Thomas P. DiNapoli, State Comptroller Rahul Jain, Deputy Comptroller

Annual Update: Metropolitan Transportation Authority's Debt Profile

Highlights

- In the four years prior to the pandemic, 2016 through 2019, the MTA was able to commit an average of $7.1 billion per year for capital projects but in 2022, the MTA made a record $11.4 billion of capital commitments.
- As of March 1, 2023, the MTA's capital programs since 2010 have a total of $42.3 billion which still must be committed.
- The amount of outstanding long-term debt issued by the MTA increased from $29 billion in 2010 to $35.4 billion in 2019 (22 percent) and then rose to $42.3 billion in 2022 (19 percent).
- With available resources from federal COVID-19 aid, the MTA has prepaid $1.4 billion of principal and interest which will lower debt service payable from the operating budget by $1.5 billion in 2023 through 2026.
- Budgeted debt service (including lockbox debt service and excluding debt issued after the 2020-2024 capital program) is projected to reach nearly $5 billion by 2031, $1.8 billion more than in 2022 (58 percent higher).
- Debt service on the assumed $18.5 billion of lockbox bonding is expected to rise to $1.3 billion annually starting in 2028. This debt service, however, is expected to be paid from the capital lockbox, which reduces pressure on the MTA's operating budget.
- The MTA estimates that debt service will grow by 3.2 percent annually from 2022 to 2031. At that rate, debt capacity for future capital commitments through 2041 would be $54.4 billion and debt service paid out of the operating budget would peak at $6.5 billion in 2047.

Escalating debt service costs have long been a source of financial pressure at the MTA. The pandemic exacerbated these pressures causing ridership to drop and tax revenues to dry up. The MTA's finances recently brightened as the enacted New York State budget has provided a substantial, recurring funding solution to help it balance its budgets as the financial benefit stemming from federal COVID-19 operating assistance is exhausted. The additional funding should allow the MTA to reverse pressure on its operating budget associated with the greater use of debt. However, a shift towards sustainable and long-term budget balance is reliant on the decisions that the MTA and its funding partners make in the future, including the use and structuring of debt.

MTA debt has risen substantially over the last 25 years as the aging and expanding system requires greater capital funding and support from its funding partners has been inconsistent. This trend may continue, as congestion pricing, the largest anticipated funding source for the 2020-2024 capital program, still faces some uncertainty in implementation. Although recently approved by the federal government, the level of tolls must still be set which could lead to further delays.

In the past, the MTA has also used a debt structuring approach called "backloading" to balance its short-term budgets, pushing higher costs to budgets decades away and increasing total interest expenses. Recently, the MTA elected to use monies freed up by federal funds to prepay debt, producing debt service savings over the next three years. Efforts such as this are desirable and can help the MTA lower debt service levels without resorting to backloading. The MTA should continue to take steps to reduce its future debt load by managing capital spending wisely and committing to sound debt repayment practices without obscuring how debt is contributing to its budget deficits.

Capital Program Progress

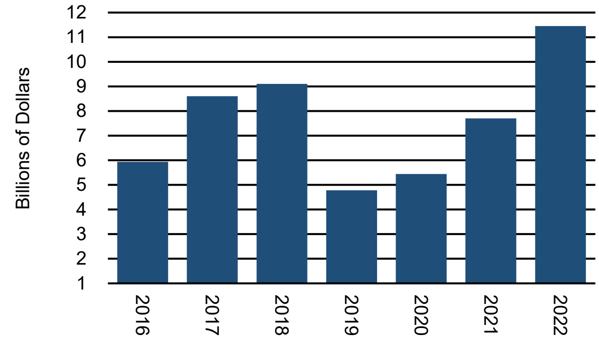
The MTA's capital programs, which generally span five-year periods, are critical to bringing the overall system into a state of good repair, maintaining normal replacement of assets, and improving and expanding the system to meet its riders' needs. Capital programs are funded through various sources including debt issued by the Authority. The vast majority of MTA debt has been issued to fund its capital programs (see "Capital Funding" section).

Historically, the MTA has multiple capital programs active at the same time. It normally takes more than five years to commit (i.e., award) to contractors all the projects in a capital program and even more time to complete the work. The Authority uses a seven-year target for making capital commitments and a 10-year target for completing its capital plan work. The pace of commitment and related funding has implications for the size of the Authority's debt and related payments. In addition, these factors can make it difficult for stakeholders to get a clear and comprehensive picture of the MTA's progress. For various reasons, both the 2015-2019 and 2010-2014 capital programs have taken longer than seven years to commit their projects.

The MTA had difficulty before the pandemic increasing the level of its capital commitments. In the four years prior to the pandemic, 2016 through 2019, it committed an average of $7.1 billion per year. In 2020, $5.4 billion across all capital programs was committed, due to the pause in capital spending during the early days of the pandemic (see Figure 1).

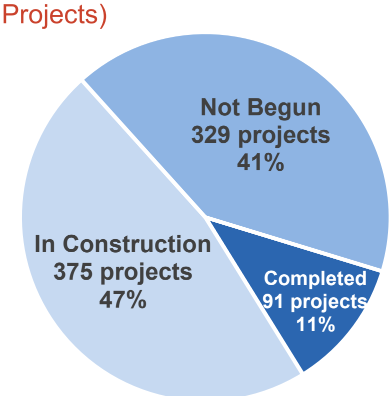
In 2021, when the pause was lifted, the MTA increased its commitments to $7.7 billion. In 2022, the MTA was able to commit $11.4 billion of capital projects, a record and more than $3 billion higher than the MTA's goal, mostly through the earlier-than-planned commitment for new subway cars. From November 2022 to February 2023, the MTA awarded $9 billion for capital projects. The MTA attributes the increase in commitments to the larger size of the 2020-2024

FIGURE 1
MTA Capital Commitments



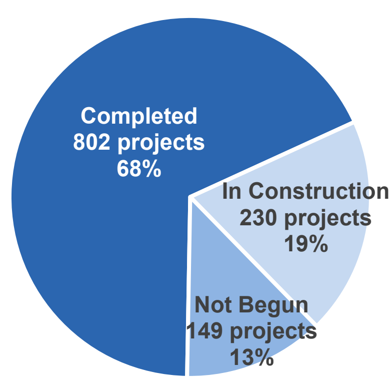
Source: Metropolitan Transportation Authority

FIGURE 2
Status of MTA 2020-2024 Capital Program (795 Projects)



Note: As of December 31, 2022.
Sources: Metropolitan Transportation Authority; OSC analysis

FIGURE 3
Status of MTA 2015-2019 Capital Program (1,181 Projects)



Note: As of December 31, 2022.
Sources: Metropolitan Transportation Authority; OSC analysis

program, the increasing use of design/build contacts as allowed by State law and the bundling of contracts which has allowed for an acceleration of work and a centralization of capital project oversight and management at the MTA. The accelerated capital work, a boon for the system's infrastructure, may also require accelerated MTA bonding if other sources of funding are not available when needed.

As of March 1, 2023, the MTA's capital programs since 2010 total $42.3 billion which still must be committed. As of March 1, 2023, $18.6 billion (33.6 percent) of the 2020-2024 program has been committed, leaving $36.8 billion still to be committed. [This is a vast improvement from a year prior] when only $8.3 billion had been committed for this program, as the MTA has ramped up the level of commitments to make up for the delayed start to the program because of the pandemic construction slowdown. According to the MTA capital dashboard, as of December 31, 2022, 466 of 795 projects in the 2020-2024 capital program had been completed or begun (see Figure 2). The program had gotten off to a slow start in 2020 as the MTA halted capital commitments at the start of the pandemic. As in the past, the MTA is expected to split larger projects into smaller segments during the life of the program, which ultimately will increase the total number of projects as the plan continues.

At the same time as the MTA continues work on its 2020-2024 capital program, it must still finish its 2015-2019 and prior programs. Partly due to the 2015-2019 program being approved 18 months late due to a funding dispute between the State and the City, 32 percent of the 1,181 projects that make up the 2015-2019 capital program were not finished as of December 31, 2022 (see Figure 3). The MTA had completed 802 projects, but 230 (19 percent) were still in

FIGURE 4
MTA Capital Program Funding
(In Millions)

	1982-1991	1992-1999	2000-2004	2005-2009	2010-2014	2015-2019	2020-2024
Federal Funding	$5,201	$5,603	$7,454	$7,723	$14,131	$7,638	$12,430
New York State	2,385	104	- - -	1,450	770	9,196	3,007
New York City	1,924	2,118	516	2,833	654	2,669	3,100
MTA Bonds	4,532	6,365	8,770	5,100	8,588	10,786	11,364
Dedicated Tax Bonds	- - -	1,085	3,796	5,624	- - -	- - -	- - -
Payroll Mobility Tax MTA Bonds	- - -	- - -	- - -	- - -	6,000	- - -	- - -
Congestion Pricing Bonds/Cash (PAYGO)	- - -	- - -	- - -	- - -	- - -	- - -	15,000
Sales Tax and Mansion Tax	- - -	- - -	- - -	- - -	- - -	- - -	10,000
MTA Asset Sales and Other	1,349	2,821	1,118	1,623	1,558	3,680	542
Total	**$15,391**	**$18,096**	**$21,654**	**$24,353**	**$31,701**	**$33,969**	**$55,443**

Sources: Metropolitan Transportation Authority; OSC analysis
Note: 2020-2014 program includes funding for Superstorm Sandy projects.

construction, and construction had not begun on the remaining 149 projects (13 percent). Most of the remaining work relates to Phase 2 of the Second Avenue Subway, which was delayed while awaiting federal approval to start preliminary work, and the completion of 10 subway station renewals of which five are still waiting for construction to begin. As of March 1, 2023, $3.4 billion (10 percent) of this $33.9 billion program still must be committed.

The 2010-2014 capital program has completed 90 percent of the 1,313 projects in the program, with 137 projects left to be completed. Most of the outstanding projects are for Superstorm Sandy-related work, commuter railroad rolling stock purchases and improvements at New York City Transit, including the new fare payment system. As of March 1, 2023, of this $31.7 billion program, about $2.2 billion (6.9 percent) still must be committed.

Capital Funding

The composition of sources for capital programs has important implications for the MTA's debt outstanding and eventual debt servicing costs. The provision of capital funding from its partners, including the State, City and federal governments, can substantially alter the makeup of MTA debt. Given that available capital funding is not commensurate with the full list of needs for the system, the MTA may choose to issue more or less debt to fund its capital needs. It must also balance that investment with driving up debt service costs to levels that are unmanageable for its operating budget.

As seen in Figure 4, direct State funding in the first MTA capital program was initially a small but important share of funding, as the State had enabled the MTA to use operating revenues to finance capital spending. The State then made additional dedicated taxes available for the MTA's operating budget, allowing the MTA to issue more bonds but reduced direct state support. City funding for the MTA's capital program has also fluctuated historically, influenced by the City's own financial position. This approach to funding capital projects contributed to the heavy amount of MTA bonding that was done starting in the early 2000s and to the heavy debt load the MTA now carries.

In recognition of the increasing burden on the MTA's operating budget from debt, the MTA received substantial funding from both the State and the City in the 2015-2019 capital program. The State, starting with the 2015-2019 program, has required the City to provide additional capital funding to the MTA.

In 2019, the State elected to provide congestion pricing, internet marketplace sales tax and mansion tax revenues totaling $25 billion for the 2020-2024 capital program. These funds are separated from the MTA's operating budget and placed in a lockbox so the impact on the operating budget is not felt. The federal government has also appreciably increased its level of capital formula funding for state of good repair and normal replacement projects in the 2020-2024 program.

These additional sources of funding, including lockbox funding kept separate from the MTA's operating budget, have allowed the MTA to maintain the share of capital funding coming from MTA bonds at close to the level of prior capital programs.

Debt Outstanding

The amount of outstanding long-term debt issued by the MTA more than doubled from 2000 to 2010, from $11.4 billion in 2000 to $29 billion in 2010. The pace of growth slowed to 22 percent from 2010 to 2019, to reach $35.4 billion, as State support rose from the decade prior. Since 2019, however, debt has risen to accommodate increased capital spending, reaching $42.3 billion in 2022, a 19 percent increase since 2019 (see Figure 5).

Including capital lockbox debt, which is kept outside of the operating budget to eliminate any impact on operational spending, the MTA expects debt outstanding to be $44.3 billion in 2023 and increase to $56.7 billion in 2028. Non-lockbox debt outstanding (which has an operating budget impact) is expected to decline from $41.6 billion in 2022 to $38.4 billion in 2028 and $35 billion in 2030 as the MTA focuses on issuing its lockbox debt. As a result, debt service paid from the operating budget is also expected to stabilize in the short term.

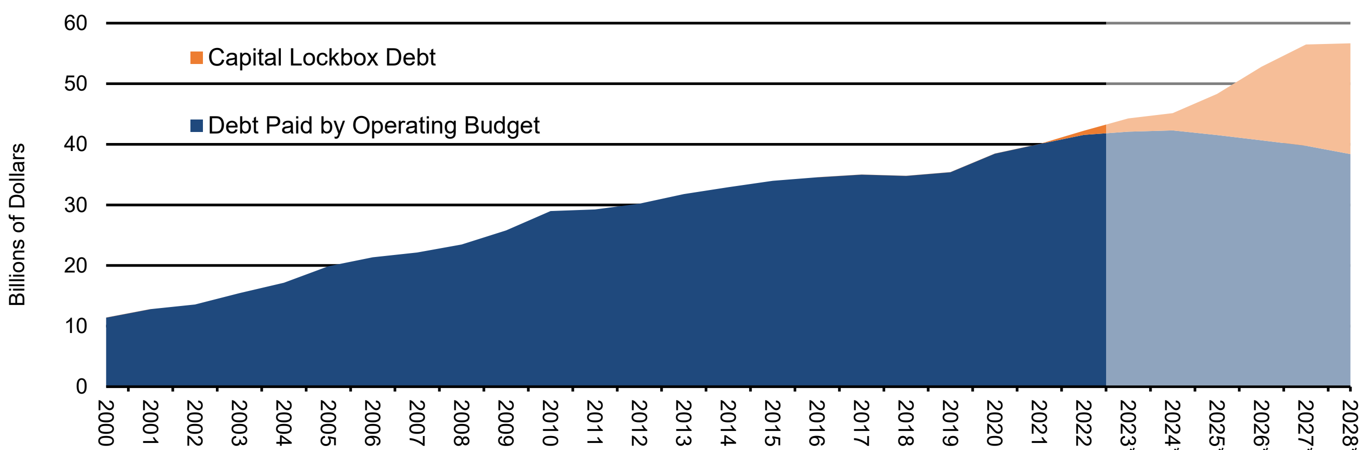
In the last review of the MTA's debt, OSC noted lockbox debt had not yet been included in debt service projections. The MTA now includes all of the proposed lockbox debt in its forecast, which provides a more realistic view of the MTA's debt in the coming years. The updated debt forecast includes $18.5 billion of future bonding backed by capital lockbox revenues including congestion pricing. Most of the initial planned lockbox borrowing is expected to be backed by City internet sales tax contributions as the MTA waits for congestion pricing to begin.[1]

The inclusion of capital lockbox debt, the majority of which comes from congestion pricing, is critical to managing the overall debt load of the MTA and its impact on debt service and its operating budget. Future declines in debt outstanding for non-lockbox debt are reliant on capital lockbox debt providing funds to pay for capital projects. Capital lockbox debt is expected to grow from 5 percent of debt outstanding in 2023 to 32 percent by 2028. However, risks over the implementation of congestion pricing could have an impact on the MTA's capital program, either in the form of reducing planned spending or further reliance on existing types of debt which are paid from operating revenues. The MTA has already pushed back the receipt of the congestion pricing funds from the beginning of 2021 to currently the second quarter of 2024.

The forecast includes $9.6 billion of debt the MTA expects to bond for projects in the transit and commuter portions of the 2020-2024 capital program. However, the debt is not expected to be issued until the 2030 through 2034 period. Projected borrowing for any future capital programs after the 2020-2024 program is also not included in the MTA's financial plan.

The MTA makes use of Bond Anticipation Notes (BANs) which are short-term financing vehicles that mature in periods of less than five years that are expected to be refinanced with long-term bonds after maturity. These BANs were used to fund a portion of the State's share of the 2015-

FIGURE 5
MTA Debt Outstanding including Capital Lockbox Debt



Note: Excludes short-term bond anticipation notes (BANs). Shaded area beginning in 2023 are projections.
Sources: Metropolitan Transportation Authority; OSC analysis

*MTA forecast

[1] These sales tax contributions are the result of the elimination of a tax exemption for third-party internet marketplace providers from collecting and remitting New York sales taxes on transactions conducted on their sites. The MTA has so far issued $2 billion of debt backed by NYC sales taxes.

2019 capital program and the MTA expected the State to fund the debt service on the long-term bonds issued to repay the BANs. However, the State budget for State fiscal year 2021-22 assumed that the State would finance these contributions with State bonding instead of reimbursing the MTA for the debt service on its bonds. As a result, the MTA is relieved from having to bond the remaining amounts, reducing overall debt outstanding. The State has already bonded $5.5 billion of this $7.3 billion commitment for the 2015-2019 capital program.

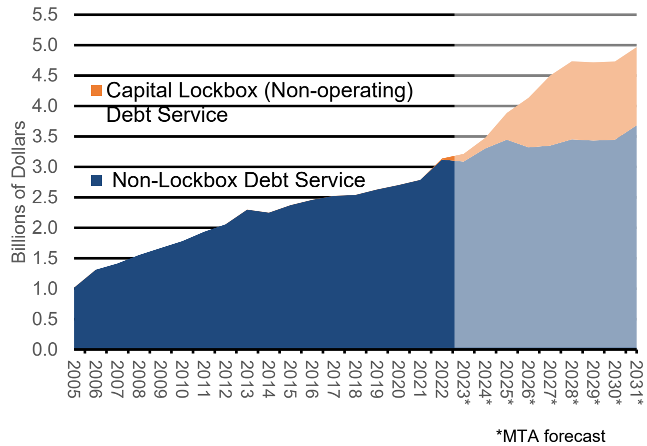
Debt Service and Debt Burden

Debt service is the payment made for combined principal and interest for existing debt obligations. Debt service on any issued bond is a fixed cost that can stretch to 30 years or more after issuance, potentially crowding out operating spending of other types, as there is limited control over the ability to reduce these costs over time. MTA-budgeted debt service (including lockbox debt service) is projected to reach nearly $5 billion by 2031 (see Figure 6), $1.8 billion more than in 2022 (58 percent higher). Non-lockbox debt service is also expected to rise, even as overall non-lockbox debt outstanding is expected to decline, mostly due to the MTA still having to issue long-term bonds to pay outstanding BANs and fund a portion of the 2020-2024 capital program.

As noted earlier, the MTA's debt service forecast includes the issuance of $9.6 billion in anticipated debt backed by the payroll mobility tax for the 2020-2024 program. The MTA does not anticipate issuing BANs for this capital contribution until 2027; the long-term bonds to pay back these BANs would not be issued until 2030. The federal infrastructure law is expected to provide the MTA with an additional $1.7 billion of formula funds which would allow the MTA to reduce the amount of BANs issued for the 2020-2024 capital program by $1.7 billion.

There are a number of other ways the MTA can choose to structure its debt and how it pays for the related costs. Some of these choices are based on a fundamentally sound public financing

FIGURE 6
MTA Debt Service



Note: Data as of the MTA's February 2023 Financial Plan. Shaded area beginning in 2023 are projections.
Sources: Metropolitan Transportation Authority; OSC analysis

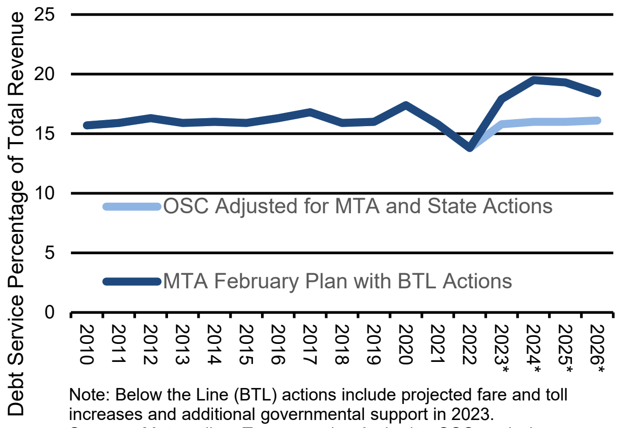
rationale, however others may have been done to put off more difficult decisions, particularly during recent periods of fiscal stress.

For instance, the separation of funds for the explicit purpose of paying for the capital program, such as the lockbox, is a means of avoiding conflating pressures from the operating budget onto the capital program.

Debt service on the assumed $18.5 billion of lockbox bonding is expected to rise to $1.3 billion annually starting in 2028.[2] This debt service, however, is expected to be paid from the capital lockbox, which is separate from the MTA's operating budget and will not compete for other resources in the operating budget without changes to State law.

[2] The remaining $7 billion of the $25 billion expected from capital lockbox resources is expected to be used as pay-as-you-go cash contributions to the MTA's 2020-2024 capital program.

FIGURE 7
MTA Debt Burden



Note: Below the Line (BTL) actions include projected fare and toll increases and additional governmental support in 2023.
Sources: Metropolitan Transportation Authority; OSC analysis

*MTA forecast

This approach stands in contrast to recent choices on bond repayment structures by the Authority. Starting in 2018, the MTA has structured its bond sales to defer the payment of principal, in some cases for as long as 20 years, which leads to lower debt service costs in the short term and reduces its current operating burden. However, this approach, known as "backloading," pushes these increased costs into an uncertain future while also increasing overall interest expenses. The MTA can also use notes in this way, pushing off long-term financing through bonds to a later time.

The MTA's financial plan assumes most of its projected issuances will have level debt service, which is an appropriate and equitable means for planning to pay these costs, and an industry standard for municipal bond issuers. However, OSC anticipates that the MTA will continue to issue debt that will defer all principal payments for 10 years, as it already plans to do with its own share of bonding for the 2020-2024 program. The MTA has not issued debt with level debt service since 2017.

The MTA has also become more reliant on debt with maturities longer than 30 years. Of the 29 bonds that the MTA has issued since 2017, 14 bonds totaling nearly $3 billion had maturities longer than 30 years. Eight bond issuances that will take longer than 30 years to repay have been issued since 2021, during a period of sustained fiscal uncertainty. The MTA has stated that it structures its debt so that it matures within the expected useful life of the project being funded but longer maturities also mask short-term operating pressures.

The share of total revenue needed to fund debt service averaged 16.1 percent from 2010 through 2019 (see Figure 7). The MTA's February Plan reports that its debt burden is expected to rise from 15.8 percent in 2021 to 17.9 percent in 2023, increasing to around 19.5 percent in 2024 and 2025 before decreasing to 18.4 percent in 2026. These totals assumed a 5.5 percent fare and toll increase in 2023, a 4 percent increase in 2025 and the receipt of $600 million in new State aid in 2023.

As part of the recently enacted State budget, the MTA is set to receive more than $1 billion in new aid for its operating budget, allowing the MTA to lower its planned fare and toll increase in 2023 to 4 percent. Based on the receipt of this new support and using federal COVID-19 aid, the MTA has prepaid $1.4 billion in principal and interest freeing up $1.5 billion for other operating purposes in 2023 through 2026, which has not been reflected in the February Plan. If these MTA and State actions are included, OSC estimates that the debt burden would be about 16 percent from 2023 through 2026, a substantial reduction from current forecasts.[3]

If the capital lockbox debt service and revenues were not separated but were instead included as part of the operating budget, the debt burden could rise to 21.2 percent by 2031, assuming all $18.5 billion of lockbox debt is issued.[4]

[3] This estimate includes the additional one-time State aid in 2023, additional Payroll Mobility Tax revenue and contributions from the City for paratransit enacted in the State budget. It does not include gambling revenues that are earmarked for the MTA, since the amount and timing of such revenues is uncertain.

[4] OSC analysis includes 100 percent of anticipated capital lockbox revenue being available for debt service of related bonds. The analysis assumes 3 percent growth in revenue for 2027 through 2031.

The MTA reported to OSC that its current projection for growth in debt service from 2022 to 2031 is 3.2 percent, including some deferrals of principal payments, with similar increases assumed for total revenues over the period. This would allow the MTA to manage a debt burden of 17 percent or less from 2023 through 2031. OSC acknowledges that the MTA maintains the ability to defer the payment of principal for future bond issuances in its projections. Assuming the growth in debt service continues at that rate, future program commitments for capital programs through 2041 would be $54.4 billion. Under this scenario, debt service paid out of the operating budget would peak at $6.5 billion in 2047.[5]

As in the past, the MTA is relying on future revenue growth to limit the debt burden on the operating budget and offer management flexibility to fund future capital programs, but there is no guarantee that sufficient growth will occur. If revenues increase by 1 percent annually after the plan period, the debt burden would rise to 18.6 percent by 2031 but if revenues increase by 5 percent annually, the debt burden would be 15.3 percent that year. Efforts to allow for the use of congestion pricing funds to support operations, as suggested by some legislators, could provide a short-term boost for operating revenues but would ultimately come at the expense of capital investment and increase the fixed cost burden on operations. Success in bringing riders back to the system, and thereby boosting revenue, would help alleviate the debt burden over the long-term.

As shown in Figure 8, the MTA uses five main types of debt, known as “credits” for its bonding program. Each credit is backed by different pledged revenues. Transportation Revenue Bonds (TRBs) were previously the most used credit since most MTA revenue is pledged toward debt service payments.

FIGURE 8
2023 MTA Debt Service Metrics

Bond Credit	Pledged Revenue (in millions)	Debt Service (in millions)	Debt Service as Share of Pledged Revenues
Transportation Revenue	$13,573	$1,589	12%
Payroll Mobility Tax	2,069	379	18%
Dedicated Tax Fund	611	329	54%
TBTA General	1,739	666	38%
TBTA Subordinate	1,072	103	10%

Sources: Metropolitan Transportation Authority; OSC analysis

The MTA now plans to do the bulk of its borrowing using the Payroll Mobility Tax (PMT) credit, since it carries a stronger credit rating and thus offers lower interest rates. By 2026, the MTA expects 24 percent of PMT pledged revenue to be used for debt service, up from 11 percent in 2022. As mentioned previously, the MTA expects to use the PMT credit to fund its $9.6 billion share of the transit and commuter railroad portions of the 2020-2024 capital program. Debt service paid with PMT funds is expected to be as high as $1.4 billion in 2047, most likely using a higher share of revenue that will not be available for operating expenses.

The MTA Dedicated Tax Fund Bonds are backed mostly by petroleum business taxes. In 2023, 54 percent of the portion of these statewide revenues devoted to the MTA are going toward debt service. Debt service as a percentage of pledged revenue is expected to be 38 percent for Triborough Bridge and Tunnel Authority (TBTA) General Revenue Bonds and 10 percent for TBTA Subordinate Revenue Bonds in 2023.

[5] The revenue assumptions in this analysis do not include the impact of the new operating budget aid that the State has provided the MTA.

Conclusion

Recent action taken by the State to support the MTA's operations will put the MTA closer to its goal of providing safe, reliable and frequent public transit service. The MTA must do its part to fully reflect the costs of doing business so that its funding partners and customers are clear on how it anticipates achieving budget balance over time. One important way to ensure future budgets are balanced in a sustainable fashion, while still making needed investments in the infrastructure of the system, is by more appropriately managing its debt.

When using debt, it is important that the MTA attempt to maintain debt structures that repay its obligations in an equitable manner, without placing a disproportionate burden on future budgets and the taxpayers, toll payers and riders that will fund them. This approach to using debt stands in contrast to backloading, a financing practice which the MTA has used in times of fiscal stress and continues to make use of now, and which can lead to future periods of structural budget imbalance, requiring additional funding in the form of greater-than-anticipated fare and toll hikes or new or increased taxes. It is also important that the MTA prioritize and align its most critical needs with capital funding in its upcoming needs assessment in order to make the best use of limited capital dollars.

The MTA and its stakeholders must continue to monitor and address its fiscal challenges, including the pressures caused by the fixed cost associated with servicing debt, and ensure that the MTA's structural budgetary imbalance does not result in disinvestment in the system. By doing so, the MTA can continue to provide services needed for the nation's largest regional economy to recover and prosper in the years ahead.

Prepared by the Office of the State Deputy Comptroller for the City of New York

Leonard Liberto, Chief Municipal Financial Analyst
Barry Del Mastro, Administrative Specialist

Office of the New York State Comptroller
110 State Street, Albany, NY 12236