locations	VAR	.0	.0	26.8	60.1	.4	87.3
04	Additional Work: Line Equipment	SGR	.0	.0	.7	27.8	.0	28.5
05	Rehab Deep Wells & Control Upgrade Nostrand Line	SGR	.0	22.2	.1	.0	.0	22.3
06	Rehab Fan Plant Damper Systems - 7 Locations	SGR	.0	33.4	.3	.0	.0	33.8
07	Replace Supervisory Vent Controls - 2 Locs / FLS	SGR	5.7	.1	.0	.0	.0	5.8
08	Pump Rooms & Deep Wells Design	SGR	.0	3.0	.0	.0	.0	3.0
12	Fan Plants Design	SGR	.0	.7	.0	.0	.0	.7
13	Tunnel Lighting Design	SGR	.0	.2	.0	.0	.0	.2
14	Fan Plant SCADA Head-End Upgrade	SI	.0	4.8	14.0	.0	.0	18.8
17	Deep Wells Back-flushing - Lenox Line	SGR	.0	11.3	.4	.0	.0	11.7
18	Tunnel Lighting, 8 Ave	SGR	.0	.0	19.1	.0	.0	19.1
19	Fan Fiber, 8 Ave	SGR	.0	.0	18.2	.0	.0	18.2
	Element Total 05		\$5.7	\$75.7	\$99.8	\$87.8	\$111.5	\$380.6
	Category Total 806		\$5.7	\$75.7	\$99.8	\$87.8	\$111.5	\$380.6

### LINE STRUCTURES T- 807

ELEM	ENT RIPTION/PROJECT	Needs Code	2020	2021	2022	2023	2024	Total All Years
03	LINE STRUCTURE REHABILITATION							
01	Subway Structure Repairs: Various Locations	SGR	.0	.0	66.1	33.5	644.2	743.9
02	Elevated Structure Repairs: Various Locations	VAR	.0	.0	120.0	251.4	142.6	513.9
03	Elevated Structure Painting and Repair	SGR	.0	.0	509.6	.0	784.8	1,294.4
04	Elevated Structure Netting	SGR	.0	.0	.0	.0	50.0	50.0
05	Miscellaneous Line Structure Investments	VAR	.0	.0	5.7	13.0	.0	18.7
07	Small Business Mentoring Program - Line Structures	SGR	.3	1.0	.6	.0	.0	1.9
08	Structural Repairs Steinway Loop QBL	SGR	1.1	.0	.0	.0	.0	1.1
09	Subway Structure Repairs Design	SGR	.2	6.1	.5	.0	.0	6.8
10	Special/Misc. Structures Design	VAR	1.7	.0	5.1	.0	.0	6.8
11	Plenum Plate Demo & Struct. Rehab EPK	SGR	.5	.0	.0	.0	.0	.5
12	LSCRP 8th Ave CNR	SGR	.0	35.0	.0	.0	.0	35.0
13	Line Structures Overcoat Painting Design	SGR	1.5	1.4	4.7	.0	.0	7.5
14	Elevated Structure Repairs Design	SGR	.0	.0	3.3	.0	.0	3.3
15	Overcoat Painting: Culver Line Section 1 Design	SGR	.0	2.7	.1	.0	.0	2.9
16	Overcoat Painting: Culver Line Section 2	SGR	.0	3.0	.1	.0	.0	3.2
18	LSCRP 161 -192 Sts BXC	SGR	.0	120.3	6.7	.0	.0	127.0
19	Vents 161 - 192 Sts BXC	SGR	.0	11.4	.4	.0	.0	11.7
20	Rehab of Emergency Exits / 2021	SGR	.0	7.5	.0	.0	.0	7.5
25	Elevevated Structure Repairs: Over-Land Sections	SGR	.0	.0	.4	.0	.0	.4
26	Jamaica Structural Repairs	SGR	.0	2.2	.0	.0	.0	2.2
27	63 St Structural Repairs	SGR	.0	1.6	.0	.0	.0	1.6
28	Critical Ventilators Between Stations - Constr I/H	SGR	.0	4.8	.0	.0	.0	4.8
29	Line Structure Repairs, 8 Ave	SGR	.0	.0	80.9	.0	.0	80.9
30	LSCRP: Repair of Priority Column Bases/JER&WPR	SGR	.0	7.5	.0	.0	.0	7.5
34	Rehab of Emergency Exits - 2022	SGR	.0	.0	12.5	.0	.0	12.5
39	LSCRP: Defects within Stations (In-House)	SGR	.0	.0	3.3	.0	.0	3.3
40	Stormwater Mitigation: Various Locations	SI	.0	.0	.0	.0	55.0	55.0
41	Demolition of Abandoned Structures WPR	SGR	.0	.0	.8	.0	.0	.8
	Element Total 03		\$5.3	\$204.3	\$820.7	\$297.9	\$1,676.6	\$3,004.8
	Category Total 807		\$5.3	\$204.3	\$820.7	\$297.9	\$1,676.6	\$3,004.8

## **SIGNALS & COMMUNICATION**

T-808

Commitments (\$ in millions)

ESC	IENT RIPTION/PROJECT	Needs Code	2020	2021	2022	2023	2024	Total All Years
03	SIGNAL MODERNIZATION							
01	Interlocking SSI Replacement: Bergen St CUL	NR	.0	.0	.0	.0	47.4	47.4
02	System-Wide Signal Improvements	VAR	.0	.0	.0	.0	160.0	160.0
03	SigMod Equipment for Cars and Locomotives	SI	.0	.0	53.8	61.2	.0	115.0
04	SigMod: 8 Av and 2 Interlockings (Add supp costs)	SGR	.0	.0	.0	.0	143.6	143.6
05	Miscellaneous SigMod Supporting Investments	VAR	.0	.0	.9	5.0	.0	5.9
12	Mechanical Plug-In Timer Relays Replacement	VAR	13.9	.0	.0	.0	.0	13.9
13	CBTC: Flushing Line Equipment Removals	SI	.0	19.6	.2	.0	.0	19.8
14	Single Chip UWB Interoperability Proof of Concept	SI	.0	35.1	.0	.0	.0	35.1
15	Signal Enhancements (TIP)	SI	.0	.4	.0	.0	.0	.4
16	CBTC: GEC Services	SI	.0	.1	18.2	.0	.0	18.3
17	SigMod: Queens Blvd East and 3 Interl Furnish	SGR	.0	76.0	22.8	.0	.0	98.8
18	SigMod: Queens Blvd East and 3 Interl Install	SGR	.0	367.4	44.0	.0	.0	411.4
20	Cable Messenger Brackets/BRI	SGR	.0	.0	3.3	.0	.0	3.3
26	CBTC: Equip 640 R211 Option 1 Cars	SI	.0	.0	14.4	.0	.0	14.4
DD	Signal Modernization Design	VAR	1.8	8.2	.6	.0	.0	10.5
RR	SigMod: 4 Lines and Associated Interlockings	VAR	.0	.0	615.5	2,318.3	1,410.4	4,344.2
The	e following lines are also identified in the 2020-2024 progr	am and will	be broke	n out as award	ed.			
23	SigMod: Crosstown Line and Associated Interlockings							
24 25	SigMod: 6 Ave and 63rd St Lines and Associated Interlo SigMod: Fulton Line and Associated Interlockings	ockings						
	Element Total 03		\$15.7	\$506.8	\$773.7	\$2,384.5	\$1,761.3	\$5,442.1

\* Represents values less than \$50,000

## SIGNALS & COMMUNICATION

T-808

ELEM DESC	ENT RIPTION/PROJECT	Needs Code	2020	2021	2022	2023	2024	Total All Years
06	COMMUNICATION SYSTEMS							
01	Comm Network Upgrades: Various Locations	VAR	.5	.5	1.0	181.8	.0	183.9
02	Phone PBX Switch Upgrades: Various Locations	NR	.0	.0	1.3	6.6	31.8	39.7
03	Fiber Optic Cable Replacement: Various Locations	SGR	3.0	.2	10.0	29.3	.0	42.5
04	Copper Cable Replacement: Various Locations	NR	.0	.0	2.1	7.9	.0	10.0
05	Antenna Cable Replacement: Various Locations	SGR	.0	2.1	1.7	14.4	.0	18.2
06	Subway Radio Equipment Replacement	NR	.0	1.8	9.0	.0	19.1	29.9
07	Station Comm Room Upgrades: Various Locations	SGR	2.2	.0	.0	33.8	.0	36.0
08	Station Information Systems: Various Locations	VAR	2.8	.2	79.9	11.2	314.3	408.3
09	Passenger ID: Various Locations	SI	.0	.0	.0	.0	125.0	125.0
10	Security Technology Upgrades: Various Locations	SI	.0	.0	.0	135.2	.6	135.8
11	Small Business Mentoring Program - Communications	SI	.0	21.3	15.9	23.2	.0	60.4
12	Passenger ID CCTV - 88 Locations	SI	.0	.3	65.7	.0	.0	66.0
13	Comm Room 318A 34 St BW7 PSNY-33rd	SI	1.5	.0	.0	.0	.0	1.5
15	Liftnet Transition to Ethernet; Ph. 2 - Package 1	SI	.0	8.7	.2	.0	.0	8.9
37	Electronic Security: Columbus Circle Complex	SI	14.2	.0	.1	.0	.0	14.3
38	ESS: Wall/Broad Street	SI	.0	8.8	.1	.0	.0	8.9
39	ESS: Canal Street Complex (DES)	SI	.0	.8	1.1	.0	.0	2.0
40	Antenna Cable Concourse Line (IND)	SI	.0	9.4	.4	.0	.0	9.8
41	Asynch Fiber Optic Network Ring F	SI	.0	27.0	.0	.0	.0	27.0
42	PA/CIS Electronics Replacement - Canarsie Line	NR	.0	7.5	.0	.0	.0	7.5
43	Fiber Optic Cable Replacement (2021)	NR	.0	4.4	.2	.0	.0	4.6
44	ESS: Jay St Metro Tech (DES)	SI	.0	.0	.9	.0	.0	.9
46	Laser Intrusion Detection	SI	.0	.0	.0	.0	15.0	15.0
47	Track Intrusion Detection	SI	.0	.0	.0	.0	35.0	35.0
48	Track Safety Communications Initiatives Reserve	SI	.0	.0	.0	.0	10.0	10.0
	Element Total 06		\$24.3	\$92.9	\$189.7	\$443.3	\$550.8	\$1,301.0
	Category Total 808		\$40.0	\$599.7	\$963.4	\$2,827.9	\$2,312.1	\$6,743.1

### TRACTION POWER T- 809

Commitments (\$ in millions)

ELEM DESC	ENT RIPTION/PROJECT	Needs Code	2020	2021	2022	2023	2024	Total All Years
02	SUBSTATIONS							
01	Substation Renewals: Various Locations	SGR	.0	.0	6.9	154.9	145.5	307.3
02	Substation Equipment: Various Locations	SGR	.0	.0	83.2	44.5	.0	127.7
03	Substation Enclosures: Various Locations	SGR	.0	.0	.0	.0	83.1	83.1
04	Power Improvements: Various Locations	SI	.0	.0	78.3	.0	598.9	677.2
07	Negative Cables:4th Ave Line - 36St to Pacific Ph3	SGR	.0	.0	48.5	.0	.0	48.5
08	New 84C Contact Rail - Archer Ave	SGR	5.2	.0	.0	.0	.0	5.2
09	New Negative Side Feeders- Archer Ave	SGR	1.7	.0	.0	.0	.0	1.7
10	Substation Projects- Design	SGR	2.4	19.0	5.2	.0	.0	26.6
11	Jamaica Line: 84C Contact Rail	SGR	.0	3.6	.0	.0	.0	3.6
12	Jamaica Line Negative Side Feeders	SGR	.0	.4	.0	.0	.0	.4
13	63 St 84C Contact Rail	SGR	.0	9.5	.0	.0	.0	9.5
14	63 St Negative Side Feeders	SGR	.0	.9	.0	.0	.0	.9
	Element Total 02		\$9.3	\$33.5	\$222.2	\$199.4	\$827.6	\$1,291.9
04	POWER DISTRIBUTION							
01	Circuit Breaker Houses: Various Locations	VAR	.0	.0	.0	113.7	135.8	249.5
02	Traction Power Cables: Various Locations	SGR	.0	.0	29.3	43.0	.0	72.3
03	Miscellaneous Power Investments	VAR	.0	.0	.0	83.7	22.7	106.3
04	Rehabilitation of 11 CBHs and 1 Enclosure DES	SGR	2.3	.0	.0	.0	.0	2.3
05	Rebuild Ducts: Central Substation	SGR	.0	7.3	.0	.0	.0	7.3
06	Upgrade SCADA BMT	SGR	.0	.0	50.8	.0	.0	50.8
07	Power Distribution Design	SGR	.0	4.8	.1	.0	.0	4.9
08	Rehab CBH Enclosure: CBH 301 Pennsylvania Av / EPK	SGR	.0	1.8	.0	.0	.0	1.8
09	Rehab 4 CBH Enclosures at CIY	SGR	.0	5.6	.0	.0	.0	5.6
I	Element Total 04		\$2.3	\$19.5	\$80.3	\$240.4	\$158.4	\$500.9
(	Category Total 809		\$11.6	\$53.0	\$302.5	\$439.8	\$986.0	\$1,792.8

Numbers may not add due to rounding

### SHOPS & YARDS T- 810

Commitments (\$ in millions)

ELEM DESC	ENT RIPTION/PROJECT	Needs Code	2020	2021	2022	2023	2024	Total All Years	
04	SHOPS & YARDS								
01	Shop Component Repairs: Various Locations	VAR	.0	.0	25.0	82.0	191.1	298.1	
02	Shop Rehab/Reconstruct: Various Locations	SGR	.0	.0	.0	74.0	106.8	180.7	
03	Yard/Non-Revenue Track Replacement	SGR	.0	.0	.0	6.1	2.9	9.0	
04	Yard Switch Replacement	SGR	.0	.0	.0	3.9	4.0	7.9	
05	Yard Fencing/Lighting/Misc. Investments	VAR	.0	.8	.0	13.7	9.9	24.3	
06		Yard Track - 2020	SGR	2.3	.0	.0	.0	.0	2.3
07		SGR	2.8	.0	.0	.0	.0	2.8	
08	2020 Non-Revenue Track Replacement - Times Square	SGR	1.5	.0	.0	.0	.0	1.5	
09	Shop Components Design	SGR	.0	2.9	1.6	.0	.0	4.5	
10	Yard Track & Switch Design	SGR	.0	.0	.0	.0	.0	.0*	
11	Yard Track - 2021	SGR	.0	2.8	.0	.0	.0	2.8	
12	Livonia Maint Shop Phase I	SGR	.0	21.5	.4	.0	.0	22.0	
13	Small Business Mentoring Program - Shops & Yards	SGR	.0	1.9	.6	.0	.0	2.5	
14	Yard Track - 2022 Design	SGR	.0	.0	.0	.0	.0	.0*	
15	Yard Track - 2022	SGR	.0	.0	2.8	.0	.0	2.8	
	Element Total 04		\$6.6	\$29.9	\$30.4	\$179.6	\$314.6	\$561.2	
	Category Total 810		\$6.6	\$29.9	\$30.4	\$179.6	\$314.6	\$561.2	

### DEPOTS T-812

ELEM	ENT RIPTION/PROJECT	Needs Code	2020	2021	2022	2023	2024	Total All Years
03	DEPOT REHAB & RECONSTRUCTION							
01	Depot Component Repairs: Various Locations	VAR	.0	.0	51.0	115.6	2.2	168.8
03	Jamaica Depot Reconstruction	NR	.0	.0	537.5	.0	.0	537.5
05	Roof Topping & Expnsn Joint Rplcmnt at Kingsbridge	NR	.0	5.0	.4	.0	.0	5.4
06	Zero Emission Fleet Transformation Study	SI	.0	.0	6.1	8.5	5.9	20.5
08	Depot Component Repairs: Design	VAR	.0	.0	.5	.0	.0	.5
	Element Total 03		\$.0	\$5.0	\$595.6	\$124.1	\$8.1	\$732.8
04	DEPOT IMPROVEMENTS							
01	Automatic Bus Lane Enforcement (ABLE), Phase 2	SI	.0	.0	28.2	56.8	.0	85.0
02	Miscellaneous Depot Investments	NR	.0	.0	23.0	13.2	.0	36.2
03	Depot Improvements Design	NR	.0	1.1	.0	.0	.0	1.1
04	Chassis Wash Repl at Ulmer Park Bus Depot [SBMP]	SGR	.0	2.1	.1	.0	.0	2.1
	Element Total 04		\$.0	\$3.1	\$51.2	\$70.0	\$.0	\$124.4
(	Category Total 812		\$.0	\$8.1	\$646.8	\$194.1	\$8.1	\$857.2

### SERVICE VEHICLES T- 813

Commitments (\$ in millions)

ELEM	ENT RIPTION/PROJECT	Needs Code	2020	2021	2022	2023	2024	Total All Years
02	SERVICE VEHICLES							
01	Purchase Rubber Tire Vehicles	NR	.0	.0	5.0	.0	35.0	40.0
02	Purchase Various Work Train Cars	VAR	.0	.0	70.2	17.8	73.4	161.4
03	Service Vehicles DES	VAR	1.0	1.1	.0	.0	.0	2.1
04	Purchase 27 Flat Cars	NR	23.0	.0	.0	.0	.0	23.0
I	Element Total 02		\$24.0	\$1.1	\$75.2	\$17.8	\$108.4	\$226.4
(	Category Total 813		\$24.0	\$1.1	\$75.2	\$17.8	\$108.4	\$226.4

### MISC./EMERGENCY T-816

Commitments (\$ in millions)

ELEN DESC	IENT RIPTION/PROJECT	Needs Code	2020	2021	2022	2023	2024	Total All Years
02	MISCELLANEOUS							
01	Capital Revolving Fund		.0	.0	.0	5.0	5.0	10.0
02	Insurance to Support Capital Program		.0	.0	108.8	3.9	17.1	129.8
03	Capital Revolving Fund 2020		5.0	.0	.0	.0	.0	5.0
04	All Agency Liability Insurance		3.0	.0	.0	.0	.0	3.0
05	Owner Controlled Insurance Program		.0	53.1	7.7	.0	.0	60.8
08	Capital Revolving Fund 2021		.0	5.0	.0	.0	.0	5.0
09	Capital Revolving Fund 2022		.0	.0	5.0	.0	.0	5.0
99	Authority-Wide Contingency: 2020-2024		.0	.0	.0	.0	406.3	406.3
	Element Total 02		\$8.0	\$58.1	\$121.5	\$8.9	\$428.3	\$624.8
04	MANAGEMENT INFORMATION SYSTEMS							
01	Enterprise Asset Management (EAM)	NR	.0	9.4	21.4	14.6	.0	45.4
02	Upgrade Information Systems / Data Centers	VAR		1.3	.0	43.6	2.5	47.5
	Element Total 04		\$.0	\$10.7	\$21.4	\$58.3	\$2.5	\$92.9
					<b>,</b>		+	
05	ENGINEERING SERVICES							
01	Utica Ave Corridor Study EIS	SI	.0	.0	.0	.0	5.0	5.0
02	Engineering Services to Support Capital Program		4.5	14.3	54.1	.0	50.0	122.8
03	Scope Development and Design Reserve		1.1	4.0	1.6	.0	323.3	330.0
04	MTA Independent Engineering Consultant		.0	6.0	3.5	7.0	.0	16.5
05	Small Business Mentoring Program Administration		.0	.0	6.0	.0	21.2	27.2
06	GO Support - Traffic Checkers 2022		.0	.0	10.0	.0	.0	10.0
14	GO Support - Traffic Checkers 2020		10.0	.0	.0	.0	.0	10.0
15	GO Support - Traffic Checkers 2021		.0	10.0	.0	.0	.0	10.0
	Element Total 05		\$15.6	\$34.3	\$75.2	\$7.0	\$399.5	\$531.6
06	ENVIRONMENTAL SAFETY							
01	Fire Alarms and Sprinklers: Various Locations	NR	.0	.0	.0	104.1	.0	104.1
03	Environmental Remediation	NR	.0	.0	10.1	.0	.0 11.5	21.6
03	Fire Alarms and Sprinklers DES	NR	.0	.0 1.6	.2	.0	.0	1.8
	Element Total 06		\$.0	\$1.6	\$10.4	\$104.1	\$11.5	\$127.6

#### Metropolitan Transportation Authority

### MISC./EMERGENCY T-816

ELEN	IENT RIPTION/PROJECT	Needs Code	2020	2021	2022	2023	2024	Total All Years
07	EMPLOYEE FACILITIES							
01	Subways Employee Facility Repairs: Various Locs	SGR	.0	.0	23.3	88.6	84.8	196.7
02	Facility Elevator Replacement: Various Locations	NR	.0	.0	.0	34.4	.0	34.4
03	Misc./Administrative Facility Investments	VAR	.0	.0	.0	42.7	41.7	84.4
04	EFR: 8AV - 4 Locations (Uptown)	SGR	2.6	.1	.0	.0	.0	2.7
05	Livingston Plz Elec, Mechanical, Generator Phase B	NR	.0	68.7	.3	.0	.0	69.0
06	EMD Facility: Hoyt-Schermerhorn FUL	SGR	13.7	.1	.1	.0	.0	14.0
07	Employee Facilities Design	VAR	.0	.6	.0	.0	.0	.6
08	EDR Water Remedy and Equipment Replacement	SGR	.0	5.7	.5	.0	.0	6.2
09	EFR Bathroom and Breakroom Ph1	SGR	.0	2.8	.1	.0	.0	3.0
10	EFR Bathroom and Breakroom Ph2	SGR	.0	3.9	.1	.0	.0	4.0
11	EFR Consolidation: 2 Ave / 6Ave	SGR	.0	17.9	.0	.0	.0	17.9
	Element Total 07		\$16.3	\$99.9	\$24.6	\$165.8	\$126.5	\$433.0
	Category Total 816		\$39.9	\$204.5	\$253.0	\$344.1	\$968.4	\$1,809.9
	TOTAL PROGRAM	\$	933.8	\$2,344.0	\$6,474.2	\$9,731.3	\$14,754.2	\$34,237.5

<sup>\*</sup> Represents values less than \$50,000

## Staten Island Railway

## STATEN ISLAND RAILWAY

S- 807

ELEM DESC	ENT RIPTION/PROJECT	Needs Code	2020	2021	2022	2023	2024	Total All Years
01	SIR: MISCELLANEOUS							
01	Station Components: Various Locations	SGR	2.5	.0	1.0	33.1	.0	36.6
02	Track and Switch Replacement	SGR	.0	.0	39.1	47.2	.0	86.3
03	Bridge Structures: Various Locations	VAR	1.3	.0	.0	52.4	.0	53.7
04	Purchase Various Work Train Cars	VAR	.0	.0	6.5	9.7	.0	16.2
05	Purchase Rubber Tire Vehicles	SGR	.0	.0	2.5	2.5	.0	5.0
08	ADA: New Dorp SIR	SI	28.1	.2	6.4	.0	.0	34.7
09	Track and Switch Rehab: SIR Mainline (Add'l Work)	SGR	14.3	36.4	.0	.0	.0	50.7
10	Components: New Dorp SIR	SGR	.0	1.4	.0	.0	.0	1.4
RR	ADA: 2 Stations Reserve (Clifton and Huguenot)	SI	.0	.0	3.6	.0	84.4	88.1
I	Element Total 01		\$46.3	\$38.0	\$59.1	\$144.9	\$84.4	\$372.7
(	Category Total 807		\$46.3	\$38.0	\$59.1	\$144.9	\$84.4	\$372.7
	TOTAL PROGRAM		\$46.3	\$38.0	\$59.1	\$144.9	\$84.4	\$372.7

<sup>\*</sup> Represents values less than \$50,000

## NYCT AGENCY SUMMARY

#### Commitments (\$ in millions)

AGENCY	2020	2021	2022	2023	2024	Total All Years
TOTAL NYCT PROGRAM	\$933.8	\$2,344.0	\$6,474.2	\$9,731.3	\$14,754.2	\$34,237.5
TOTAL SIR PROGRAM	\$46.3	\$38.0	\$59.1	\$144.9	\$84.4	\$372.7
TOTAL	\$980.2	\$2,381.9	\$6,533.3	\$9,876.2	\$14,838.6	\$34,610.2
TOTAL MTA CAPITAL PROGRAM	\$980.2	\$2,381.9	\$6,533.3	\$9,876.2	\$14,838.6	\$34,610.2

### ROLLING STOCK L- 801

Commitments (\$ in millions)

ELEM DESC	ENT RIPTION/PROJECT	Needs Code	2020	2021	2022	2023	2024	Total All Years
04								
01	REVENUE EQUIPMENT							
01	Work Locomotives	NR	.0	.0	.0	30.0	.0	30.0
02	Purchase Dual-Mode Locomotives	NR	.0	.0	.0	47.6	15.4	63.0
03	Purchase Coaches	NR	.0	.0	.0	.0	60.0	60.0
04	Other Rolling Stock	SI	.0	.0	.0	.2	2.0	2.2
I	Element Total 01		\$.0	\$.0	\$.0	\$77.8	\$77.4	\$155.2
(	Category Total 801		\$.0	\$.0	\$.0	\$77.8	\$77.4	\$155.2

### STATIONS L- 802

Commitments (\$ in millions)

SCH	ENT RIPTION/PROJECT	Needs Code	2020	2021	2022	2023	2024	Total All Years
04	STATIONS AND BUILDINGS							
01	Station Renewals: Various Locations	NR	.0	.0	.0	28.2	48.4	76.6
• •	Station Platform Components: Various Locations	VAR	7.2	.0	.0	122.4	66.2	195.9
	Station Building Components: Various Locations	VAR	.0	1.4	1.2	2.6	.0	5.2
	Escalator Replacement	NR	.0	.0	.0	10.0	.0	10.0
	Elevator Replacement	NR	.0	.0	.0	6.4	.0	6.4
	Fare Collection Program	NR	.0	.0	20.6	14.4	.0	35.0
	Community Development Fund Contribution	SI	.0	.0	.0	.0	5.0	5.0
	Small Business Mentoring Program - Stations	NR	.0	.0	2.1	7.5	6.4	16.0
	Force Account Station Work - Various Locations	NR	3.5	2.6	.9	4.3	.0	11.3
	Tactile Strips - Various Locations	NR	5.6	.0	.0	.0	.0	5.6
	Mets-Willets EIC Relocation	SI	11.7	14.3	.2	2.5	.0	28.7
	Northport Station Improvements	NR	.0	.8	10.5	5.1	.0	16.4
	Valley Stream Escalator / Elevator Replacement	NR	.0	.0	17.1	.5	.0	17.6
	Auburndale Elevator Replacement	NR	.0	.0	5.7	.3	.0	5.9
	ADA Accessibility and Components 24 Stations DES	SI	13.8	.7	.3	.0	.0	14.8
	Stations ADA Reserve	SI	.0	.0	.0	294.5	4.7	299.2
	These stations in the STATIONS AND BUILDINGS element a	re identified	in the 2020	)-2024 program f	or ADA and will be			
	ADA: Hollie Station	15						
09 10 11 12 13 14	ADA: Hollis Station ADA: Hunterspoint Avenue Station ADA: Locust Manor Station ADA: Forest Hills Platform Ext. & Elevators ADA: Copiague Station ADA: St Albans Station	15 20 21 22 23	ADA: Ar ADA: La ADA: Ma	/illets Pt Statio nityville Statior urelton Station assapequa Par ndenhurst Stati	k Station			
10 11 12 13	ADA: Hunterspoint Avenue Station ADA: Locust Manor Station ADA: Forest Hills Platform Ext. & Elevators ADA: Copiague Station	20 21 22	ADA: Ar ADA: La ADA: Ma	nityville Statior urelton Station assapequa Par	k Station	\$498.8	\$130.7	\$749.5
10 11 12 13 14	ADA: Hunterspoint Avenue Station ADA: Locust Manor Station ADA: Forest Hills Platform Ext. & Elevators ADA: Copiague Station ADA: St Albans Station	20 21 22	ADA: Ar ADA: La ADA: Ma ADA: Lir	nityville Statior urelton Station assapequa Par ndenhurst Stati	k Station on \$58.5			
10 11 12 13 14 <b>05 P</b>	ADA: Hunterspoint Avenue Station ADA: Locust Manor Station ADA: Forest Hills Platform Ext. & Elevators ADA: Copiague Station ADA: St Albans Station Element Total 04 ARKING rking Rehabilitation & Access Improvements	20 21 22	ADA: Ar ADA: La ADA: Ma ADA: Lir <b>\$41.8</b>	nityville Statior urelton Station assapequa Par ndenhurst Stati \$19.7 .2	k Station on <b>\$58.5</b> .1	15.9	.0	16.6
10 11 12 13 14 <b>)5 P</b>	ADA: Hunterspoint Avenue Station ADA: Locust Manor Station ADA: Forest Hills Platform Ext. & Elevators ADA: Copiague Station ADA: St Albans Station Element Total 04 ARKING	20 21 22 23	ADA: Ar ADA: La ADA: Ma ADA: Lir <b>\$41.8</b>	nityville Statior urelton Station assapequa Par ndenhurst Stati	k Station on \$58.5			
10 11 12 13 14 <b>)5 P</b>	ADA: Hunterspoint Avenue Station ADA: Locust Manor Station ADA: Forest Hills Platform Ext. & Elevators ADA: Copiague Station ADA: St Albans Station Element Total 04 ARKING rking Rehabilitation & Access Improvements	20 21 22 23 VAR	ADA: Ar ADA: La ADA: Ma ADA: Lir <b>\$41.8</b>	nityville Statior urelton Station assapequa Par ndenhurst Stati \$19.7 .2	k Station on <b>\$58.5</b> .1	15.9	.0	16.6
10 11 12 13 14 05 PA 01 Pa 02 Sn	ADA: Hunterspoint Avenue Station ADA: Locust Manor Station ADA: Forest Hills Platform Ext. & Elevators ADA: Copiague Station ADA: St Albans Station Element Total 04 ARKING Irking Rehabilitation & Access Improvements nall Business Mentoring Program - Parking	20 21 22 23 VAR NR	ADA: Ar ADA: La ADA: Ma ADA: Lir <b>\$41.8</b> .4 .5 <b>\$.8</b>	nityville Statior urelton Station assapequa Par idenhurst Stati \$19.7 .2 .2 5.2 \$5.4	k Station on \$58.5 .1 .0 <b>\$.1</b>	15.9 3.8 <b>\$19.8</b>	.0 2.2 <b>\$2.2</b>	16.6 11.7 <b>\$28.3</b>
10 11 12 13 14 05 PA 01 Pa 02 Sn 06 F 01 Pe	ADA: Hunterspoint Avenue Station ADA: Locust Manor Station ADA: Forest Hills Platform Ext. & Elevators ADA: Copiague Station ADA: St Albans Station Element Total 04 ARKING rking Rehabilitation & Access Improvements nall Business Mentoring Program - Parking Element Total 05 PENN STATION nn Station HVAC, Platform, & Building Improvement	20 21 22 23 VAR NR	ADA: Ar ADA: La ADA: Ma ADA: Lir <b>\$41.8</b> .4 .5 <b>\$.8</b> .0	nityville Statior urelton Station assapequa Par idenhurst Stati \$19.7 .2 .2 5.2 \$5.4 .0	k Station on \$58.5 .1 .0 \$.1 .0	15.9 3.8 <b>\$19.8</b> 7.5	.0 2.2 <b>\$2.2</b> .0	16.6 11.7 <b>\$28.3</b> 7.5
10 11 12 13 14 05 PA 01 Pa 02 Sn 06 F 01 Pe 02 Ra	ADA: Hunterspoint Avenue Station ADA: Locust Manor Station ADA: Forest Hills Platform Ext. & Elevators ADA: Copiague Station ADA: St Albans Station Element Total 04 ARKING Irking Rehabilitation & Access Improvements nall Business Mentoring Program - Parking Element Total 05 PENN STATION nn Station HVAC, Platform, & Building Improvement dio Antenna Improvements	20 21 22 23 VAR NR SGR NR	ADA: Ar ADA: La ADA: Ma ADA: Lir <b>\$41.8</b> .4 .5 <b>\$.8</b> .0 .0 .0	nityville Statior urelton Station assapequa Par idenhurst Stati \$19.7 .2 5.2 \$5.4 .0 .0	k Station on \$58.5 .1 .0 <b>\$.1</b> .0 .0	15.9 3.8 <b>\$19.8</b> 7.5 5.0	.0 2.2 <b>\$2.2</b> .0 .0	16.6 11.7 <b>\$28.3</b> 7.5 5.0
10 11 12 13 14 05 P/ 01 Pa 02 Sn 06 F 01 Pe 02 Ra 03 PS	ADA: Hunterspoint Avenue Station ADA: Locust Manor Station ADA: Forest Hills Platform Ext. & Elevators ADA: Copiague Station ADA: St Albans Station Element Total 04 ARKING Irking Rehabilitation & Access Improvements nall Business Mentoring Program - Parking Element Total 05 PENN STATION Inn Station HVAC, Platform, & Building Improvement dio Antenna Improvements NY Platform 7 & 8 Stairs Replacement	20 21 22 23 VAR NR SGR NR SGR	ADA: Ar ADA: La ADA: Ma ADA: Lir <b>\$41.8</b> .4 .5 <b>\$.8</b> .0 .0 .0 .7	nityville Statior urelton Station assapequa Par idenhurst Stati \$19.7 .2 5.2 \$5.4 .0 .0 3.8	k Station on \$58.5 .1 .0 <b>\$.1</b> .0 .0 .0 .1	15.9 3.8 <b>\$19.8</b> 7.5 5.0 24.9	.0 2.2 <b>\$2.2</b> .0 .0 .0	16.6 11.7 <b>\$28.3</b> 7.5 5.0 29.5
10 11 12 13 14 05 P/ 01 Pa 02 Sn 06 F 01 Pe 02 Ra 03 PS	ADA: Hunterspoint Avenue Station ADA: Locust Manor Station ADA: Forest Hills Platform Ext. & Elevators ADA: Copiague Station ADA: St Albans Station Element Total 04 ARKING Irking Rehabilitation & Access Improvements nall Business Mentoring Program - Parking Element Total 05 PENN STATION nn Station HVAC, Platform, & Building Improvement dio Antenna Improvements	20 21 22 23 VAR NR SGR NR	ADA: Ar ADA: La ADA: Ma ADA: Lir <b>\$41.8</b> .4 .5 <b>\$.8</b> .0 .0 .0	nityville Statior urelton Station assapequa Par idenhurst Stati \$19.7 .2 5.2 \$5.4 .0 .0	k Station on \$58.5 .1 .0 <b>\$.1</b> .0 .0	15.9 3.8 <b>\$19.8</b> 7.5 5.0	.0 2.2 <b>\$2.2</b> .0 .0	16.6 11.7 <b>\$28.3</b> 7.5 5.0
10 11 12 13 14 05 P/ 01 Pa 02 Sn 06 F 01 Pe 02 Ra 03 PS	ADA: Hunterspoint Avenue Station ADA: Locust Manor Station ADA: Forest Hills Platform Ext. & Elevators ADA: Copiague Station ADA: St Albans Station Element Total 04 ARKING Irking Rehabilitation & Access Improvements nall Business Mentoring Program - Parking Element Total 05 PENN STATION Inn Station HVAC, Platform, & Building Improvement dio Antenna Improvements NY Platform 7 & 8 Stairs Replacement	20 21 22 23 VAR NR SGR NR SGR	ADA: Ar ADA: La ADA: Ma ADA: Lir <b>\$41.8</b> .4 .5 <b>\$.8</b> .0 .0 .0 .7	nityville Statior urelton Station assapequa Par idenhurst Stati \$19.7 .2 5.2 \$5.4 .0 .0 3.8	k Station on \$58.5 .1 .0 <b>\$.1</b> .0 .0 .0 .1	15.9 3.8 <b>\$19.8</b> 7.5 5.0 24.9	.0 2.2 <b>\$2.2</b> .0 .0 .0	16.6 11.7 <b>\$28.3</b> 7.5 5.0 29.5
10 11 12 13 14 05 P/ 005 P/ 001 Pa 002 Sn 001 Pa 002 Ra 003 PS 004 PS 004 PS 007 (	ADA: Hunterspoint Avenue Station ADA: Locust Manor Station ADA: Forest Hills Platform Ext. & Elevators ADA: Copiague Station ADA: St Albans Station Element Total 04 ARKING rking Rehabilitation & Access Improvements mall Business Mentoring Program - Parking Element Total 05 PENN STATION nn Station HVAC, Platform, & Building Improvement dio Antenna Improvements NY Platform 7 & 8 Stairs Replacement NY-33	20 21 22 23 VAR NR SGR NR SGR	ADA: Ar ADA: La ADA: Ma ADA: Lir <b>\$41.8</b> .4 .5 <b>\$.8</b> .0 .0 .0 .7 3.6	nityville Statior urelton Station assapequa Par indenhurst Stati \$19.7 .2 5.2 \$5.4 .0 .0 .0 3.8 8.8	k Station on \$58.5 .1 .0 \$.1 .0 .0 .1 .3	15.9 3.8 <b>\$19.8</b> 7.5 5.0 24.9 6.1	.0 2.2 <b>\$2.2</b> .0 .0 .0 .0	16.6 11.7 <b>\$28.3</b> 7.5 5.0 29.5 18.8
10 11 12 13 14 05 P/ 005 P/ 001 Pa 002 Sn 006 F 002 Ra 003 PS 004 PS 004 PS 007 (	ADA: Hunterspoint Avenue Station ADA: Locust Manor Station ADA: Forest Hills Platform Ext. & Elevators ADA: Copiague Station ADA: St Albans Station Element Total 04 ARKING rking Rehabilitation & Access Improvements mall Business Mentoring Program - Parking Element Total 05 PENN STATION nn Station HVAC, Platform, & Building Improvement dio Antenna Improvements NY Platform 7 & 8 Stairs Replacement NY-33 Element Total 06 GRAND CENTRAL TERMINAL	20 21 22 23 VAR NR SGR SGR SI	ADA: Ar ADA: La ADA: Lir <b>\$41.8</b> .4 .5 <b>\$41.8</b> .0 .0 .0 .7 3.6 <b>\$4.3</b>	nityville Statior urelton Station assapequa Par adenhurst Stati \$19.7 .2 5.2 \$5.4 .0 .0 .0 3.8 8.8 \$12.6	k Station on \$58.5 .1 .0 \$.1 .0 .0 .0 .1 .3 \$.4	15.9 3.8 <b>\$19.8</b> 7.5 5.0 24.9 6.1 <b>\$43.5</b>	.0 2.2 <b>\$2.2</b> .0 .0 .0 .0 .0 <b>\$.0</b>	16.6 11.7 <b>\$28.3</b> 7.5 5.0 29.5 18.8 <b>\$60.8</b>

### TRACK L- 803

ELEM DESC	ENT RIPTION/PROJECT	Needs Code	2020	2021	2022	2023	2024	Total All Years
01	ANNUAL TRACK REHAB PROGRAM							
01	Construction Equipment & Geometry Cars	SGR	6.2	1.1	46.2	6.5	.0	60.0
02	Various Right of Way Projects	VAR	4.0	.0	.0	6.0	.0	10.0
03	Yard Track Rehabilitation	VAR	.0	1.5	.0	20.8	.0	22.3
05	2020 - Annual Track Program	NR	128.1	33.8	19.3	49.5	.0	230.7
06	2021- Annual Track Program	NR	.0	60.0	.0	10.0	.0	70.0
07	2022- Annual Track Program	NR	.0	.0	82.4	.0	.0	82.4
08	2023- Annual Track Program	NR	.0	.0	.0	60.0	.0	60.0
09	2024- Annual Track Program	NR	.0	.0	.0	.0	78.5	78.5
10	Concrete Tie Program	NR	53.7	.0	.0	1.3	.0	55.0
11	Right of Way Fencing	NR	4.7	.0	.0	.3	.0	5.0
12	Track Rehab- West Side Storage Yard	NR	5.0	.7	.0	.0	.0	5.7
I	Element Total 01	ę	5201.7	\$97.1	\$147.9	\$154.4	\$78.5	\$679.6
04	OTHER TRACK IMPROVEMENTS							
01	Amtrak Territory Investments	NR	11.3	.0	.5	20.8	67.4	100.0
02	Jamaica Capacity Improvements - Reserves	SI	.0	.0	.0	45.0	40.0	85.0
03	JCI - Hall Interlocking Expansion	SI	.0	.0	75.0	75.0	.0	150.0
04	Other Track Improvements - Reserve	NR	.0	.0	.0	31.0	31.7	62.7
I	Element Total 04		\$11.3	\$.0	\$75.5	\$171.8	\$139.1	\$397.7
(	Category Total 803	9	\$213.0	\$97.1	\$223.4	\$326.2	\$217.6	\$1,077.3

# LINE STRUCTURES

ELEM DESC	ENT RIPTION/PROJECT	Needs Code	2020	2021	2022	2023	2024	Total All Years
01	BRIDGES							
01	Painting, Drainage, & Waterproofing of Bridges	SGR	.0	.0	.0	35.3	.0	35.3
02	Replacement & Rehabilitation of Bridges	SGR	.0	.0	.0	51.5	.0	51.5
03	Miscellaneous Bridge Work	VAR	.0	.0	.0	70.2	.0	70.2
04	Small Business Mentoring Program - Bridges	NR	.2	.0	3.2	23.8	6.8	33.9
05	Wreck Lead Bridge Rehab	NR	6.1	.4	.0	.0	.0	6.5
06	Bridge Design	VAR	.0	.9	.0	.0	.0	.9
07	Bridge Repl & Rehab: Cherry Valley Rd	SGR	.0	21.4	1.0	.0	.0	22.5
08	Hillside Facility West Overpass Replacement	NR	.0	.0	3.3	.0	.0	3.3
09	Bridge Repl & Rehab: Webster Ave.	SGR	.0	.0	.0	23.8	.0	23.8
	Element Total 01		\$6.3	\$22.7	\$7.5	\$204.7	\$6.8	\$247.9
02	TUNNELS							
01	Atlantic Avenue Tunnel Structural Work	SGR	.0	.0	.0	44.3	.0	44.3
02	Tunnel Replacements & Upgrades	NR	.0	.0	.0	5.0	.0	5.0
03	East River Tunnel Fire and Life Safety	NR	.0	.0	.0	.0	20.0	20.0
04	Small Business Mentoring Program - Tunnels	VAR	1.5	4.2	6.6	.0	.0	12.3
	Element Total 02		\$1.5	\$4.2	\$6.6	\$49.3	\$20.0	\$81.6
	Category Total 804		\$7.8	\$26.9	\$14.1	\$254.0	\$26.8	\$329.5

### **COMMUNICATIONS & SIGNALS**

L- 805

Commitments (\$ in millions)

ELEM DESC	ENT RIPTION/PROJECT	Needs Code	2020	2021	2022	2023	2024	Total All Years
01	COMMUNICATIONS IMPROVEMENTS							
01	Comm. Pole Line	SGR	4.2	.0	.0	3.8	.0	8.0
02	Comm Component Replacement	SGR	1.6	.0	.0	6.4	.0	8.0
03	Fiber Optic Network	NR	6.0	.0	.0	8.0	.0	14.0
04	Station Technology Upgrades	SI	.0	.0	.0	.0	3.0	3.0
05	Portable Mobile Radio Replacement	NR	.0	.0	.0	1.0	.0	1.0
06	Radio Head-End Replacement	NR	.0	2.7	.0	13.4	.0	16.0
07	Improved Radio Coverage Initiative/FCC Mandates	SI	.0	.0	.0	5.0	.0	5.0
08	Help Points	SI	2.0	.0	.0	3.0	.0	5.0
09	Implement New Communications Systems Technology	SI	.0	.0	.0	.0	5.0	5.0
10	Grade Crossing Cameras	SI	.8	.0	.0	4.2	.0	5.0
11	Customer Information Technology Upgrade	SI	1.0	.0	.0	4.0	.0	5.0
	Element Total 01		\$15.6	\$2.7	\$.0	\$48.8	\$8.0	\$75.0
02	SIGNAL IMPROVEMENTS							
01	Babylon Interlocking Renewal	SGR	.0	1.0	61.8	30.1	.0	92.9
02	Hunt to Post	SGR	.0	.0	.0	.0	67.6	67.6
03	Babylon to Patchogue	SGR	.0	.0	.0	10.0	.0	10.0
04	Centralized Train Control	SI	.0	10.0	.0	.0	40.0	50.0
05	Signal Replacement and Interlocking Improvements	VAR	33.6	33.6	16.5	31.3	.0	115.0
07	Positive Train Control (ESA)	SI	.0	.0	29.9	3.1	.0	33.0
08	Positive Train Control (FRA Mandates)	SI	.0	.0	.0	8.0	.0	8.0
	Element Total 02		\$33.6	\$44.6	\$108.2	\$82.5	\$107.6	\$376.5
	Category Total 805		\$49.2	\$47.2	\$108.2	\$131.3	\$115.6	\$451.5

\* Represents values less than \$50,000

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### SHOPS AND YARDS L- 806

Commitments (\$ in millions)

	ENT RIPTION/PROJECT	Needs Code	2020	2021	2022	2023	2024	Total All Years
01	SHOPS AND YARDS							
01	Rolling Stock Support Shop Equipment	NR	.2	.5	9.0	32.2	.0	41.9
02	Shop Improvements at Various Locations	VAR	.0	.2	1.7	12.2	.0	14.1
03	Yard Improvements at Various Locations	VAR	.5	.0	.0	34.1	.0	34.6
04	Small Business Mentoring Program - Shops & Yards	NR	.0	.0	.0	1.4	1.0	2.4
05	Mid Suffolk Yard Phase 2	SI	5.3	.0	.0	.0	.0	5.3
	Element Total 01		\$6.0	\$.7	\$10.7	\$79.9	\$1.0	\$98.2
04	EMPLOYEE FACILITIES							
01	Rehabilitation of Employee Facilities - Various Lo	VAR	1.0	2.5	3.4	23.0	11.1	41.1
02	Consolidation of Employee Facilities	SI	.0	.0	.0	3.9	.0	3.9
03	Fire Protection Improvements	NR	.0	.0	.0	25.0	.0	25.0
04	New Signal Training Facility	SI	.0	.0	.0	2.0	.0	2.0
05	Small Business Mentoring Program - Emp. Facs.	NR	.0	7.8	4.9	3.0	7.3	23.0
06	Rehabilitation of Employee Facilities - Bethpage	NR	.0	.9	.1	6.0	.0	7.0
	Element Total 04		\$1.0	\$11.2	\$8.3	\$62.9	\$18.5	\$102.0
	Category Total 806		\$7.0	\$11.9	\$19.0	\$142.8	\$19.5	\$200.2

### POWER L- 807

ELEM	ENT RIPTION/PROJECT	Needs Code	2020	2021	2022	2023	2024	Total All Years
01	POWER							
01	Substation Replacements	SGR	1.3	.0	15.8	111.9	.0	129.0
02	Lighting Improvements	SGR	11.6	.0	.0	6.4	.0	18.0
03	Power Component Repairs and Replacements	VAR	12.0	.0	.0	16.4	36.4	64.7
04	3rd Rail Upgrades	NR	13.3	.0	.0	22.5	7.2	43.0
06	Substation Component Renewal	SI	.0	7.9	2.4	.0	.0	10.3
07	Jamaica Substation	SGR	.0	.0	33.2	14.8	.0	48.0
I	Element Total 01		\$38.1	\$7.9	\$51.4	\$172.0	\$43.5	\$313.0
(	Category Total 807		\$38.1	\$7.9	\$51.4	\$172.0	\$43.5	\$313.0

<sup>\*</sup> Represents values less than \$50,000

### MISCELLANEOUS L- 809

ELEM	ENT RIPTION/PROJECT	Needs Code	2020	2021	2022	2023	2024	Total All Years
04	MISCELLANEOUS							
01	Security Camera Replacement Program	NR	.0	1.6	1.5	.5	.0	3.6
02	Access Control at Stations, Platforms, Yards & Fac	NR	.0	.4	1.4	.8	2.4	5.0
03	Perimeter Physical Hardening Project	SI	3.0	.0	.0	.0	.0	3.0
04	Equipment Upgrades for Security Command Centers	NR	.0	.0	.3	.9	1.8	3.0
05	Atlantic Avenue Tunnels Security Improvements	SI	.0	.0	.0	.0	4.0	4.0
06	Centralized Video Storage/Management Solution	SI	.0	.0	1.8	.8	2.5	5.0
07	Physical Assessment of all LIRR Right of Way	SI	.0	.0	.0	3.5	.0	3.5
08	Environmental Remediation	NR	.0	.0	.0	2.0	.0	2.0
09	EAM Development	SI	.0	.0	.0	.0	8.0	8.0
10	Program Administration		23.7	25.0	14.3	26.0	49.0	138.0
11	Program Development		.0	.0	.0	5.0	5.0	10.0
12	Insurance		.3	.0	.0	2.6	4.7	7.6
13	Independent Engineer		.0	2.5	.0	2.7	5.4	10.5
14	SBDP Administration		.0	.0	.0	2.8	5.6	8.4
15	Owner Controlled Insurance Program (OCIP)		.0	5.2	.0	10.8	.0	16.0
17	Engineering Services		.0	.1	.0	.0	.0	.1
	Element Total 04		\$27.0	\$34.7	\$19.3	\$58.4	\$88.2	\$227.6
	Category Total 809		\$27.0	\$34.7	\$19.3	\$58.4	\$88.2	\$227.6
<u> </u>	TOTAL PROGRAM	:	\$389.4	\$264.8	\$512.1	\$1,585.0	\$871.6	\$3,622.9

<sup>\*</sup> Represents values less than \$50,000

### ROLLING STOCK M- 801

Commitments (\$ in millions)

ELEM DESC	ENT RIPTION/PROJECT	Needs Code	2020	2021	2022	2023	2024	Total All Years
01	REVENUE EQUIPMENT							
01	M-3 Replacement	NR	.0	.0	.0	484.6	.0	484.6
02	Locomotive Replacement	NR	.0	121.9	.0	111.6	7.6	241.1
	Element Total 01		\$.0	\$121.9	\$.0	\$596.2	\$7.6	\$725.7
(	Category Total 801		\$.0	\$121.9	\$.0	\$596.2	\$7.6	\$725.7

### STATIONS M- 802

ELEN DESC	ENT RIPTION/PROJECT	Needs Code	2020	2021	2022	2023	2024	Total All Years
01	GRAND CENTRAL TERMINAL							
01	GCT Trainshed	SGR	.0	200.8	.0	11.8	90.0	302.6
02	Park Avenue Tunnel Improvements	SGR		.0	11.0	.0	.0	11.0
03	GCT Building Component Repairs/Replacements	SGR	.3	.9	55.3	.0	.0	56.5
04	Small Business Mentoring Program - GCT	SGR	.0	.0	.0	4.4	4.0	8.4
	Element Total 01		\$.3	\$201.7	\$66.3	\$16.2	\$94.0	\$378.5
02	OUTLYING STATIONS							
01	Upper H&H Stations Priority Repairs	NR	.0	.0	37.3	.0	.0	37.3
02	Harlem Line Station Renewals	SGR	.1	.0	7.1	85.9	72.4	165.4
03	Harlem ADA Improvements	SI	.0	.0	.0	.0	52.3	52.3
05	Ludlow Station Accessibility Improvements	NR	.0	.0	.0	.0	11.0	11.0
06	New Fare Payment Equipment	NR	.0	.0	33.4	.0	.0	33.4
07	Small Business Mentoring Program - Stations	SGR	.0	4.1	.0	10.0	10.9	25.0
08	North White Plains Platform Repair	SGR	.0	12.1	.0	.0	.0	12.1
	Element Total 02		\$.1	\$16.2	\$77.9	\$95.9	\$146.6	\$336.6
03	PARKING							
01	Brewster Yard Improvements-SE Parking	NR	.0	.0	.0	100.0	75.0	175.0
02	Small Business Mentoring Program - Parking	SGR	.0	4.5	.0	.0	4.5	9.0
	Element Total 03		\$.0	\$4.5	\$.0	\$100.0	\$79.5	\$184.0
	Category Total 802		\$.4	\$222.4	\$144.2	\$212.1	\$320.1	\$899.1

<sup>\*</sup> Represents values less than \$50,000

## **TRACK & STRUCTURES**

M- 803

ELEM DESC	ENT RIPTION/PROJECT	Needs Code	2020	2021	2022	2023	2024	Total All Years
01	TRACK							
01	Cyclical Track Program	NR	.0	.0	.0	24.5	38.5	63.0
03	Turnouts - Mainline, GCT, & Yards	NR	10.4	15.5	8.7	17.9	22.6	75.0
04	Rock Slope Remediation - East of Hudson	SGR	.0	6.1	1.6	.0	7.4	15.0
05	Rebuild Marble Hill Retaining Wall - Phase 1	NR	.0	1.8	.0	.0	13.2	15.0
06	RoW Drainage Improvements	NR	.0	.0	.0	.0	9.0	9.0
07	MoW Equipment	NR	.0	4.1	2.6	11.4	11.4	29.5
08	2020 Cyclical Track Program	NR	19.3	.0	.0	.0	.0	19.3
10	2021 Cyclical Track Program	NR	.0	21.0	.0	.0	.0	21.0
	Element Total 01		\$29.6	\$48.4	\$12.8	\$53.8	\$102.1	\$246.8
02	STRUCTURES							
01	Park Avenue Viaduct Replacement	SGR	1.3	61.8	525.9	0	.0	589.0
02	Undergrade Bridge Program - EoH	SGR		.0	4.7	3.7	69.2	77.6
03	Overhead Bridge Program	SGR		.0	47.1	2.8	6.0	55.9
04	Railtop Culverts	SGR		.8	.5	2.1	1.3	4.5
05	Bridge Walkways	SGR		.5	.0	.4	.6	1.5
06	Replace Timbers UG Bridges	NR	.0	1.3	1.1	1.0	.6	4.0
07	Right-of-Way Fencing	NR	.0	.0	.0	.3	.3	.5
08	Hudson Line Tunnels	SGR	.0	.0	.0	5.7	.0	5.7
09	Small Business Mentoring Program - Structures	SGR	.0	.0	.0	.0	4.0	4.0
11	Park Avenue Viaduct Interim Repairs	SGR	.0	10.2	.0	.0	.0	10.2
	Element Total 02		\$1.3	\$74.5	\$579.2	\$15.9	\$82.0	\$752.8
03	W OF HUDSON INFRASTRUCTURE							
01	WoH Rock Slope Remediation - Pt Jervis Line	SGR	.0	.0	.0	.0	11.4	11.4
02	WoH Track Program - Pt Jervis Line	SGR		.0	8.0	2.0	5.9	15.9
03	WoH Undergrade Bridges - Pt Jervis Line	SGR		.0	.7	9.9	.0	10.5
04	Moodna/Woodbury Viaduct Repairs	SGR		.0	4.6	.0	35.5	40.0
05	WoH Improvements	SGR		.7	.7	.7	.7	3.5
06	Small Business Mentoring Program - West of Hudson	SGR	.0	.0	.0	.0	5.7	5.7
07	WoH Capacity Improvements - Pt Jervis Line	SI	.0	.0	.0	.0	100.0	100.0
08	W of H Infrastructure Improvement	SGR	.0	.0	.0	.0	40.0	40.0
	Element Total 03		\$.7	\$.7	\$13.9	\$12.6	\$199.1	\$227.0
	Category Total 803		\$31.6	\$123.7	\$605.9	\$82.2	\$383.2	\$1,226.6

### COMM & SIGNALS M- 804

Commitments (\$ in millions)

ELEN	IENT RIPTION/PROJECT	Needs Code	2020	2021	2022	2023	2024	Total All Years
01	COMM & SIGNALS							
01	Harmon to Poughkeepsie Signal System	SGR	.0	.0	.0	51.3	198.0	249.3
02	PBX Replacement/Upgrade	NR	.0	.0	.0	.0	3.9	3.9
03	Voice Recorder Replacement	NR	.0	.0	.0	.0	1.0	1.0
04	Network Infrastructure	NR	.0	.0	.0	.0	15.5	15.5
05	Station PA System	NR	.0	.0	.0	.0	2.0	2.0
06	Radio System	NR	.0	.0	.0	13.4	.0	13.4
08	CCTV	NR	.0	.0	.0	.0	2.5	2.5
09	Grade Crossing Improvements	NR	.0	.0	.0	3.0	.0	3.0
13	Positive Train Stop Release	SI	.0	.0	.0	25.0	.0	25.0
	Element Total 01		\$.0	\$.0	\$.0	\$92.6	\$222.9	\$315.6
	Category Total 804		\$.0	\$.0	\$.0	\$92.6	\$222.9	\$315.6

### POWER M- 805

ELEM DESC	ENT RIPTION/PROJECT	Needs Code	2020	2021	2022	2023	2024	Total All Years
01	POWER							
01	Repl. MA's in Signal Substations	SGR	.0	.1	2.6	.0	.0	2.6
06	Hudson Line Track 1 Electrification	SI	.0	.0	3.7	.0	40.4	44.1
07	Repl Signal Pwr Transformer & Signl Sect. Switches	NR	.0	.0	.0	.0	3.2	3.2
08	Transformer Rehabilitation	NR	.0	.0	3.4	.0	.0	3.4
09	NHL Pelham Substation Replacement	SGR	.0	.0	31.6	.0	.0	31.6
10	Rebuild 2 NHL AC Substations	SGR	.0	.0	.0	69.6	.0	69.6
	Element Total 01		\$.0	\$.1	\$41.3	\$69.6	\$43.6	\$154.5
	Category Total 805		\$.0	\$.1	\$41.3	\$69.6	\$43.6	\$154.5

<sup>\*</sup> Represents values less than \$50,000

### SHOPS & YARDS M- 806

Commitments (\$ in millions)

ELEMENT DESCRIPTION/PROJECT		Needs Code	2020	2021	2022	2023	2024	Total All Years
01	SHOPS & YARDS							
01	Upgrade Automotive Fuel System	SGR	.3	.0	4.3	4.6	.0	9.2
03	Small Business Mentoring Program - Shops & Yards	SGR	.0	.0	.0	.0	3.5	3.5
	Element Total 01		\$.3	\$.0	\$4.3	\$4.6	\$3.5	\$12.8
(	Category Total 806		\$.3	\$.0	\$4.3	\$4.6	\$3.5	\$12.8

## MISCELLANEOUS

M- 808

Commitments (\$ in millions)

ELEMENT DESCRIPTION/PROJECT		Needs Code	2020	2021	2022	2023	2024	Total All Years
01	MISCELLANEOUS							
01	Environmental Remediation		.5	.0	.0	.0	1.5	2.0
02	<ul> <li>Railroad Protective Liability</li> <li>Independent Engineer</li> <li>Program Administration</li> <li>Program Scope Development</li> <li>Owner Controlled Insurance Program (OCIP)</li> </ul>	SI	.5	.2 .1	.0 .2 10.0 4.0 3.2 .0	.0 .4 .8 10.0	1.5 .4 .8 5.4	2.0
03			.2					1.2
04			.6					2.8
05			10.0	10.3				45.7
06			4.0	4.0		3.0	1.0	16.0
07			.0	.0		30.8 .0	.0 13.4	34.0
08			.0	.0				13.4
09	Small Business Mentoring Program Administration		.0	.0	.0	.6	.3	.9
10	EAM Reserve	SI	.0	.0	.0	.0	5.3	5.3
Element Total 01			\$15.8	\$15.1	\$17.4	\$45.5	\$29.5	\$123.3
	Category Total 808		\$15.8	\$15.1	\$17.4	\$45.5	\$29.5	\$123.3
	TOTAL PROGRAM		\$48.1	\$483.1	\$813.1	\$1,102.8	\$1,010.4	\$3,457.5

## **CRR AGENCY SUMMARY**

#### Commitments (\$ in millions)

AGENCY	2020	2021	2022	2023	2024	Total All Years	
TOTAL LIRR PROGRAM	\$389.4	\$264.8	\$512.1	\$1,585.0	\$871.6	\$3,622.9	
TOTAL MNR PROGRAM	\$48.1	\$483.1	\$813.1	\$1,102.8	\$1,010.4	\$3,457.5	
TOTAL	\$437.4	\$747.9	\$1,325.2	\$2,687.8	\$1,882.0	\$7,080.4	
TOTAL MTA CAPITAL PROGRAM	\$437.4	\$747.9	\$1,325.2	\$2,687.8	\$1,882.0	\$7,080.4	

\* Represents values less than \$50,000

Numbers may not add due to rounding

### **MTA Bus Company**

#### **BUS COMPANY PROJECTS** U- 803

ELEN DESC	IENT RIPTION/PROJECT	Needs Code	2020	2021	2022	2023	2024	Total All Years
02	BUS COMPANY PROJECTS							
01	Purchase 25 Standard Electric Buses	NR	.0	.0	.0	.0	49.1	49.1
02	Purchase 289 Standard Buses	SGR	.0	.0	.0	83.4	.0	83.4
03	Purchase 228 Standard Buses	NR	.0	.0	.0	.0	193.4	193.4
04	Purchase 55 Standard Buses	SI	.0	.0	.0	37.9	.0	37.9
05	Purchase 250 Express Buses	SGR	.0	.0	.0	188.4	.0	188.4
06	Purchase 42 Articulated Buses	NR	.0	.0	.0	.0	42.6	42.6
07	Purchase 37 Articulated Buses	SI	.0	.0	.0	.0	39.4	39.4
08	Bus Systems	SI	.0	.0	3.0	1.3	.7	5.0
09	Depot Component Repairs: Various Locations	VAR	.0	.0	28.8	8.9	24.1	61.8
10	Purchase Rubber Tire Vehicles	NR	.0	.0	1.2	.4	.4	2.0
11	Electric Fleet Mod at 1 MTA Bus Depot	SI	.0	.0	20.0	.0	.0	20.0
12	Miscellaneous Depot Investments	VAR	.0	.0	16.3	.0	20.0	36.3
13	Traffic Signal Priority	SI	.0	.0	2.5	.0	.0	2.5
14	Project Engineering and Administration	SI	.0	.0	17.4	5.8	5.5	28.7
16	Purchase 25 Standard Diesel Buses	SGR	.0	17.7	.0	.0	.0	17.7
17	Purchase 85 Standard Diesel Buses	SGR	.0	61.9	.0	.0	.0	61.9
18	289 Standard Diesel Buses	SGR	.0	.0	.3	.0	.0	.3
	Element Total 02		\$.0	\$79.6	\$89.5	\$326.1	\$375.2	\$870.4
	Category Total 803		\$.0	\$79.6	\$89.5	\$326.1	\$375.2	\$870.4
	TOTAL PROGRAM		\$.0	\$79.6	\$89.5	\$326.1	\$375.2	\$870.4

<sup>\*</sup> Represents values less than \$50,000

#### MTA MENTORING PROGRAM ADMIN

N- 800

Commitments (\$ in millions)

ELEN DESC	IENT RIPTION/PROJECT	Needs Code	2020	2021	2022	2023	2024	Total All Years
01	MTA MENTORING PROGRAM ADMIN							
02	MTA SBDP Business Development		4.2	.0	.0	.0	.0	4.2
	Element Total 01		\$4.2	\$.0	\$.0	\$.0	\$.0	\$4.2
	Category Total 800		\$4.2	\$.0	\$.0	\$.0	\$.0	\$4.2

## MTA POLICE DEPARTMENT

N- 810

Commitments (\$ in millions)

ELEN DESC	IENT RIPTION/PROJECT	Needs Code	2020	2021	2022	2023	2024	Total All Years
01	MTA POLICE DEPARTMENT							
01	MTAPD District Offices Rehab/Replacement	NR	.0	.0	.0	.0	11.9	11.9
02	MRRS Antenna Systems and Transmitters	SI	.0	.0	1.6	4.0	.0	5.6
03	Communications Radio Equipment	SI	.0	.0	.0	8.7	6.3	15.0
05	ESA Grand Central Terminal	NR	.0	2.0	.0	.0	.0	2.0
06	REP-ESU Fleet Vehicle Purchases	NR	.0	.0	.9	.0	.9	1.8
08	1825 Park Avenue	SI	.0	2.6	.0	.0	.0	2.6
	Element Total 01		\$.0	\$4.6	\$2.5	\$12.7	\$19.1	\$38.9
	Category Total 810		\$.0	\$4.6	\$2.5	\$12.7	\$19.1	\$38.9

#### MTA PLANNING N- 811

Commitments (\$ in millions)

ELEM	IENT RIPTION/PROJECT	Needs Code	2020	2021	2022	2023	2024	Total All Years
01	MTA PLANNING INITIATIVES							
01	Core Planning Support	SI	.0	.3	8.1	1.6	.0	10.0
02	Corridor Planning Support	SI	.0	.0	4.0	3.0	3.0	10.0
03	Capital Program Support	SI	.0	.0	10.0	10.0	40.0	60.0
	Element Total 01		\$.0	\$.3	\$22.1	\$14.6	\$43.0	\$80.0
	Category Total 811		\$.0	\$.3	\$22.1	\$14.6	\$43.0	\$80.0

#### **MTA CONSTRUCTION & DEVELOPMENT**

N- 813

ELEMENT DESCRIPTION/PROJECT	Needs Code	2020	2021	2022	2023	2024	Total All Years
01 MTA CONSTRUCTION & DEVELOPMENT							
01 MTA Construction & Development		.0	3.9	14.9	.0	.0	18.8
Element Total 01		\$.0	\$3.9	\$14.9	\$.0	\$.0	\$18.8
Category Total 813		\$.0	\$3.9	\$14.9	\$.0	\$.0	\$18.8
TOTAL PROGRAM		\$4.2	\$8.8	\$39.5	\$27.3	\$62.1	\$141.9

<sup>\*</sup> Represents values less than \$50,000

## **MTA Interagency Summary**

AGENCY	2020	2021	2022	2023	2024	Total All Years
TOTAL MTA MENTORING PROGRAM ADMIN	\$4.2	\$0.0	\$0.0	\$.0	\$.0	\$4.2
TOTAL MTA POLICE DEPARTMENT	\$0.0	\$4.6	\$2.5	\$12.7	\$19.1	\$38.9
TOTAL MTA PLANNING	\$0.0	\$0.3	\$22.1	\$14.6	\$43.0	\$80.0
TOTAL MTA CONSTRUCTION & DEVELOPMENT	\$0.0	\$3.9	\$14.9	\$.0	\$.0	\$18.8
TOTAL MTA INTERAGENCY	\$4.2	\$8.8	\$39.5	\$27.3	\$62.1	\$141.9

Commitments (\$ in millions)

#### EAST SIDE ACCESS G- 809

ELEN DESC	IENT RIPTION/PROJECT	Needs Code	2020	2021	2022	2023	2024	Total All Years	
01	EAST SIDE ACCESS								
01	EAST SIDE ACCESS Bard Party EAC Needs - Manhattan Bard Party EAC Needs - Queens/Harold Bard Party EAC Needs - Queens/Harold Bard Party EAC Needs - Systems Bard Party EAC Needs - Other Force Account EAC Needs - Direct Force Account EAC Needs - Indirect Soft Costs EAC Needs - Design/CPS Soft Costs EAC Needs - PM Soft Costs EAC Needs - CM OCIP - EAC Needs Rolling Stock Real Estate LIRR Force Account - Harold Stage 4 48th Street Entrance at 415 Madison Materials Warranties Utility Allowance Package LIRR Operating Support Services FA System Testing & Commissioning LIRR Force Account - Harold Stage 3 Operational Readiness Training	NE	.0	34.1	13.2	.0	.0	47.3	
02	3rd Party EAC Needs - Queens/Harold	NE	.0	7.0	7.1	.0	.0	14.1	
03	3rd Party EAC Needs - Systems	NE	.0	26.2	52.2	.0	.0	78.4	
04	3rd Party EAC Needs - Other	NE	.0	6.5	6.9	.0	.0	13.3	
05	Force Account EAC Needs - Direct	NE	.0	.0	2.6	.0	.0	2.6	
06	Force Account EAC Needs - Indirect	NE	.0	3.4	15.9	.0	.0	19.3	
07	Soft Costs EAC Needs - Design/CPS	NE	.0	13.4	27.4	.0	.0	40.8	
08	Soft Costs EAC Needs - PM	NE	.0	2.3	18.5	.0	.0	20.8	
09	Soft Costs EAC Needs - CM	NE	.0	48.4	5.5	.0	.0	53.9	
11	OCIP - EAC Needs Rolling Stock Real Estate LIRR Force Account - Harold Stage 4	NE	.0	16.3	30.3	.0	.0	46.6	
12		NE	.0	.0	.0	194.5	.0	194.5	
13		Real Estate	NE	.0	.0	55.0	.0	.0	55.0
15		NE	.0	.0	14.8	.0	.0	14.8	
16	48th Street Entrance at 415 Madison	NE	.0	.0	30.1	.0	.0	30.1	
17	Materials Warranties	NE	.0	.0	14.7	.0	.0	14.7	
18	Utility Allowance Package	NE	.0	1.5	19.6	.0	.0	21.0	
19	LIRR Operating Support Services	NE	.0	5.6	2.1	.0	.0	7.7	
20	FA System Testing & Commissioning	NE	.0	5.6	19.8	.0	.0	25.4	
21	LIRR Force Account - Harold Stage 3	NE	.0	.0	3.8	.0	.0	3.8	
22	Operational Readiness Training	NE	.0	.0	2.7	.0	.0	2.7	
23	CM Office Costs (Northern Blvd)	NE	.0	1.4	2.0	.0	.0	3.5	
24	Test Trains	NE	.0	.0	1.3	.0	.0	1.3	
26	Amtrak Operating Support Services	NE	.0	2.5	.0	.0	.0	2.5	
99	ESA Program Reserve	NE	.0	.0	84.1	.0	.0	84.1	
	Element Total 01		\$.0	\$174.2	\$429.5	\$194.5	\$.0	\$798.2	
	Category Total 809		\$.0	\$174.2	\$429.5	\$194.5	\$.0	\$798.2	

#### FULL LENGTH SECOND AVE SUBWAY

G- 810

Commitments (\$ in millions)

ELEM DESC	IENT RIPTION/PROJECT	Needs Code	2020	2021	2022	2023	2024	Total All Years
01	FULL LENGTH SECOND AVE SUBWAY							
01	SAS 2 Construction Reserve	NE	.0	.0	.0	1,200.0	2,500.0	3,700.0
02	SAS 2 Construction Management	NE	.0	.0	150.0	450.0	150.0	750.0
03	SAS 2 Real Estate	NE	.0	.0	55.0	50.0	.0	105.0
	Element Total 01		\$.0	\$.0	\$205.0	\$1,700.0	\$2,650.0	\$4,555.0
	Category Total 810		\$.0	\$.0	\$205.0	\$1,700.0	\$2,650.0	\$4,555.0

# **PENN STATION ACCESS**

G- 811

	LEMENT ESCRIPTION/PROJECT		2020	2021	2022	2023	2024	Total All Years
01	PENN STATION ACCESS							
02	Program Management	NE	.0	.0	12.2	5.6	.0	17.8
03	Construction Management	NE	.0	102.4	3.0	.0	.0	105.4
08	Shops & Yards	NE	.0	.0	.0	146.9	.0	146.9
10	General Engineering Consultant	NE	.0	.0	34.3	.0	.0	34.3
11	Force Account	NE	.0	.0	31.3	14.7	.0	46.0
12	Real Estate	NE	1.5	.4	8.1	.0	.0	10.0
13	Owner Controlled Insurance Program (OCIP)	NE	.0	.0	83.9	.0	.0	83.9
14	Design-Build	NE	.0	1,499.7	196.1	.0	.0	1,695.7
20	Fleet Purchase	NE	.0	.0	.0	.0	312.0	312.0
99	PSA Program Reserve	NE	.0	.0	40.2	106.4	150.0	296.6
	Element Total 01		\$1.5	\$1,602.5	\$409.1	\$273.6	\$462.0	\$2,748.7
	Category Total 811		\$1.5	\$1,602.5	\$409.1	\$273.6	\$462.0	\$2,748.7

<sup>\*</sup> Represents values less than \$50,000

## LIRR EXPANSION PROJECT

G- 813

Commitments (\$ in millions)

	ENT RIPTION/PROJECT	Needs Code	2020	2021	2022	2023	2024	Total All Years
01	LIRR EXPANSION PROJECT							
03	D-B Construction Contract	NE	284.1	.0	.0	.0	.0	284.1
07	Force Account Construction	NE	.0	.0	37.6	5.5	.0	43.1
09	Force Account Support	NE	.0	47.6	.0	5.4	.0	53.0
11	Force Account Project Management	NE	.0	.0	8.1	.9	.0	8.9
12	Force Account Design	NE	.0	.0	2.4	.3	.0	2.7
14	3P Project Management Contract	NE	33.2	.0	.0	.0	.0	33.2
15	MTACC Project Management	NE	.0	.1	.7	.2	.0	.9
17	Project Administration (Other Costs)	NE	1.0	.0	.0	.0	.0	1.0
18	Owner Controlled Insurance Program (OCIP)	NE	.0	11.5	.0	.1	.0	11.6
	Element Total 01		\$318.3	\$59.2	\$48.7	\$12.3	\$.0	\$438.5
	Category Total 813		\$318.3	\$59.2	\$48.7	\$12.3	\$.0	\$438.5

### **REGIONAL INVESTMENTS**

G- 814

Commitments (\$ in millions)

ELEN DESC	ENT RIPTION/PROJECT	Needs Code	2020	2021	2022	2023	2024	Total All Years
01	REGIONAL INVESTMENTS							
01	Eastbound Reroute	NE	.0	188.1	.0	.0	.0	188.1
02	Westbound Bypass	NE	.0	.0	.0	.0	88.4	88.4
03	Loop & T Interlocking	NE	.0	6.4	.0	.0	7.3	13.7
04	Amtrak Direct Force Account	NE	.0	.4	18.2	.0	10.6	29.2
05	LIRR Direct Force Account	NE	.0	.2	1.8	1.3	6.3	9.6
06	PM/CM	NE	.0	30.0	37.7	7.0	3.3	78.0
07	Design/CPS	NE	.0	1.2	11.4	6.2	6.2	24.9
08	Rolling Stock	NE	.0	.0	50.0	.0	.0	50.0
09	General Conditions	NE	.0	.0	.6	.0	.0	.6
10	OCIP	NE	.0	.0	14.2	.0	.0	14.2
16	Harold Catenary Work	NE	24.9	.0	.0	.0	.0	24.9
17	B/C Approach	NE	.0	2.7	.0	.0	.0	2.7
18	Amtrak Access and Protection	NE	.0	2.5	.0	.0	.0	2.5
19	LIRR Access and Protection	NE	.0	2.9	.0	.0	.0	2.9
99	RI Program Reserve	NE	.0	.0	.1	9.4	1.4	10.9
	Element Total 01		\$24.9	\$234.3	\$134.0	\$23.8	\$123.5	\$540.5
	Category Total 814		\$24.9	\$234.3	\$134.0	\$23.8	\$123.5	\$540.5

## PENN RECONSTRUCTION

G- 815

Commitments (\$ in millions)

ELEN DESC	IENT RIPTION/PROJECT	Needs Code	2020	2021	2022	2023	2024	Total All Years
01	PENN RECONSTRUCTION							
01	GEC Contract	NE	.0	.0	70.0	.0	.0	70.0
02	Penn Reconstruction Support	NE	.0	.0	.0	30.0	.0	30.0
	Element Total 01		\$.0	\$.0	\$70.0	\$30.0	\$.0	\$100.0
	Category Total 815		\$.0	\$.0	\$70.0	\$30.0	\$.0	\$100.0

#### MISCELLANEOUS G- 816

Commitments (\$ in millions)

	ELEMENT DESCRIPTION/PROJECT		2020	2021	2022	2023	2024	Total All Years
04								
01	MISCELLANEOUS							
01	Misc. Engineering/Prog Support	NE	.0	19.2	35.2	29.8	30.6	114.8
02	MTA Independent. Engineering Consultant	NE	.0	2.3	6.2	4.2	4.2	16.8
03	Additional Program Support	NE	.0	.0	.0	.0	100.0	100.0
04	C&D Engineering	NE	.0	.1	.0	.0	.0	.1
	Element Total 01		\$.0	\$21.6	\$41.4	\$34.0	\$134.8	\$231.8
	Category Total 816		\$.0	\$21.6	\$41.4	\$34.0	\$134.8	\$231.8
· · ·	TOTAL PROGRAM		\$344.7	\$2,091.7	\$1,337.7	\$2,268.3	\$3,370.3	\$9,412.7

## **CPRB** Agency Summary

AGENCY	2020	2021	2022	2023	2024	Total All Years
TOTAL New York City Transit	\$980.2	\$2,381.9	\$6,533.3	\$9,876.2	\$14,838.6	\$34,610.2
TOTAL Long Island Rail Road	\$389.4	\$264.8	\$512.1	\$1,585.0	\$871.6	\$3,622.9
TOTAL Metro-North Railroad	\$48.1	\$483.1	\$813.1	\$1,102.8	\$1,010.4	\$3,457.5
TOTAL MTA Bus Company	\$0.0	\$79.6	\$89.5	\$326.1	\$375.2	\$870.4
TOTAL MTA Interagency	\$4.2	\$8.8	\$39.5	\$27.3	\$62.1	\$141.9
Core Subtotal	\$1,421.8	\$3,218.3	\$7,987.5	\$12,917.4	\$17,157.9	\$42,702.9
TOTAL Capital Construction Company	\$344.7	\$2,091.7	\$1,337.7	\$2,268.3	\$3,370.3	\$9,412.7
TOTAL 2020-2024 CPRB PROGRAM	\$1,766.5	\$5,310.0	\$9,325.2	\$15,185.7	\$20,528.2	\$52,115.6

#### STRUCTURES D- 801

Commitments (\$ in millions)

ELEMENT DESCRIPTION/PROJECT	Needs Code	2020	2021	2022	2023	2024	Total All Years
AW AGENCY-WIDE							
04 Program Contingency		.0	.2	.0	.0	2.2	2.4
X3 Structural Health Monitoring	SI	.0	.0	.0	.0	8.8	8.8
Element Total AW		\$.0	\$.2	\$.0	\$.0	\$11.0	\$11.2
BW BRONX-WHITESTONE BRIDGE							
14 Miscellaneous Structural Rehabilitation	NR	.8	27.0	.0	.0	.0	27.8
Element Total BW		\$.8	\$27.0	\$.0	\$.0	\$.0	\$27.8
CB CROSS BAY BRIDGE							
30 Structural Rehabilitation of CBB	NR	1.0	.7	56.6	.0	.0	58.3
Element Total CB		\$1.0	\$.7	\$56.6	\$.0	\$.0	\$58.3
HC HUGH L. CAREY TUNNEL							
48 Rehabilitation of Tunnel Entrance/Exit - Manh	NR	.0	.0	2.4	.0	18.2	20.6
84 Rehabilitation of Pipe Gallery	NR	.0	.0	.0	.0	10.4	10.4
Element Total HC		\$.0	\$.0	\$2.4	\$.0	\$28.6	\$30.9
HH HENRY HUDSON BRIDGE							
36 Dyckman Street Substations Upgrade	NR	2.7	42.5	4.5	.0	.0	49.6
37 Upper Level North Abutment & Retaining Wall R	NR	.0	.0	.4	8.5	.0	8.9
Element Total HH		\$2.7	\$42.5	\$4.9	\$8.5	\$.0	\$58.5
MP MARINE PARKWAY BRIDGE							
16 Miscellaneous Steel Repairs	NR	.0	.0	6.5	.0	7.9	14.4
Element Total MP		\$.0	\$.0	\$6.5	\$.0	\$7.9	\$14.4
QM QUEENS MIDTOWN TUNNEL							
40 Tunnel Rehabilitation	NR	.0	.0	.0	.0	3.8	3.8
84 Rehabilitation of Pipe Gallery	NR	.0	.0	.0	.0	13.7	13.7
Element Total QM		\$.0	\$.0	\$.0	\$.0	\$17.5	\$17.5
RK ROBERT F. KENNEDY BRIDGE							
04 Ward's Island/Queens Anchorage Rehabilitation	NR	1.5	.0	.0	48.2	.0	49.7
19 Suspended Span Retrofit	NR	4.2	10.5	.0	470.9	.0	485.5
70 Structural Repairs/Flag Repairs	NR	17.5	.6	.0	.0	5.0	23.1
81 Facility Interoperability Improvements	NR	5.4	.0	.0	.0	.0	5.4
83 Lift Span Fender Upgrades	NR	.8	32.0	0.	.0	.0	32.8
93 Reconstruct / Relocate RI Ramps (QR & RM)	SI	.0	1.0	123.7	0.	.0	124.7
Element Total RK		\$29.4	\$44.0	\$123.7	\$519.1	\$5.0	\$721.2

\* Represents values less than \$50,000

Numbers may not add due to rounding

2020-2024 Capital Program

#### STRUCTURES D- 801

Commitments (\$ in millions)

ELEMENT DESCRIPTION/PROJECT		Needs Code	2020	2021	2022	2023	2024	Total All Years
ΤN	THROGS NECK BRIDGE							
49	Main Cable and Suspender Rope Investigation	NR	.0	.0	.0	15.0	.0	15.0
52	Miscellaneous Structural Rehabilitation	NR	.0	1.2	9.1	.0	.0	10.3
87	Anchorage & Tower Protection	NR	.0	.0	.0	144.5	.0	144.5
l	Element Total TN		\$.0	\$1.2	\$9.1	\$159.5	\$.0	\$169.8
VN	VERRAZZANO-NARROWS BRIDGE							
32	Steel Repair & Concrete Rehabilitation	NR	.0	.0	.0	.0	10.0	10.0
	Element Total VN		\$.0	\$.0	\$.0	\$.0	\$10.0	\$10.0
(	Category Total 801		\$33.8	\$115.5	\$203.1	\$687.1	\$80.0	\$1,119.5

## ROADWAYS & DECKS

D- 802

ELEMENT DESCRIPTION/PROJECT	Needs Code	2020	2021	2022	2023	2024	Total All Years
BW BRONX-WHITESTONE BRIDGE							
63 Facility Interoperability Improvements	SI	.0	.0	.0	.0	3.2	3.2
Element Total BW	01	\$.0	\$.0	\$.0	\$.0	\$3.2	\$3.2
HH HENRY HUDSON BRIDGE							
07 Shared Use Path	SI	.0	.0	.0	15.6	.0	15.6
14 Deck Rehabilitation and Resurfacing	NR	.0	.0	.0	.0	.0	.0*
Element Total HH		\$.0	\$.0	\$.0	\$15.6	\$.0	\$15.6
RK ROBERT F. KENNEDY BRIDGE							
75 Deck Rehabilitation & Overlay	NR	9.6	.0	.0	.0	.0	9.6
90 Widening of S/B FDR Drive - 125 St to 116 St	SI	.1	1.5	.0	29.8	.0	31.4
Element Total RK		\$9.7	\$1.5	\$.0	\$29.8	\$.0	\$41.0
VN VERRAZZANO-NARROWS BRIDGE							
81 Lower Level Main Span Deck Rehabilitation	NR	.0	.0	107.0	.0	.0	107.0
84 Ph.2 -Reconstruction of Upper Level Approach	NR	.0	.0	.0	.0	604.4	604.5
86 Widening Belt Parkway, Phase 1B	SI	.0	.0	37.5	.0	.0	37.5
Element Total VN		\$.0	\$.0	\$144.5	\$.0	\$604.4	\$749.0
Category Total 802		\$9.8	\$1.5	\$144.5	\$45.4	\$607.7	\$808.9

<sup>\*</sup> Represents values less than \$50,000

TSMO D- 803

Commitments (\$ in millions)

	ELEMENT DESCRIPTION/PROJECT		2020	2021	2022	2023	2024	Total All Years
AW	AGENCY-WIDE							
36	Fiber Optic Infrastructure and Integration	SI	.0	.0	.0	.0	10.2	10.2
52	Traffic Detection/Incident Mgmt. Systems	SI	.0	.0	.0	.0	6.7	6.7
57	ATMS Enhancements & Upgrades/OCCC System	SI	.0	.0	.0	.0	11.6	11.6
65	Toll Collection System Rehabilitation/Upgrade	NR	.0	.0	.0	1.4	6.2	7.6
74	SCADA Systems	NR	.0	.0	5.1	.0	.0	5.1
80	Adv. Traveler Info. Systems (ATIS) & VMS Upgrade	NR	.0	.0	.0	14.1	.0	14.1
	Element Total AW		\$.0	\$.0	\$5.1	\$15.5	\$34.7	\$55.3
	Category Total 803		\$.0	\$.0	\$5.1	\$15.5	\$34.7	\$55.3

#### UTILITIES D- 804

ELEMENT DESCRIPTION/PROJECT	Needs Code	2020	2021	2022	2023	2024	Total All Years
AW AGENCY-WIDE							
11 Replacement & Upgrade of Fueling Systems	NR	.0	.0	.0	.0	11.3	11.3
73 Rehab/Replace Facility Monitoring & Safety System	NR	.0	.1	1.2	41.0	.0	42.2
Element Total AW		\$.0	\$.1	\$1.2	\$41.0	\$11.3	\$53.5
BW BRONX-WHITESTONE BRIDGE							
96 Lighting, Power Redundancy & Resiliency Imprv	NR	2.3	.0	52.6	.0	.0	54.9
98 Cable Dehumidification and Miscellaneous Work	SI	.0	.0	.0	.0	4.0	4.0
Element Total BW		\$2.3	\$.0	\$52.6	\$.0	\$4.0	\$59.0
HC HUGH L. CAREY TUNNEL							
83 Installation of Fire Suppression System	SI	.1	.0	.0	3.0	.0	3.1
Element Total HC		\$.1	\$.0	\$.0	\$3.0	\$.0	\$3.1
MP MARINE PARKWAY BRIDGE							
09 Electrical Rehabilitation (Elevator)	NR	.6	24.5	.0	.0	.0	25.1
Element Total MP		\$.6	\$24.5	\$.0	\$.0	\$.0	\$25.1
QM QUEENS MIDTOWN TUNNEL							
85 Installation of Fire Suppression System	SI	.0	.0	.0	3.1	.0	3.1
Element Total QM		\$.0	\$.0	\$.0	\$3.1	\$.0	\$3.1
TN THROGS NECK BRIDGE							
58 Electrical Resiliency Improvements	NR	.0	.0	.0	6.5	.0	6.5
85 Bridge Structural Lighting & Misc Struct Upgrade	NR	.0	.0	.0	7.0	.0	7.0
Element Total TN		\$.0	\$.0	\$.0	\$13.5	\$.0	\$13.5
VN VERRAZZANO-NARROWS BRIDGE							
12 Misc. Bridge Lighting & Electrical Improvement	NR	1.5	.1	16.4	20.3	.0	38.3
Element Total VN		\$1.5	\$.1	\$16.4	\$20.3	\$ <b>.</b> 0	\$38.3
Category Total 804		\$4.5	\$24.7	\$70.2	\$80.8	\$15.4	\$195.6

#### BUILDINGS & SITES D- 805

ELEMENT DESCRIPTION/PROJECT	Needs Code	2020	2021	2022	2023	2024	Total All Years
							All lears
AW AGENCY-WIDE							
12 Hazardous Materials Abatement	NR	.3	.7	.9	.0	10.4	12.3
X9 Service Building Upgrades	NR	.0	.0	.0	.0	8.2	8.2
Element Total AW		\$.3	\$.7	\$.9	\$.0	\$18.7	\$20.5
HC HUGH L. CAREY TUNNEL							
80 Rehabilitation of HCT Ventilation/Service Bldngs	NR	.0	5.1	.0	.0	20.6	25.7
Element Total HC		\$.0	\$5.1	\$.0	\$.0	\$20.6	\$25.7
QM QUEENS MIDTOWN TUNNEL							
36 Rehabilitation Ventilation/Service Bldngs	NR	.0	.0	31.2	.0	.0	31.2
Element Total QM		\$.0	\$.0	\$31.2	\$.0	\$.0	\$31.2
RK ROBERT F. KENNEDY BRIDGE							
82 Storage Facility for Spare Parts & Materials	SI	.3	.0	.0	.0	.0	.3
Element Total RK		\$.3	\$.0	\$.0	\$.0	\$.0	\$.3
Category Total 805		\$.6	\$5.7	\$32.1	\$.0	\$39.3	\$77.7

<sup>\*</sup> Represents values less than \$50,000

#### MISCELLANEOUS D- 806

Commitments (\$ in millions)

ELEMENT DESCRIPTION/PROJECT	Needs Code	2020	2021	2022	2023	2024	Total All Years
AW Agency-Wide 10 EAM		.0	4.2	.0	.0	.2	4.4
15 MTA Independent Engineer		.0 .7	4.2 .0	.0 .0	.0 3.3	.2	4.4 3.9
18 Protective Liability Insurance		.9	.0	.0	11.2	.0	13.0
21 Program Administration		.5 2.1	1.8	.4 1.9	6.5	.0	12.3
22 Miscellaneous		.0	.2	.4	3.6	.0	4.1
28 Scope Development		.0	1.6	.4	9.5	.0	4.1 11.1
29 Preliminary Design		.0	.0	.0	0.0	12.0	12.0
85 TEA - Reserve		.0	.0	.0	2.0	.0	2.0
94 Small Business Mentoring Program		1.9	2.7	2.5	.0	32.7	39.7
Element Total AW		\$5.5	\$10.8	\$5.2	\$36.1	\$44.9	\$102.5
X1 Operational Improvement Element Total CB	SI	.0 <b>\$.0</b>	.0 <b>\$.0</b>	.0 <b>\$.0</b>	.0 <b>\$.0</b>	8.0 <b>\$8.0</b>	8.0 <b>\$8.0</b>
MP MARINE PARKWAY BRIDGE X1 Operational Improvement	SI	.0	5.1	.0	.0	6.2	11.3
Element Total MP	31	\$.0	\$5.1	\$.0	.0 <b>\$.0</b>	\$6.2	\$11.3
		ψ.υ	ψ0.1	ψ.0	4.0	ψ0.2	φ11.5
VN VERRAZZANO-NARROWS BRIDGE	SI	0	43.7	0	.0	7.5	51.2
X1 Install Safety Fencing on Both Levels of the VNB Element Total VN	31	.0 <b>\$.0</b>	43.7 \$43.7	.0 <b>\$.0</b>	.0 <b>\$.0</b>	<b>\$7.5</b>	\$1.2 \$51.2
		<b>Э.</b> О	⊅4J./	<b></b> .0	<b></b> .0	φ1.5	¢01.∠
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#### STRUCTURAL PAINTING

D- 807

ELEMENT DESCRIPTION/PROJECT	Needs Code	2020	2021	2022	2023	2024	Total All Years
BW BRONX-WHITESTONE BRIDGE							
PT BW Facility-Wide Painting Program	NR	.0	9.9	.0	.0	.0	9.9
Element Total BW		\$.0	\$9.9	\$.0	\$.0	\$.0	\$9.9
MP MARINE PARKWAY BRIDGE							
PT MP Facility-Wide Painting Program	NR	1.8	18.9	.0	.0	.0	20.8
Element Total MP		\$1.8	\$18.9	\$.0	\$.0	\$.0	\$20.8
RK ROBERT F. KENNEDY BRIDGE							
19 Zone/Maintenance Painting of Suspended Spans	NR	.0	.0	.0	43.3	.0	43.3
PT RK Facility-Wide Painting Program	NR	.2	17.2	23.1	.0	33.0	73.6
Element Total RK		\$.2	\$17.2	\$23.1	\$43.3	\$33.0	\$116.8
TN THROGS NECK BRIDGE							
PT TN Facility-Wide Painting Program	NR	.0	.0	17.0	45.8	.0	62.7
Element Total TN		\$.0	\$.0	\$17.0	\$45.8	\$.0	\$62.7
VN VERRAZZANO-NARROWS BRIDGE							
81 VN Suspended Span Painting Program	NR	.0	.0	40.0	.0	.0	40.0
PT VN Facility-Wide Painting Program	NR	.0	.0	.4	126.5	16.6	143.6
Element Total VN		\$.0	\$.0	\$40.4	\$126.5	\$16.6	\$183.6
Category Total 807		\$2.1	\$46.0	\$80.5	\$215.5	\$49.7	\$393.7
TOTAL PROGRAM		\$56.2	\$253.1	\$540.7	\$1,080.4	\$893.3	\$2,823.7

#### **CBD Tolling Program**

#### CBD TOLLING PROGRAM PROJECT

C- 801

Commitments (\$ in millions)

	T TION/PROJECT	Needs Code	2020	2021	2022	2023	2024	Total All Years
CP CI	BD Tolling Program							
01 CE	BDT - Exploratory Work	SI	6.9	.0	.0	.0	.0	6.9
02 CE	BDT - Program Management	SI	45.8	.6	34.7	.7	.0	81.8
03 CE	BDT - Design-Build & Integrate	SI	272.4	.0	.0	.0	.0	272.4
04 CE	BDT - Customer Service Ctr.	SI	16.5	.0	15.1	.0	.0	31.7
05 CE	BDT - Inter-Agency Agreements	SI	6.1	.0	.5	.0	.0	6.6
06 CE	BDT - Program Contingency	SI	.0	.0	.0	103.7	.0	103.7
Eler	ment Total CP		\$347.7	\$.6	\$50.4	\$104.4	\$.0	\$503.0
Cat	egory Total 801		\$347.7	\$.6	\$50.4	\$104.4	\$.0	\$503.0
тот	TAL PROGRAM		\$347.7	\$.6	\$50.4	\$104.4	\$.0	\$503.0

## **B&T AGENCY SUMMARY**

#### Commitments (\$ in millions)

AGENCY	2020	2021	2022	2023	2024	Total All Years
TOTAL CBD PROGRAM	\$347.7	\$.6	\$50.4	\$104.4	\$.0	\$503.0
TOTAL B&T PROGRAM	\$56.2	\$253.1	\$540.7	\$1,080.4	\$893.3	\$2,823.7
TOTAL	\$403.9	\$253.7	\$591.0	\$1,184.8	\$893.3	\$3,326.7
TOTAL B&T	\$403.9	\$253.7	\$591.0	\$1,184.8	\$893.3	\$3,326.7

\* Represents values less than \$50,000

Numbers may not add due to rounding

## **All Agency Summary**

AGENCY	2020	2021	2022	2023	2024	Total All Years
TOTAL New York City Transit	\$980.2	\$2,381.9	\$6,533.3	\$9,876.2	\$14,838.6	\$34,610.2
TOTAL Long Island Rail Road	\$389.4	\$264.8	\$512.1	\$1,585.0	\$871.6	\$3,622.9
TOTAL Metro-North Railroad	\$48.1	\$483.1	\$813.1	\$1,102.8	\$1,010.4	\$3,457.5
TOTAL MTA Bus Company	\$0.0	\$79.6	\$89.5	\$326.1	\$375.2	\$870.4
TOTAL MTA Interagency	\$4.2	\$8.8	\$39.5	\$27.3	\$62.1	\$141.9
Core Subtotal	\$1,421.8	\$3,218.3	\$7,987.5	\$12,917.4	\$17,157.9	\$42,702.9
TOTAL Capital Construction Company	\$344.7	\$2,091.7	\$1,337.7	\$2,268.3	\$3,370.3	\$9,412.7
TOTAL 2020-2024 CPRB PROGRAM	\$1,766.5	\$5,310.0	\$9,325.2	\$15,185.7	\$20,528.2	\$52,115.6
TOTAL Bridges and Tunnels	\$403.9	\$253.7	\$591.0	\$1,184.8	\$893.3	\$3,326.7
TOTAL 2020-2024 CAPITAL PROGRAM	\$2,170.4	\$5,563.7	\$9,916.2	\$16,370.5	\$21,421.5	\$55,442.2





new.mta.info/2020CapitalProgram