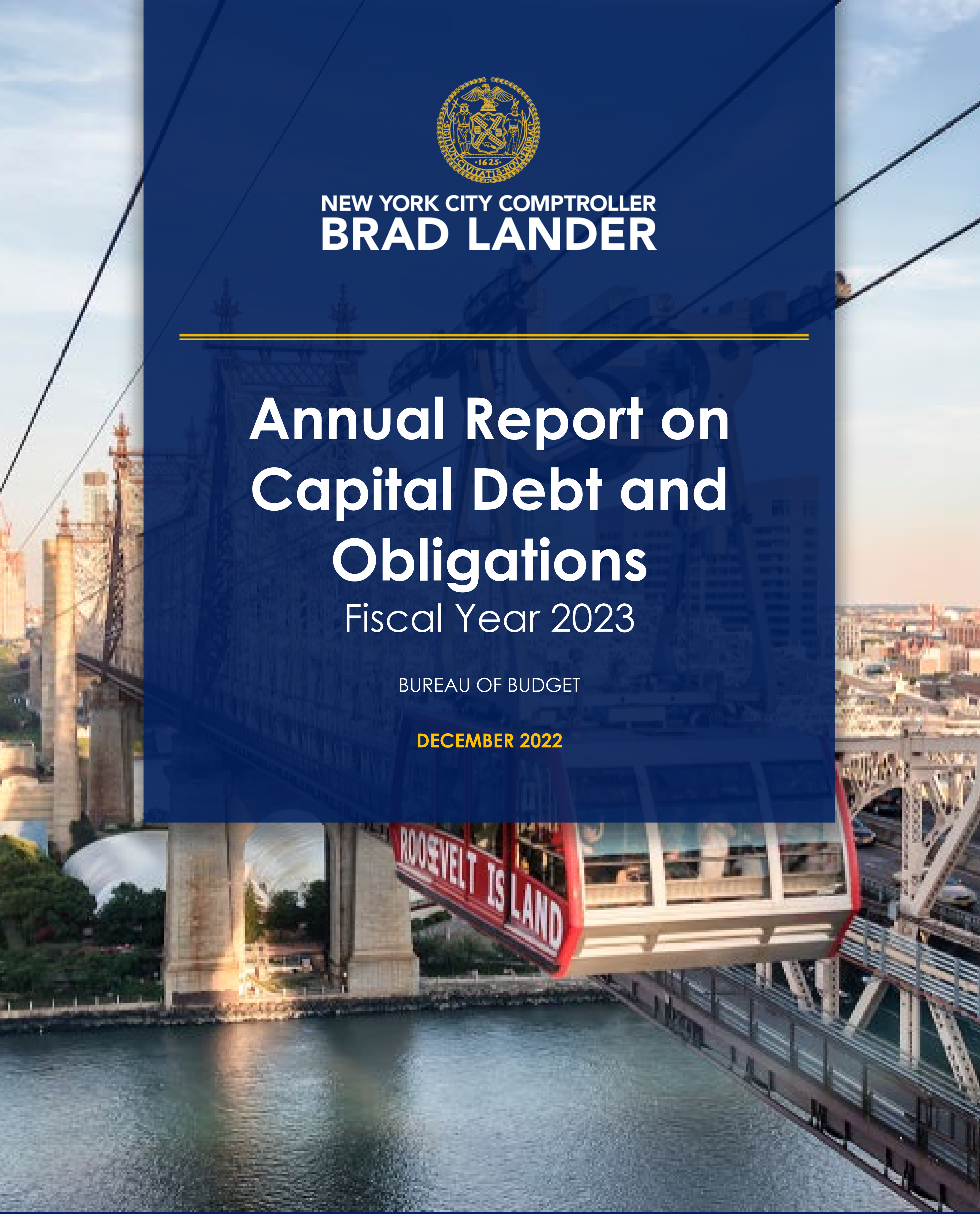

NEW YORK CITY COMPTROLLER
BRAD LANDER

Annual Report on Capital Debt and Obligations

Fiscal Year 2023

BUREAU OF BUDGET

DECEMBER 2022

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A Message from the New York City Comptroller

Dear New Yorkers,

New York City's infrastructure is a foundation for our shared thriving. City capital projects are the school buildings that educate our kids, the tunnels that bring us clean water, our public parks, libraries, and hospitals, affordable housing for families, the space and technology needed for our municipal government and courts, and the roads and bridges that New Yorkers rely on every day.

As our city grows and changes, so do the needs and strains on that infrastructure. Many of our bridges and sewer mains are over 100 years old. The affordable housing crisis (including the needs of NYCHA) calls for massive investments. The rising seas and temperatures of the climate crisis require new flood protections, building transformations, and renewable energy infrastructure.

All these projects will require many billions of dollars of investment in the years ahead. Some of those funds will be provided through federal and state programs, like the recently passed Infrastructure Investment and Jobs Act (IIJA) and New York State Environmental Bond Act.

But the vast majority of the funding will come through the City of New York's debt financing. Much like a household that takes out a mortgage to finance the long-term purchase of a home, the City borrows for its long-term capital needs. While debt financing provides critical resources, it must be managed wisely. If the City's debt service obligations grow too large, they can crowd out room for necessary operating expenses. And if bond investors fear that the City is not keeping its debt burden manageable, the cost of borrowing is likely to go up, making it harder to raise funds for future needs.

This Annual Report on Capital Debt and Obligations therefore examines key questions about New York City's debt. Several of the key findings are positive:

- New York City's debt burden, relative to its tax base, has declined across multiple indicators. After reaching a high of 17.2% in FY 2002, the City's debt service as a percent of local tax revenues has dropped to 9.7% in FY 2022. Debt outstanding as a percent of personal income and taxable assessed value has also dropped measurably.
- The City's outstanding debt remains well below the statutory debt limit set by the State Constitution and is projected to stay that way across the four years of the financial plan. This is an area to watch for the long term, however, as it is possible that growing infrastructure needs could eventually require a greater share of our resources.

Beyond the important questions of the capital debt limit and affordability explored in this annual report, there are other critical questions about New York City's infrastructure planning and execution that bear sustained attention.

Capital projects procurement and execution can and must be dramatically improved. The NYC Capital Process Reform Task Force, convened by First Deputy Mayor Lorraine Grillo, and the Department of Design and Construction's Blueprint 2022 take direct aim at this need and are a promising start. This work includes better performance management and reporting, such as creation of the uniform Capital Project Tracker required by Local Law 37 of 2020, which I sponsored as a Council Member. Our office is an enthusiastic partner with City Hall in these efforts.

We also need better infrastructure planning to guide spending and prioritize projects. There is currently no comprehensive, accurate, regularly-updated inventory of the City's infrastructure – including what it would really cost to bring it into a "state of good repair" and where the biggest vulnerabilities lie. In the face of rising seas and temperatures, the City also needs to develop a risk-based framework to guide long-term resiliency investments.

Making these infrastructure investments offers an enormous economic development opportunity in the coming years – both because strong infrastructure is a requirement for business creation and long-term thriving, and because it creates a large number of good jobs now.

If we face a global economic downturn in the near term, as many economists predict, construction jobs on public infrastructure projects can provide a critical, countercyclical boost. Especially if we can strengthen our workforce development system, those construction jobs can help create a more inclusive economy, and offer many low-income and immigrant New Yorkers a pathway to the middle class, as they have for generations.

So many good reasons to make your way through the charts and tables that comprise our Annual Report on New York City's Capital Debt and Obligations, if you weren't planning to already!

With an eye on the long term,

Brad

I. Executive Summary

The City of New York's (the "City") debt finances the capital maintenance, upkeep, and expansion of an infrastructure that must accommodate not only 8.5 million City residents but also millions of daily commuters and tourists. The City's extensive and complex infrastructure is both essential and costly to maintain. This report assesses the current state of the City's debt burden compared to its tax base, the statutory debt limit, and other U.S. cities. In accordance with Section 232 of the City Charter, the Comptroller is required to report the amount of debt the City may incur for capital projects during the current fiscal year and each of the three succeeding fiscal years.

Debt for the City, excluding that of the New York City Municipal Water Finance Authority, has grown from $39.55 billion in FY 2000 to $95.27 billion in FY 2022, an increase of 141 percent. Over the same period, New York City personal income grew by 136 percent, New York City local tax revenues by 205 percent, and the City-funds expense budget by 184 percent.[1]

Debt is issued directly by the City or on behalf of the City through a number of public benefit corporations or authorities.

The City may issue long-term debt only for capital purposes (assets with useful lives of at least three years for certain technology purposes or five years or greater for other purposes, and a value equal to or greater than $50,000, as established in Comptroller's Office Directive #10), to finance certain pollution remediation costs per a 2010 amendment to the Financial Emergency Act, and to provide capital grants to other entities such as the Metropolitan Transportation Authority (MTA).[2]

The City's Outstanding Debt Remains Well Under the Statutory Debt Limit

Despite its magnitude, the amount of outstanding City debt counted against the City's debt limit is well under the City's statutory debt-incurring power for the current year. New York City's general debt limit, as set forth in the New York State Constitution, is 10 percent of the five-year rolling average of the full value of taxable City real property, or $127.45 billion for FY 2022. Outstanding City debt that is counted against the debt limit totaled $85.94 billion as of July 1, 2022, or 67 percent of the debt limit, leaving the City with a net debt-incurring capacity of $41.51 billion. The City's general debt limit is projected to increase (along with the value of taxable City real property) to $131.69 billion in FY 2024, $136.68 billion in FY 2024 and $145.59 billion by FY 2026.

[1] FY 2022 New York City personal income is estimated from the NYC OMB's November 2022 Plan.

[2] A minimum useful life of three years for certain information technology projects became effective July 1, 2019. On July 1, 2020, the minimum cost of a capital-eligible project rose to $50,000 from $35,000.

The outstanding debt total as of July 1, 2022 included $36.31 billion of net General Obligation (GO) debt, $29.83 billion of NYC Transitional Finance Authority (TFA) debt above its $13.5 billion authorized base, and $19.8 billion in contract and other liabilities, as shown in Table 1 on page 6. By the beginning of FY 2026, the City's total indebtedness is expected to grow by 11.5 percent annually to $119.16 billion. The City's remaining projected debt-incurring capacity of $37.29 billion as of July 1, 2023, is estimated to decline to $29.50 billion on July 1, 2024 and to $26.44 billion on July 1, 2025, based on projected growth of the full market value of taxable real property. Forty-seven percent of outstanding GO and TFA debt is scheduled to come due over the next ten years.

The calculation of indebtedness is based in part on the City's projection of capital commitments and the attendant financing to support capital spending under these commitments. As in previous years, we assume that the City will achieve the planned amount of capital commitments, net of those considered unattainable by the NYC Office of Management and Budget (OMB). While the calculation of overall indebtedness remained unchanged, this year's report uses OMB's assumptions on bond issuance from the November 2022 Financial Plan to project the components of indebtedness. In the estimates, commitments in excess of bond issuance increase contract liability. Table 1 shows that net funded debt is projected to grow at an annual rate of 8.2 percent, versus a growth rate of contract liability of 21.3 percent.

Between the start of FY 2022, as demonstrated in last year's annual report, and the start of FY 2023, debt-incurring power decreased by $6.19 billion. This is because the debt limit grew by only $96 million (0.1 percent), while net funded debt increased by $2.21 billion (3.5 percent), and contract and other liability grew by $4.08 billion (25.9 percent). Despite the lower starting point, the projection of debt-incurring power increased due to the different time profile of planned commitments. Given the underachievement of OMB's planned capital commitments, it is likely that the remaining debt incurring power in FY 2026 will be higher than projected.

In July 2009, the State Legislature authorized the issuance of TFA Future Tax Secured bonds above the cap of $13.5 billion, with the condition that TFA debt above $13.5 billion be counted against the gross debt-incurring limit.[3] This change gave the City additional flexibility in funding the commitments but did not generate additional remaining debt-incurring power. A higher TFA exclusion amount, such as the one pursued by the City earlier this year, would instead increase the remaining debt-incurring power dollar for dollar. The additional power could over time be absorbed by additional capital commitments and by reduction in unattained commitments. However, actual bond issuances (which affect the components of total indebtedness) would be determined by considerations regarding affordability, such as the ratio of debt service to NYC tax revenues.

[3] Before the change, TFA had already hit the $13.5 billion cap and the bonds were not counted against the debt-incurring limit. See the FY 2009 Annual Report of the Comptroller on Capital Debt and Obligations https://comptroller.nyc.gov/wp-content/uploads/documents/jan09_capdebtFY2009.pdf.

Certain entities aside from the City issue debt to finance capital programs for the City. While the City may pay a certain portion of these debts, they are not counted towards the City's statutory debt limit. Additional funding for the City's Capital Plan is provided by debt issued by the New York City Municipal Water Finance Authority (NYW), which is backed by water and sewer system revenues.

The City's Debt Burden Relative to its Tax Base is Improving Across Multiple Indicators

Over the past two decades, all three measures of debt burden have improved:

- After reaching a high of 17.2 percent in FY 2002, New York City's debt service as a percent of local tax revenues has dropped to 10.7 percent in FY 2020, and to 9.7 percent in both FY 2021 and FY 2022.
- Debt outstanding as a percent of total NYC personal income has dropped to 13.3 percent in FY 2021 along with a forecast of 13.2 percent for FY 2022, having averaged 15.2 percent from FY 2002 to FY 2020.
- Debt outstanding as a percent of taxable assessed value was 36.6 percent in FY 2022 compared with an average of 41.7 percent over FY 2002 to FY 2021.

While New York City's FY 2021 per capita debt burden was over twice the average of comparable large U.S. cities, there are several relevant explanatory factors. New York City has responsibilities that in other cities are distributed more broadly among states, counties, unified school districts, public improvement districts, and public authorities, among the cities compared in this report. Partly because of this, New York City ranks the highest in two measures of debt burden that factor in a locality's taxable base and is above the averages of the comparable cities and counties.

New York City's outstanding debt as a percentage of NYC Department of Finance's (DOF) estimates of market value from the assessment roll for FY 2021 was 6.9 percent. However, because assessments are affected by statutory and other constraints, NYC DOF underestimates the market value of the City's real estate. When an estimate based on sales activity is used instead, the ratio of outstanding debt drops to 3.4 percent, which is the average among comparison cities.

New York City's debt as a percentage of personal income in FY 2021 was 13.3 percent, almost twice the average of the other comparison cities.[4] San Antonio and Houston were the next highest, at 12.3 and 10.7 percent, respectively.

New York City's credit rating remains strong. In Fiscal Year 2022, Moody's Investors Service maintained the City's GO bond rating at Aa2. Standard and Poor's Global Ratings (S&P) maintained its rating of the City's GO bonds at AA. Fitch Ratings (Fitch) maintained its rating of

[4] The latest available BEA data for personal income is for 2021.

GO bonds at AA- and changed its outlook to positive. In Fiscal Year 2022, the City's GO bonds received a rating of AA+ from Kroll Bond Rating Agency (Kroll). Rating agencies cite the City's large and diverse economy, strong financial management, and liquidity among positive credit attributes that support GO ratings. High TFA and NYW ratings reflect their strong legal frameworks and debt service coverage by pledged revenues.

Table 1. NYC Debt-Incurring Power

($ in millions)

	July 1, 2022	July 1, 2023	July 1, 2024	July 1, 2025
Gross Statutory Debt-Incurring Power [a]	**$127,448**	**$131,687**	**$136,682**	**$145,593**
General Obligation (GO) Bonds Outstanding as of July 1, 2022 plus projected bond issuance (net) [b]	38,760	41,210	43,648	46,841
Less: Appropriations for GO Principal	(2,450)	(2,513)	(2,435)	(2,368)
Plus: Incremental TFA Bonds Outstanding Above $13.5 billion	29,829	32,110	35,343	39,320
Subtotal: Net Funded Debt Against the Limit	**$66,139**	**$70,807**	**$76,556**	**$83,793**
Plus: Contract and Other Liability	19,801	23,589	30,623	35,364
Total Projected Indebtedness Against the Limit [c]	**$85,940**	**$94,396**	**$107,179**	**$119,157**
Remaining Debt-Incurring Power within General Limit	**$41,508**	**$37,291**	**$29,503**	**$26,436**
Remaining Debt-Incurring Power (%)	**32.6%**	**28.3%**	**21.6%**	**18.2%**

SOURCE: NYC Comptroller's Office and the NYC Office of Management and Budget.

NOTE: The Debt Affordability Statement released by OMB in April 2022 presents data for the last day of each fiscal year, June 30th, instead of the first day of each fiscal year, July 1, as reflected in this table. The City's Debt Affordability Statement forecasts that indebtedness would be below the general debt limit by $27.38 billion at the end of FY 2023.

[a] FYs 2024 through 2026 debt limits are based on the NYC Comptroller's Office's forecasts of the full market value of real property.

[b] Net adjusted for Original Issue Discount, GO bonds issued for the water and sewer system and Business Improvement District debt. The $38.76 billion is derived from the $38.85 billion GO total minus $85 million of the aforementioned adjustments.

[c] Reflects City-funds capital commitments as of the FY 2023 Adopted Capital Commitment Plan (released in September of 2022) and includes cost of issuance and certain Inter-Fund Agreements. In addition, the total indebtedness figure includes assumptions for future borrowing, estimated principal redemptions, and incremental changes to contract liability. In July 2009, the State Legislature authorized the issuance of TFA Future Tax Secured bonds above the cap of $13.5 billion, with the condition that this debt would be counted against the general debt limit. Thus, City capital commitments are funded with TFA debt as well as City GO bonds.

II. Profile of New York City Debt

Debt to support New York City's capital program is issued directly by the City, or on its behalf, through a number of different debt issuing entities. This debt (gross NYC debt) is used to finance the City's capital projects, and includes the City's General Obligation (GO) bonds, all categories of NYC Transitional Finance Authority bonds (TFA), TSASC, Inc. bonds, and other conduit issuers included in the Capital Lease Obligations and other category (see Table 1).[5] While New York City Municipal Water Finance Authority (NYW) bonds also fund City capital projects, they are not included in gross NYC debt as they are paid for through charges for water and sewer service set and billed by the NYC Water Board.

In the 1980s, gross NYC debt grew at an average annual rate of 4.5 percent. During the 1990s, it increased by 6.4 percent annually. The substantial increase during the 1990s resulted mainly from the rehabilitation of facilities that were neglected during the 1970s fiscal crisis. Gross debt outstanding grew at a rate of 4.1 percent per year from FY 2000 to FY 2022. The June 2022 Financial Plan shows growth of approximately 6.1 percent annually through 2026.[6] Projections for growth rates may change as more detailed information about funding needs becomes available over time.

Composition of Debt

Excluding NYW bonds, the City issues two major types of debt to finance or refinance its capital program, with GO and TFA bonds accounting for 41.0 percent and 54.8 percent of the outstanding debt total, respectively (Table 2). Debt service on these bonds is paid with General Fund revenues. NYW debt service is paid for by water and sewer user fees. Table 2 contains information on General Fund supported debt.

Each of the categories of debt is comprised of both tax-exempt and taxable bonds, except for TSASC debt, which has been issued solely as tax-exempt bonds. Tax-exempt debt accounted for 80.1 percent of the total par amount of the City's outstanding debt at the end of FY 2022. Taxable debt is issued for projects that have a public purpose but are ineligible for Federal tax exemption, such as housing loan programs.[7]

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[5] All bonds cited are paid from General Fund revenues.

[6] GO and TFA debt outstanding are used to estimate growth rate due to the unavailability of data regarding future lease-purchase debt issuance. As a result, Capital lease-purchase debt is held flat over FY 2023 – FY 2026.

[7] Certain bonds that the City issues are hybrids of taxable and tax-exempt. The City was authorized to issue Build America Bonds (BABs) in calendar years 2009 and 2010. In addition, the City issued taxable Qualified School Construction Bonds (QSCBs) until October 2013 when the Federal allocation was exhausted. Even though BABs and QSCBs are taxable because the City receives Federal interest subsidy payments for these bonds, they must meet the same federal tax law standards as tax-exempt bonds. While interest on BABs and QSCBs are classified as taxable, due to the federal interest subsidies, the net cost of borrowing to the City on these bonds is less than or similar to that of tax-exempt bonds.

To diversify interest rate risk, gross NYC debt consists of both fixed and variable rate debt, with the bulk of the debt in fixed rate borrowing. At the end of FY 2022, fixed rate debt accounted for 91.8 percent of gross NYC debt outstanding.

Table 2. Gross NYC Debt Outstanding, June 30, 2022

($ in millions)

	GO Bonds	TFA	TSASC	Conduit Debt Issuers [a]	Gross Debt Outstanding	GASB 87 Capital Lease Obligations & Other[b]
Tax-Exempt						
Fixed Rate	$25,576	$38,495 [c]	$966	$3,016	$68,053	$497
Variable Rate[c]	4,902 [d]	2,863[d]	0	0	7,765	156
Subtotal	$30,478	$41,358	$966	$3,016	$75,818	$653
Taxable						
Fixed Rate	$8,367 [e]	$10,462 [e]	$0	$0	$18,829	$13,958
Variable Rate	0	0	0	0	0	0
Subtotal	$8,367	$10,462	$0	$0	$18,829	$13,958
Total	**$38,845**	**$ 51,820**	**$966**	**$3,016**	**$94,647** [f]	**$14,611**
Percent of Total	**41.0%**	**54.8.%**	**1.0%**	**3.2%**	**100.0%**	**N/A**

Source: Annual Comprehensive Financial Report of the Comptroller for the Fiscal Year Ended June 30, 2022.

a Conduit Issuers include $27 million of City University Construction Fund (CUCF) debt which is not included in the Annual Comprehensive Financial Report (ACFR). In addition, $2.56 billion of Hudson Yards Infrastructure Corporation (HYIC) bonds and $81 million of tax lien securities, along with $351 million for two other conduit-debt issuers.

b Includes GASB 87 capital lease obligations of $13.96 billion and $653 million from three lease-purchase debt issuers whose principal and interest are paid from the General Fund.

c TFA fixed rate debt includes $8.15 billion of TFA BARBs and $134 million of the $143 million outstanding Recovery Bonds. The TFA variable rate debt includes $8.5 million of Recovery Bonds.

d Variable rate debt varies in term from two to 30 years, with interest rates that are reset on a daily, weekly, or other periodic basis.

e NYC GO taxable bond debt includes $2.6 billion of Build America Bonds and $22.14 million of Recovery Zone Economic Development Bonds. The TFA taxable fixed rate debt includes $2.13 billion of Build America Bonds and $1.14 billion of Qualified School Construction Bonds.

f Total does not include impact of premiums/discounts on debt outstanding estimated at $7.27 billion in FY 2022.

General Obligation bonds and Transitional Finance Authority Future Tax Secured bonds above $13.5 billion are the only two forms of debt included when calculating indebtedness under the general debt limit. Building Aid Revenue Bonds (BARBs), TSASC debt, and GASB 87 capital lease obligations and lease-purchase/conduit debt are not subject to the general debt limit.

General Obligation Debt

The use of GO debt, which is backed by the faith and credit of the City of New York, increased slightly in FY 2022 from FY 2021. As of June 30, 2022, GO debt totaled $38.85 billion and accounted for 41.0 percent of gross NYC debt outstanding, relatively unchanged from its share in FY 2021. GO debt outstanding includes Build America Bonds ("BABs") and Qualified School

Construction Bonds ("QSCBs"). The FY 2022 GO debt total is $271 million higher than GO debt outstanding at the end of FY 2021. During FY 2022, the City issued $3.53 billion of GO bonds, of which $955 billion were new money bonds for capital projects and $2.58 billion were GO refunding bonds. At the same time, the City redeemed $3.26 billion of its debt, including refunded bonds, during the fiscal year.

Debt service for GO bonds is paid from real property taxes which are deposited with and retained by the State Comptroller under a statutory formula for the payment of debt service. This "lock-box" mechanism assures that debt service obligations are satisfied before property tax revenues are released to the City's General Fund. NYC property tax revenues were $29.55 billion in FY 2022, almost five times FY 2022 debt service.[8]

Transitional Finance Authority Debt

The TFA issues two different types of debt — Future Tax Secured (FTS) bonds, backed primarily by the City's personal income tax (PIT) revenues, and BARBs, supported by revenues the City receives from New York State. At the close of FY 2022, TFA debt totaled $51.82 billion, comprised of $43.67 billion of FTS debt and $8.15 billion of BARBs. This total is 3.7 percent greater than at the close of FY 2021.The TFA share of gross NYC debt outstanding increased from 53.0 percent in FY 2021 to 54.8 percent in FY 2022. The increase reflects the issuance of $5.72 billion of TFA FTS bonds during FY 2022, including $3.65 billion of new money bonds, and principal redemptions of $3.6 billion.

The TFA was created as a public benefit corporation in 1997 with the power and authorization to issue bonds up to an initial limit of $7.5 billion, but after several legislative changes the limit was increased to $13.5 billion. This borrowing does not count against the City's general debt limit.[9] The City exhausted the $13.5 billion bonding limit in FY 2007. In July 2009, the State Legislature authorized TFA to issue debt beyond the $13.5 billion limit, with the additional borrowing subject to the City's general debt limit. Thus, the incremental TFA debt issued in FY 2010 and beyond, to the extent the amount outstanding exceeds $13.5 billion, has been combined with City GO debt when calculating the City's indebtedness within the debt limit. Last year, the City Administration has made a request to increase TFA's $13.5 billion exclusion threshold to $32.5 billion. The immediate implication of such an increase would be to create additional space to further raise planned commitments. As shown in section III of this report, under current law and assuming, conservatively, that the City will be able to enter into or fund $45.61 billion in planned capital commitments by the beginning of FY 2026, the remaining debt-incurring power is expected to be $26.44 billion, or 18.2 percent of the debt limit. This, if achieved, would be the lowest percentage since FY 2006, when the margin was 19.4 percent.[10] The analysis also shows that, barring structural changes to the speed and capacity to enter into and fund capital commitments,

8 Debt-Service used is from the NYC Comptroller's FY 2022 ACFR Schedule G5, Agency 099, page 322.

9 The debt limit is discussed in further detail in Section III.

10 Historical reports are available at https://comptroller.nyc.gov/reports/annual-report-on-capital-debt-and-obligations/.

planned commitments will not be attained and the City's actual indebtedness will grow less than assumed.

Debt Not Subject to the General Debt Limit

In April 2006, the State Legislature authorized the TFA to issue up to $9.4 billion of outstanding BARBs. This debt is used to finance a portion of the City's five-year educational facilities capital plan. Because they are repaid with State funds, BARBs are excluded from the calculation of the City's debt counted against the debt limit. Between FY 2007 and FY 2009, $4.25 billion of BARBs were issued. Additional BARBs in the amount of $2.15 billion were issued over the FY 2011 – FY 2013 period followed by $1.5 billion in FY 2015, $750 million in FY 2016, $500 million in each of FYs 2018 and 2019, $250 million in FY 2020, and $200 million in FY 2021.[11] As a result of those debt issuances, excluding amortization through June 30, 2022, there are currently $8.15 billion of BARBs outstanding. Currently, there is no planned BARBs borrowing over FY 2023 – FY 2026. The Mayor, in concert with the New York City Comptroller's Office, retains discretion with regard to the specific amount of annual BARBs borrowing.

In September of 2001, the State Legislature amended Chapter 16 of the Laws of 1997, to permit the TFA to have outstanding an additional $2.5 billion of its bonds and notes to pay for any and all expenses related to the terrorist attack on New York City on September 11, 2001. These "Recovery Bonds" are excluded from the debt limit. There were $142.6 million of Recovery Bonds outstanding as of June 30, 2022, of the $2.0 billion issued in FY 2003.

TSASC Inc. Debt

TSASC debt, which does not count toward the City's general debt limit, totaled $966 million as of June 30, 2022. This represents about a $27 million decrease from FY 2021. There currently are no plans for future new money TSASC issuances. TSASC is a local development corporation created under and subject to the provisions of the Not-for-Profit Corporation Law of the State of New York. TSASC bonds are secured by tobacco settlement revenues (TSR) as described in the Master Settlement Agreement among 46 states, six jurisdictions, and the major tobacco companies. In January 2017, TSASC refinanced all bonds issued under the Amended and Restated 2006 Indenture. The refunding bond structure continues to allow the TSRs to flow to both TSASC and the City, with 37.4 percent of the TSRs pledged to TSASC bondholders, and the remainder going into the City's General Fund.[12]

[11] The TFA did not issue any new money BARBs in FY 2014, FY 2017, and FY 2022.

[12] The previous TSASC indenture called for all tobacco revenues to flow first to TSASC and then to the City's General Fund.

Capital Lease (Conduit Debt) and Other Obligations (Excluded from Debt Limit Calculation)

Capital Lease and Other Obligations totaled $17.63 billion as of June 30, 2022, an increase of $12.93 billion from FY 2021. This significant increase is driven by an accounting rule change as set forth in GASB 87, increasing lease liability in the amount of $13.1 billion in FY 2022 from FY 2021. The change in reporting policy augmented the number of long-term capital leases eligible to be counted in the annual calculation to create greater transparency. There is no practical impact on the City's annual lease expenditures, which are not further burdened by the change in accounting reporting policy.

The City makes annual appropriations from its General Fund for agreements with other entities that issue debt to build or maintain facilities on behalf of the City. These agreements are known as "leaseback" transactions and result in a capital lease obligation. These capital lease obligations are shown as forms of indebtedness but are excluded in the calculation of the City's indebtedness under the general debt limit. Capital lease obligations include debt issued by the DASNY for New York City Health + Hospitals (H+H) facilities ($379 million), the DASNY New York City Courts Capital Program ($260 million), the Educational Construction Fund ($297 million), the City University Construction Fund (CUCF) ($27 million), the Industrial Development Agency ($54 million), the Primary Care Development Corporation ($13 million), as well as general lease obligations (GASB 87) ($13.96 million).[13] In addition, $81 million of NYC Tax Lien Trust debt was also included in this category.

The Hudson Yards Infrastructure Corporation (HYIC) is a not-for-profit local development corporation formed in July 2004 to finance development in the Hudson Yards district of Manhattan — primarily the extension of the Number 7 subway line westward to 11th Avenue and 34th Street, which began operations in September 2015. In May 2017, HYIC issued $2.14 billion of bonds to refund a portion of its outstanding debt, consisting of all the 2007A bonds and a portion of the 2012A bonds. The refunding bonds were structured as serial bonds that begin amortizing in FY 2022 and, due to coverage tests outlined in the original indenture, the unrefunded 2012A bonds were converted to establish a sinking fund structure that resulted in a substantially level debt service basis through maturity in 2047. As of June 30, 2022, HYIC had $2.56 billion in debt outstanding. No Interest Support Payments were made by the City to HYIC in FY 2022 nor are any planned for in the future. In August 2018, however, the City Council passed a resolution authorizing the issuance of up to $500 million in additional HYIC debt to fund Phase 2 of the Hudson Boulevard expansion and related park and infrastructure improvements from West 36th Street to West 39th Street in the Hudson Yards Financing district. HYIC has entered into a loan facility agreement with Bank of America, N.A. in the amount of $380 million and as of June 30, 2022, the Corporation has drawn approximately $4.5 million of the loan facility.

[13] Although for reporting purposes $379 million of Health + Hospitals (H+H) debt is included in the category of Capital Lease Obligations, the debt of H+H is not fully guaranteed by New York City.

Other Issuing Authorities

In addition to the financing mechanisms cited above, a number of independent authority's issue bonds to finance infrastructure projects in the City and throughout the metropolitan area. The two largest issuers are NY Water Financing authority (NYW) and the New York State Metropolitan Transportation Authority (MTA). Both entities have no statutory claim on revenues of the City of New York. Thus, the debt of NYW and MTA is not an obligation of the City. Nevertheless, bond proceeds from these entities are used to support capital projects that serve City residents. The outstanding indebtedness of these two authorities is summarized in Tables 3 and 4.

NYW had $31.54 billion in debt outstanding as of June 30, 2022, an increase of $495 million, or 1.6 percent, from FY 2021 as shown in Table 3. Debt issued by NYW is supported by fees and charges for the use of services provided by the system. Created by State law in 1984, NYW is responsible for funding the City's water and sewer-related capital projects administered by the City's Department of Environmental Protection (DEP), such as the construction, maintenance and repair of sewers, water mains, and water pollution control plants. Avoiding the need to build water filtration plants for upstate watersheds continues to be a high priority for DEP. Land acquisition strategies along with conservation-focused local development help the goal of preserving water quality. DEP's FY 2023 – FY 2026 Four-Year Capital Program assumes an average annual cash funding need of $2.08 billion.[14]

The FY 2023 City-funds Adopted Capital Commitment Plan will continue to be a driver of water and sewer rate increases over the Financial Plan period. DEP's current planned average annual City-funds commitment level of $2.81 billion is 79 percent higher than the agency's annual average actual capital commitments of $1.57 billion between FY 2019 and FY 2022. On average, the current DEP Capital Plan is about $100 million lower per fiscal year than its Capital Plan at this time last year.

Table 3. NYW Debt Outstanding as of June 30, 2022

Tax Exempt and Taxable	
Fixed Rate	$26,845[a]
Variable Rate	4,697
Total	**$31,542**

SOURCE: New York Water Finance Authority.
[a] Includes $2.4 billion of Build America Bonds (Taxable) and $101 million of Bond Anticipation Notes.

The MTA, a State controlled authority, is composed of six major agencies providing transportation throughout the metropolitan area. The MTA is responsible for the maintenance

[14] Source: OMB Capital Cash Flow document September 2022. This figure represents the estimated borrowing need for DEP, issued via NYW.

and operation of the New York City Transit bus and subway system as well as the Long Island and Metro-North Railroads and various bridges and tunnels.

Debt issued to fund the MTA's capital program is secured by several revenue sources: revenues from system operations, surplus MTA Bridges and Tunnels revenue, State and local government funding, and certain taxes imposed in the metropolitan commuter transportation mobility tax district, which includes the counties of New York, Bronx, Kings, Queens, Richmond, Rockland, Nassau, Suffolk, Orange, Putnam, Dutchess, and Westchester. In April 2019, the State enacted the MTA Reform and Traffic Mobility Act, which states that the MTA's Triborough Bridge and Tunnel Authority needs to design, develop, build, and run the Central Business District (CBD) Tolling Program. The CBD Tolling Program along with the 2019 Real Estate Transfer Tax and Internet Sales Taxes aim to provide a stable and recurring source of support to finance the MTA's capital program needs. These initiatives are expected to fund approximately $25 billion of capital projects over the FY 2020 – FY 2024 Plan period and subsequent capital programs. The CBD Tolling Program, which is projected to generate $1 billion per year, and support $15 billion of funding for the MTA Capital Program, is undergoing federal environmental review. If a favorable decision is issued by the Federal Highway Administration in early 2023, tolling operations could begin at the end of 2023.

As of June 30, 2022, as shown in Table 4, the MTA had $47.82 billion of debt outstanding, a decrease of $1.59 billion, or 3.2 percent, from June 30, 2021. MTA debt has grown by 237 percent, or $33.63 billion since FY 2000. This growth rate is about 96 percentage points higher than the growth rate in gross NYC indebtedness over the same period.

Table 4. MTA Debt Outstanding as of June 30, 2022

($ in millions)

Tax Exempt & Taxable	
Fixed Rate	$44,433
Variable Rate [a]	3,387
Total	**$47,820**

SOURCE: Metropolitan Transportation Authority. Finance Committee Book, July 2022, page 49.
[a] Variable rate included $2.14 billion of synthetic-fixed bonds.
NOTE: $362 million of the above figure is classified as taxable debt.

Analysis of Principal and Interest among the Major NYC Issuers

The two major types of debt that finance City capital projects outside the water and sewer system are NYC General Obligation and TFA bonds. TSASC bonds are a small component of debt outstanding and there is no additional planned new money debt issuance of TSASC debt. As a result, any new debt issuances will involve a mix of GO debt, TFA FTS bonds, and a lesser amount of TFA BARBs.

Table 5. Projected Combined NYC Debt Outstanding for GO, TFA, and TSASC, FY 2022 – FY 2032

($ in millions)

End of Fiscal Year	Debt Outstanding for GO, TFA, & TSASC	Percent Change in Debt Outstanding
2022	$91,630	2.4%
2023	$96,138	4.9%
2024	$101,513	5.6%
2025	$108,380	6.8%
2026	$115,495	6.6%
2027	$122,756	6.3%
2028	$129,719	5.7%
2029	$136,316	5.1%
2030	$142,238	4.3%
2031	$147,143	3.4%
2032	$150,177	2.1%

Based on NYC Office of Management and Budget (OMB) forecasts, the debt outstanding is expected to grow at an annual average rate of 5.1 percent between FY 2022 to FY 2032, as shown in Table 5. However, the projected average annual growth rate in the first half of this period of 6.0 percent (FY 2022 – FY 2026) is higher than the rate for the period as a whole.[15] Average annual growth beyond the Financial Plan period (FY 2027 – FY 2032) is projected to drop to 4.1 percent, primarily because of the greater uncertainty of capital project specifics in the later years. Since City agencies are typically not yet focused on the later years of the Ten-Year Capital Strategy period, their future projections are often less well defined. Projections for this slower rate of growth are likely to change as more detailed plans are formulated.

The growth in debt outstanding is driven by the excess of borrowing over principal redemption. Borrowing is projected to average $11.08 billion annually according to OMB's FY 2023 – FY 2032 capital cash flow estimates. This is an increase of about $670 million per year from the FY 2022 – FY 2031 capital cash flow estimates projected this time last year.

The combined principal and interest composition for GO, TFA and TSASC debt service is shown in Table 6.[16] The Financial Plan assumes principal payments totaling $4.02 billion in FY 2023,

[15] Projections of growth rates beyond FY 2022 are based on OMB's FY 2023 Adopted Budget and June 2022 Financial Plan.

[16] Since TFA BARBs debt service are not paid with City General Fund revenues, they are not included in Table 6.

$4.28 billion in FY 2024, $4.31 billion in FY 2025, and $4.57 billion in FY 2026. Principal is estimated to be 52.6 percent of debt service in FY 2023, 53.7 percent in FY 2024, 50.9 percent in FY 2025 and 49.4 percent in FY 2026.[17]

Table 6. Estimated Principal and Interest Payments GO, TFA FTS, and TSASC

($ in millions)

Fiscal Year	Estimated Principal Amount	Estimated Interest	Estimated Total Debt Service	Principal as Percent of Total
2023	$4,021	$3,625	$7,646	52.6%
2024	$4,275	$3,693	$7,968	53.7%
2025	$4,314	$4,165	$8,480	50.9%
2026	$4,574	$4,684	$9,258	49.4%

SOURCE: NYC Office of Management and Budget, June 2022 Financial Plan and Office of the NYC Comptroller.

NOTE: Adjusted for prepayments and excludes interest on short-term notes and debt service for capital lease / conduit debt. TFA BARBs debt is *not* included in this table.

During FY 2022, the City issued $3.53 billion of GO debt, $2.58 billion of which was for refunding purposes. These refundings produced gross budgetary savings of $115 million over the life of the bonds. The remaining amount of $955 million was for new money purposes to finance capital projects. The City also converted $89.5 million of variable rate debt to fixed rate and $75 million between variable rate modes. At the end of FY 2022, outstanding GO debt totaled $38.85 billion. Approximately $21.28 billion of the total GO debt currently outstanding (54.8 percent) will mature in the next ten years, as shown in Table 7.

[17] Debt service excludes lease-purchase debt, interest on short-term notes, debt service on TFA BARBs, and is as of OMB's FY 2023 Adopted Budget and June 2022 Financial Plan.

Table 7. Amortization of Principal of the Three General Fund Issuers

($ in millions)

Fiscal Years	GO	TFA[a]	GO and TFA	Percent of Total	TSASC	Grand Total
2023-2032	$21,279	$21,378	$42,657	47.0%	$277	$42,934
2033-2042	$12,864	$23,562	$36,426	40.2%	$239	$36,665
2043 and After	$4,702	$6,880	$11,582	12.8%	$450	$12,032
Total	**$38,845**	**$51,820**	**$90,665**	**100.0%**	**$966**	**$91,631**

[(a)] Includes $142.6 million of TFA Recovery bonds. Note: numbers may not tie due to rounding.

A total of $5.72 billion of TFA FTS debt was issued in FY 2022, of which $3.65 billion was new debt to fund capital projects. The remaining $2.07 billion was used for refunding purposes, achieving $418 million of budgetary savings over the life of the debt. The TFA also issued refunding bonds for BARBs in the amount of $813 million to refund a portion of its debt at lower interest rates. Including BARBs, TFA's debt outstanding was $51.82 billion at the end of FY 2022. Of the total TFA debt outstanding, $21.38 billion, or 41.3 percent, will come due over the next ten years, as shown in Table 7.

III. Debt Limit

The City’s Debt-Incurring Power

NYC’s general debt limit, as provided in the New York State Constitution, is equal to ten percent of the five-year rolling average of the full value of taxable real property. The City’s annual debt limit is established through the following steps:

- No later than February 15th, the New York City Department of Finance (DOF) issues a preliminary estimate of the assessed value of taxable real property for the ensuing fiscal year. Assessed value is statutorily less than the market value of properties.
- The general debt limit is based on the full market value of taxable real property, not on assessed value. To derive a market value of taxable properties, the New York State Office of Real Property Tax Services (ORPTS) develops special equalization ratios that express the relationship between assessed value and market value. ORPTS uses its most recent market survey and a projection of market values to obtain the full market value for the ensuing fiscal year. The special equalization ratio is then expressed as the ratio of the DOF assessed value of taxable real property to the full market value of taxable real property. ORPTS calculates equalization ratios for the ensuing fiscal year and the four fiscal years preceding it. These equalization ratios are used to compute the market values that are used to establish the City’s debt-incurring power (debt limit) for the current fiscal year.
- The City’s debt limit for the ensuing fiscal year is then calculated by averaging the estimated full values of real property over the prior five-year period and multiplying by 10 percent.
- By June 30th, the New York City Council adopts the City’s yearly budget and fixes the property tax rates for the ensuing fiscal year. The resolution fixing the property tax contains the five-year average of the full value of real property that is used to derive the debt limit.
- The debt limit is effective as of July 1st, the start of each fiscal year.

Table 8 illustrates the calculation of the FY 2023 debt limit. The full market value for each of FY 2018 through FY 2022 was calculated by dividing the assessed value of taxable real property for each year by the special equalization ratios provided by ORPTS. The average of the computed full market values of this five-year period is then calculated. Finally, the FY 2022 debt limit ($127.448 billion) is derived by multiplying the five-year average value ($1.274 trillion) by 10 percent.

Table 8. Calculation of Full Value of Real Property in New York City and the General Debt Limit, FY 2022

Fiscal Year	Assessed Valuations of Taxable Real Property	Special Equalization Ratio	Full Value
2019	$240,777,862,121	0.1956	$1,230,970,665,240
2020	$257,509,634,870	0.2004	$1,284,978,217,914
2021	$271,688,749,747	0.2307	$1,177,671,216,935
2022	$271,688,749,747	0.2039	$1,263,169,772,217
2023	$257,560,316,555	0.1947	$1,415,586,006,687
5-Year Average Value			$1,274,475,175,799
10 Percent of the 5-Year Average			$127,447,517,580

SOURCE: New York City Council Tax Fixing Resolution for FY 2023.

In conformance with Section 232 of the NYC Charter, a debt-incurring power table is prepared using the prescribed beginning of fiscal year method. Table 9 summarizes the estimated growth in the City's debt-incurring power. The City's FY 2023 general debt-incurring power of $127.45 billion is projected to increase to $131.69 billion in FY 2024, $136.68 billion in FY 2025 and $145.59 billion by FY 2026.[18] The City's indebtedness counted against the statutory debt limit is projected to grow from $85.94 billion at the beginning of FY 2023 to $119.16 billion by the beginning of FY 2026, leaving an estimated remaining margin of $26.44 billion. The current FY 2023 Adopted Capital Plan projections will potentially exert pressure against the debt limit in the fiscal years beyond the current Financial Plan period.

[18] The full value of taxable real property in the out years is based on the NYC Comptroller's Office forecast of future real estate trends.

Table 9. NYC Debt-Incurring Power

($ in millions)

	July 1, 2022	July 1, 2023	July 1, 2024	July 1, 2025
Gross Statutory Debt-Incurring Power [a]	**$127,448**	**$131,687**	**$136,682**	**$145,593**
General Obligation (GO) Bonds Outstanding as of July 1, 2022 plus projected bond issuance (net) [b]	38,760	41,210	43,648	46,841
Less: Appropriations for GO Principal	(2,450)	(2,513)	(2,435)	(2,368)
Plus: Incremental TFA Bonds Outstanding Above $13.5 billion	29,829	32,110	35,343	39,320
Subtotal: Net Funded Debt Against the Limit	**$66,139**	**$70,807**	**$76,556**	**$83,793**
Plus: Contract and Other Liability	19,801	23,589	30,623	35,364
Total Projected Indebtedness Against the Limit [c]	**$85,940**	**$94,396**	**$107,179**	**$119,157**
Remaining Debt-Incurring Power within General Limit	**$41,508**	**$37,291**	**$29,503**	**$26,436**
Remaining Debt-Incurring Power (%)	**32.6%**	**28.3%**	**21.6%**	**18.2%**

SOURCE: NYC Comptroller's Office and the NYC Office of Management and Budget.

NOTE: The Debt Affordability Statement released by OMB in April 2022 presents data for the last day of each fiscal year, June 30th, instead of the first day of each fiscal year, July 1, as reflected in this table. The City's Debt Affordability Statement forecasts that indebtedness would be below the general debt limit by $27.37 billion at the end of FY 2023.

[a] FYs 2024 through 2026 debt limits are based on the NYC Comptroller's Office's forecasts of the full market value of real property.

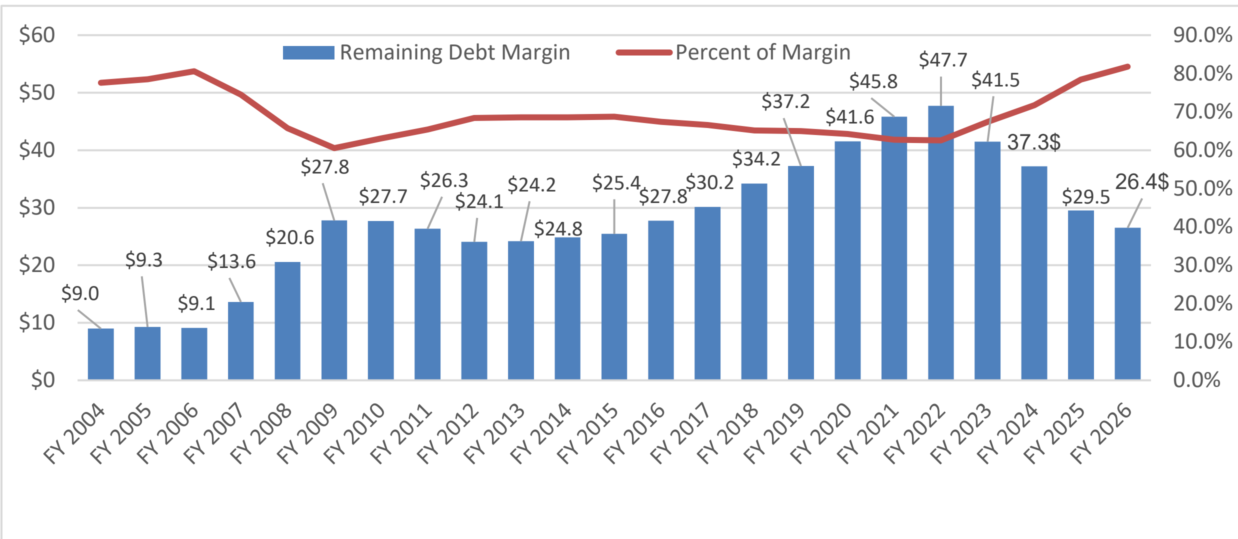
[b] Net adjusted for Original Issue Discount, GO bonds issued for the water and sewer system and Business Improvement District debt. The $38.76 billion is derived from the $38.85 billion GO total minus $85 million of the aforementioned adjustments.

[c] Reflects City-funds capital commitments as of the FY 2023 Adopted Capital Commitment Plan (released in September of 2022) and includes cost of issuance and certain Inter-Fund Agreements. In addition, the total indebtedness figure includes assumptions for future borrowing, estimated principal redemptions, and incremental changes to contract liability. In July 2009, the State Legislature authorized the issuance of TFA Future Tax Secured bonds above the initial authorization of $13.5 billion, with the condition that this debt would be counted against the general debt limit. Thus, City capital commitments are funded with TFA debt as well as City GO bonds.

As shown in Chart 1, the City's remaining debt-incurring power, the difference between indebtedness (both contractual and funded by bond issuance) and the debt limit, is projected to decrease from $41.5 billion at the beginning of FY 2023 to $26.44 billion at the start of FY 2026. The debt limit is projected to grow from $127.45 billion in FY 2023 to $145.59 billion in FY 2026, for an average annual growth rate of 4.5 percent. Over the same period, total indebtedness against the limit is projected to grow at an annual rate of 11.5 percent, reaching $119.16 billion by FY 2026. As a result, total indebtedness against the debt limit is projected to increase from 67 percent in FY 2023 to 82 percent by FY 2026. The projected indebtedness against the debt limit is based on the City's September 2022 Commitment Plan's projections while incorporating estimated principal redemptions and incremental additions to contract liability.

Chart 1. NYC's Debt Margin for FY 2004 – FY 2027 and Debt Outstanding as a Percent of Debt Limit

($ in billions)



SOURCE: NYC Comptroller's Office and the NYC Office of Management and Budget. (First day of Fiscal Year Method)

As discussed above, the debt margin is determined by both the debt limit and total indebtedness, which in turn are affected by the market value of real property and City-funded capital commitments.[19] City-funded capital commitments, excluding DEP, grew significantly between FY 2014 and FY 2019, growing at an average annual rate of 16.1 percent from $4.6 billion to $9.6 billion, as shown in Chart 2. In comparison, commitments grew at an average annual rate of 6.2 percent between FY 2005 and FY 2010, and after a brief decline from FY 2010 to FY 2012, grew at an average annual rate of 9.8 percent from FY 2012 to FY 2014. Despite the significant growth in capital commitments between FY 2014 and FY 2019, the debt margin improved from $24.8 billion to $37.2 billion. This improvement was driven by a robust real estate market which raised the debt limit from $79 billion to $106 billion, a 34 percent increase. After a slow-down in capital commitments in FY 2020 and FY 2021 in the wake of the COVID-19 pandemic, capital commitments, excluding DEP, were $10.7 billion in FY 2022, the highest level in the City's history and exceeded FY 2019 by $1.1 billion. The FY 2023 Adopted Commitment Plan projects City authorized commitments, excluding DEP, of $18.6 billion in FY 2023. Estimated authorized capital

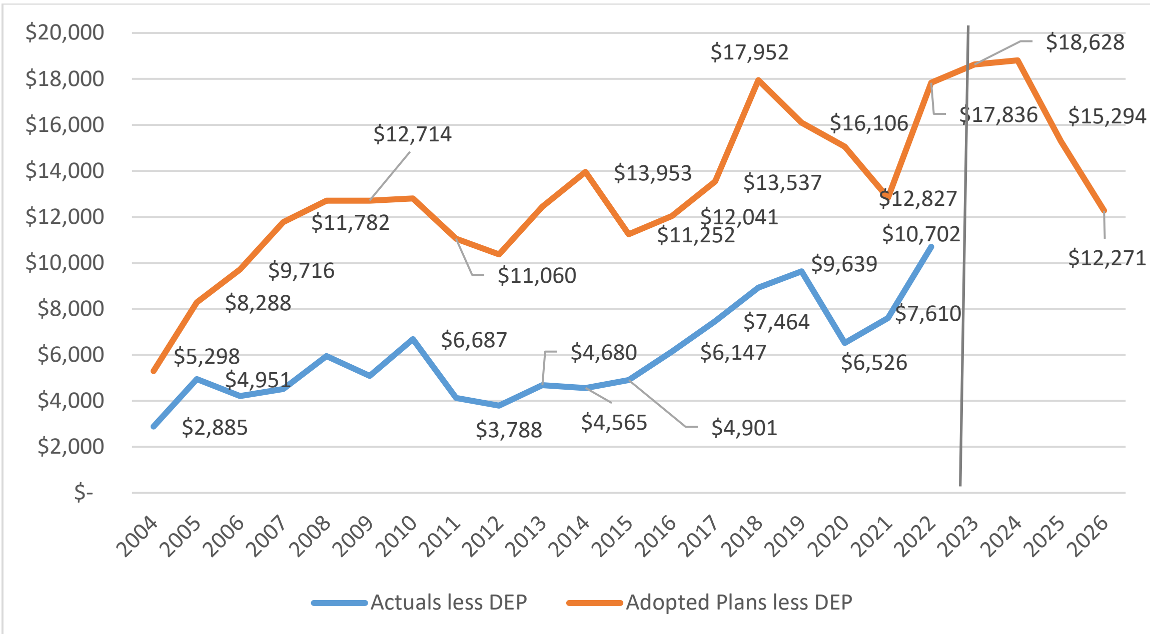
[19] City-funds commitments in this discussion exclude DEP commitments which are funded by NYW and not subject to the debt limit.

commitments are projected to average $15.5 billion over FY 2024 to FY 2026. While unlikely to be fully achieved over the period, this is a potential cause of concern should the recovery in the real estate market, particularly commercial real estate, stall. Any adjustment would require a more transparent and prioritized allocation of the City's capital needs, along with estimates that are more consistent with achievement rates against projections. As shown in the Comptroller's Office's reports on actual commitments against plan, actual commitments have consistently fallen short of authorized plans.[20]

[20] On an all-funds basis, the actual percent of planned commitments achieved over the period FY 2004-FY 2022 was 62 percent (measured in dollars using actual annual commitments divided by the first year of the Executive Plan condition)

Chart 2. City-Funds Actual Commitments FYs 2004-2022 with Historical Adopted Plans & FY 2023-2026 Plan Estimates (Excluding DEP)

($ in millions)



Relative to the projections made in 2021, the City's gross statutory debt-incurring power in fiscal years 2023 and 2024 decrease by $3.44 billion and $2.25 billion, respectively as shown in Table 10. The debt limit remains essentially unchanged in FY 2025. Total indebtedness at the start of FY 2023 was $2.20 billion lower than previously anticipated. Total indebtedness is also projected to remain below previous estimates by $5.53 billion as of July 1, 2023 and by $4.60 billion as of July 1, 2024. This not due to an overall reduction in commitments: over the projections' three-year period, commitments (net of those considered unattainable by OMB) increased by nearly $2 billion to reach $45.61 billion. Rather, the new capital plan reduces commitments in FY 2023 to $12.51 billion, from last year's $15.89 billion. Planned commitments were increased in FY 2024 and FY 2025.

Table 10. Comparison of Debt-Incurring Power Estimates

($ in millions)

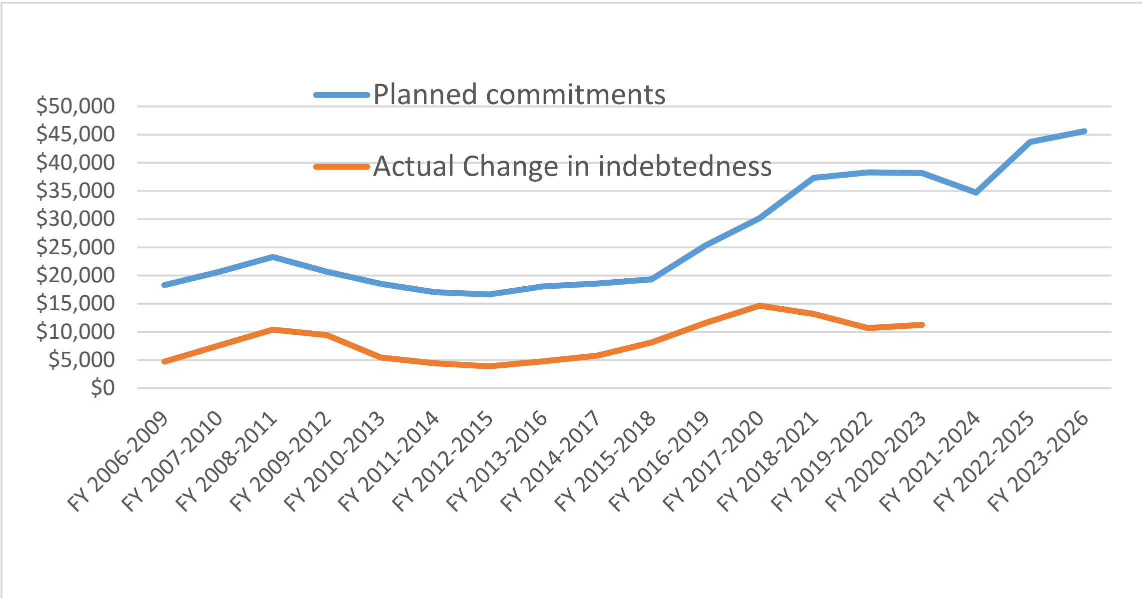
	July 1, 2022	July 1, 2023	July 1, 2024
Gross Statutory Debt-Incurring Power			
December 2021 Estimate	$130,892	$133,939	$136,723
December 2022 Estimate	$127,448	$131,687	$136,682
Difference	($3,444)	($2,252)	($41)
Total Indebtedness Against the Limit			
December 2021 Estimate	$88,141	$99,995	$111,763
December 2022 Estimate	$85,943	$94,462	$107,167
Difference	($2,198)	($5,533)	($4,596)
Remaining Debt-Incurring Power within General Limit			
December 2021 Estimate	$42,751	$33,944	$24,960
December 2022 Estimate	$41,505	$37,225	$29,515
Difference	($1,246)	$3,281	$4,555

Planned commitments are a gross addition to indebtedness. In Chart 3, we compared planned commitments and actual changes in indebtedness over the three-year periods covered by this report starting from FY 2006-2009.[21] The chart shows that until FY 2017-2020, planned commitments and changes in indebtedness moved together. Afterward, planned commitments rose to exceed $38 billion but the change in indebtedness slowed to approximately $11 billion, likely due to constraints imposed during the COVID-19 pandemic. More recently, planned commitments rose to $45.61 billion in FY 2023-2026. With the gap between planned commitments and changes in indebtedness growing, the remaining debt-incurring power in FY 2026 will likely be higher than estimated in Table 9, all other things being equal.

[21] Historical reports are available at https://comptroller.nyc.gov/reports/annual-report-on-capital-debt-and-obligations/.

Chart 3. Planned Commitments and Actual Change in Indebtedness

($ in millions)



Source: NYC Office of Comptroller

At the beginning of a fiscal year, the remaining debt-incurring power reflects both changes in the debt limit and appropriations for GO principal. Over the course of the year, as bonds are issued and capital contracts are entered into, the remaining debt-incurring power declines and reaches its minimum at the end of the fiscal year. Absent a decline in the debt limit, the remaining debt-incurring power increases at the beginning of the following year.

Table 11 reports the estimate of debt-incurring power both as of the beginning and as of the end of fiscal years through FY 2026.[22] Under the same conservative assumptions on the growth of indebtedness, remaining debt-incurring power drops to 10.1 percent of the limit, higher than in the debt affordability statement published in April of 2022 by NYC OMB.

[22] An alternative estimate of end-of-year debt-incurring power in NYC OMB's debt affordability statement published in correspondence with the Executive Budget).

Table 11. Beginning- vs. End-of-Year Estimates of Debt-Incurring Power

($ in millions)

	FY 2023		FY 2024		FY 2025		FY 2026	
	Beginning	End	Beginning	End	Beginning	End	Beginning	End
Gross Statutory Debt-Incurring Power	**$127,448**	**$127,448**	**$131,687**	**$131,687**	**$136,682**	**$136,682**	**$145,593**	**$145,593**
GO Bonds Outstanding Less Appropriations for GO Principal	$36,310	$41,210	$38,697	$43,648	$41,213	$46,841	$44,473	$50,252
TFA Bonds Outstanding Above $13.5 Billion	$29,829	$32,110	$32,110	$35,343	$35,343	$39,320	$39,320	$43,313
Net Funded Debt Against the Limit	**$66,139**	**$73,320**	**$70,807**	**$78,991**	**$76,556**	**$86,161**	**$83,793**	**$93,565**
Pre-existing Contract and Other Liability	$19,801	$19,801	$23,589	$23,589	$30,623	$30,623	$35,364	$35,364
New Contracts Not Financed	$0	$3,788	$0	$7,034	$0	$4,741	$0	$2,000
Total Contracts and Other Liability	**$19,801**	**$23,589**	**$23,589**	**$30,623**	**$30,623**	**$35,364**	**$35,364**	**$37,364**
Total indebtedness against the Limit	**$85,940**	**$96,909**	**$94,396**	**$109,614**	**$107,179**	**$121,525**	**$119,157**	**$130,929**
Remaining debt-incurring power within general limit	**$41,508**	**$30,539**	**$37,291**	**$22,073**	**$29,503**	**$15,157**	**$26,436**	**$14,664**
As a percentage of the debt Limit	32.6%	24.0%	28.3%	16.8%	21.6%	11.1%	18.2%	10.1%
Memo: Planned Commitments*	$12,513		$16,914		$16,181		$13,940	

*Planned commitments are net of DEP and reserve for unattained commitments. They include cost of issuance and certain Inter-Fund Agreements.

IV. Debt Burden and Affordability of NYC Debt

This section presents measures to assess the size of the City's debt burden and its affordability. No single measure completely captures debt affordability; hence we employ several measures that can be used to assess a locality's debt burden. This section provides measures of debt per capita, debt as a percent of the value of real property, debt as a percent of personal income, and debt as a percent of local tax revenues and total expenditures. For three of these measures, comparisons with other jurisdictions are presented.

Background

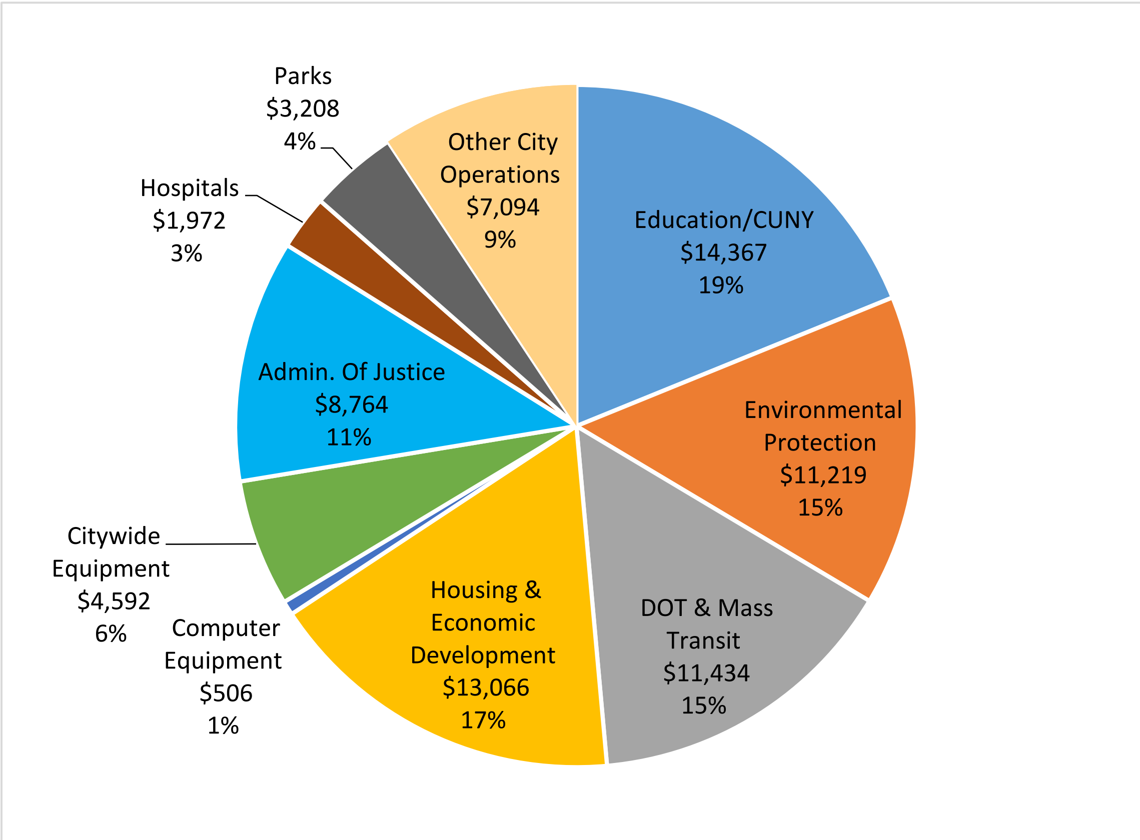
The Capital Commitment Plan published by NYC OMB is a compilation of estimated future contract registrations for all the City's new construction, physical improvements and equipment purchases that meet capital eligibility requirements. About 25 agencies engage in some form of capital work, with 14 agencies accounting for approximately 94 percent of planned capital commitments. This planning document serves as the foundation for the registration of contracts from which future capital expenditures occur. A capital commitment refers to a contract registration and does not represent a capital expenditure. Capital expenditures occur after a contract is registered, and the related spending against that contract can last several years. Capital expenditures are initially paid out of the General Fund. The financing of capital projects takes place after spending occurs to reimburse the City's General Fund. GO and TFA bonds finance all City agencies' capital projects, with the exception of DEP projects, which are financed by the NYW. In addition, the City does not finance individual projects in isolation, but rather finances portions of multiple projects simultaneously with each bond issuance.

The City-funded share of the FY 2023 Adopted Commitment Plan's authorized commitments over FY 2023 – FY 2026 totals $76.22 billion, about the same as at this time last year. City-funded commitments, after adjusting for the reserve for unattained commitments of $8.74 billion, total $67.48 billion.[23] Four programmatic areas comprise 65.7 percent of the City-funded plan, as shown in Chart 4. Department of Education (DOE)/City University of New York (CUNY) related capital projects comprise 18.8 percent of the four-year plan, followed by Housing and Economic Development related projects at 17.1 percent, the Department of Transportation (DOT) and Mass Transit at 15.0 percent the Department of Environmental Protection (DEP) at 14.7 percent. Combined, these four areas account for $50.09 billion of the $76.22 billion authorized City-funds plan.

[23] The reserve for unattained commitments represents projected shortfall in authorized commitments.

Chart 4. Allocation of $76.2 Billion City-Funds Capital Commitments FY 2023 Adopted Four-Year Commitment Plan

($ in millions)



SOURCE: NYC Office of Management and Budget, FY 2023 Adopted Capital Commitment Plan, published September 2022.

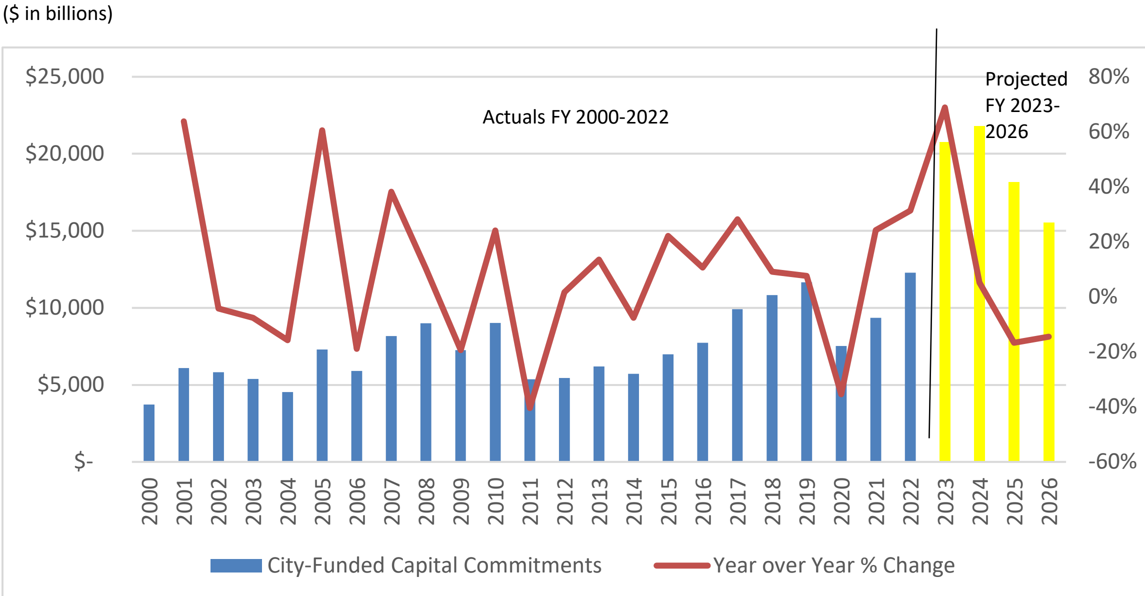
Historically, capital commitments have fluctuated widely year to year, as shown in Chart 5. In FY 2001, the City embarked on what was then a historically high capital commitment program, with City-funded capital commitments totaling $6.1 billion, a 63.8 percent increase over FY 2000. City-funded commitments increased each year from FY 2014 to FY 2019, reaching a high of $11.65 billion in FY 2019. However, City-funds commitments fell to $7.53 billion in FY 2020 due to the impact of the Covid-19 pandemic before rising to $9.35 billion in FY 2021 and $12.3 billion in FY 2022 as the City began the recovery process with the roll-out of vaccinations and the easing of restrictions on businesses and public interactions.

Going forward, the FY 2023 Adopted City-funds Capital Commitment Plan, after the reserve for unattained commitments, projects an average of $16.87 billion per year in City-funded commitments over FY 2023 – FY 2026. This represents less than a $100 million increase from the annual average in last year's Adopted Commitment City-funds Plan of $16.78 billion. The

Commitment Plan forecast is not front-loaded, with approximately 21 percent of the commitments of the current four-year Plan slated for FY 2023.[24]

Chart 5. City-Funded Capital Commitments

($ in billions)



SOURCE: NYC Office of Management and Budget, FY 2023 Adopted Capital Commitment Plan, September 2022

The City's capital program is financed almost exclusively by the issuance of bonds, which are repaid out of the City's expense budget in the form of debt service payments. The City's annual borrowing, excluding NYW debt, grew from $3.53 billion in FY 2000 to $4.61 billion in FY 2022, with the highest annual borrowing of $7.75 billion occurring in FY 2009, as shown in Chart 6. OMB expects the City's borrowing to average $10.5 billion annually between FY 2023 through FY 2026, with a peak estimated borrowing of $12.63 billion in FY 2027.[25] The $10.5 billion average over the four-year period is about $500 million higher than at this time last year. This level of borrowing, if fully executed, will put pressure on the operating budget in the event tax revenues are lower and do not meet the Financial Plan's expectations. In addition, there would be cautionary pressure on the City's general debt limit after the FY 2023 – FY 2026 Financial Plan period.

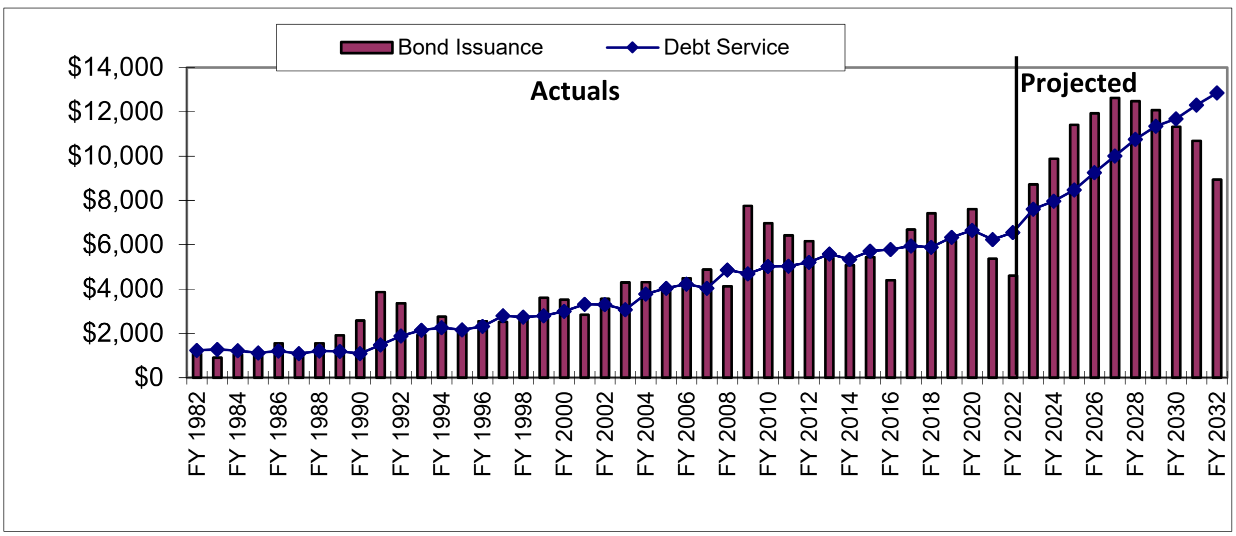
[24] Plan after Reserve for Unattained Commitment numbers were used to derive this percentage.

[25] This includes estimated bond proceeds for TFA BARBs, GO, and TFA FTS bonds from the OMB FY 2023 Adopted Budget Capital Cash flow estimates as of the September 2022 Commitment Plan. While City-funded commitments include DEP commitments because it is a mayoral operating agency, borrowing for DEP capital projects is not included in the NYC Comptroller Office's analysis of the City's debt. Financing for DEP's capital program is done by the NYW and is not counted against the General Debt Limit.

The annual average growth rate of City debt service payments between FY 2000 and FY 2022 was 3.6 percent per year, growing from $3.0 billion in FY 2000 to $6.55 billion in FY 2022.[26] According to OMB projections, the City's debt service is expected to grow at an average annual rate of 6.0 percent from FY 2023 to FY 2032, or to $12.86 billion by FY 2032, as illustrated in Chart 6. Projected growth during the four years of the Financial Plan period is 6.8 percent per annum, more than the projected average annual growth rate of 5.1 percent in FY 2027 – FY 2032.[27] However, the rate of growth over the Financial Plan period (FY 2023– FY 2026) will likely be lower as the projection incorporates conservative variable rate demand bond (VRDB) rate assumptions, as well as fairly conservative long-term bond interest rate assumptions and does not take into account the likelihood of refunding actions and lower than projected capital commitment (contract registration) rates. Conversely, the growth estimate beyond FY 2026 is low and will likely be higher than the projected pace largely because of rollovers from prior years to later years; and as the timeframe approaches for those latter years, more accurate estimates are produced.[28]

Chart 6. Bond Issuance and Debt Service, FY 2000 – FY 2032

($ in millions)



SOURCE: Comprehensive Annual Financial Reports Office of the NYC Comptroller, 2000 – 2022. Debt-service payments exclude interest on short-term notes, Municipal Assistance Corporation (MAC) debt, BARBs debt and lease-purchase debt and are adjusted for budget surpluses prepaid to the debt-service fund. However, BARBs are included in proceeds. OMB's FY 2023 Adopted Budget and Financial Plan, June 2022, was used for outyear forecasts and OMB's Capital Cash Flow document, September 2022.

[26] This includes GO and TFA FTS debt service only.

[27] These figures are as of the FY 2023 Adopted Budget and June 2022 Financial Plan and exclude lease-purchase debt service.

[28] Debt service excludes TSASC, interest on short-term notes, and lease-purchase debt service as well as the State-supported BARBs debt service.

Debt Burden

NYC debt outstanding has increased from $39.55 billion to $95.27 billion, or 141 percent, over FY 2000 – FY 2022.[29] Over this same period, the growth in NYC personal income was at 136 percent, with growth in NYC local tax revenues at 205 percent and the City-funds expense budget at 184 percent.[30] (The debt outstanding figures do not include the debt of the NYW and the MTA.)

Debt Outstanding as a Percent of Personal Income, FY 1970 – FY 2026

In the early 1970s, the City issued short-term notes which it did not entirely redeem at the end of each fiscal year. From 1970 to 1975, the City's year-end short-term note balance averaged $2.77 billion, with $4.44 billion outstanding at the end of FY 1975. This signal of financial stress contributed to the City's inability to access credit markets and the eventual involvement of the State and Federal governments beginning in March 1975. Confronted with external controls in the aftermath of the fiscal crisis, the City rapidly reduced its indebtedness in the late 1970s. This, combined with the resurgence of Wall Street in the 1980s, resulted in the decline of the ratio of debt to personal income from 1976 to 1990.

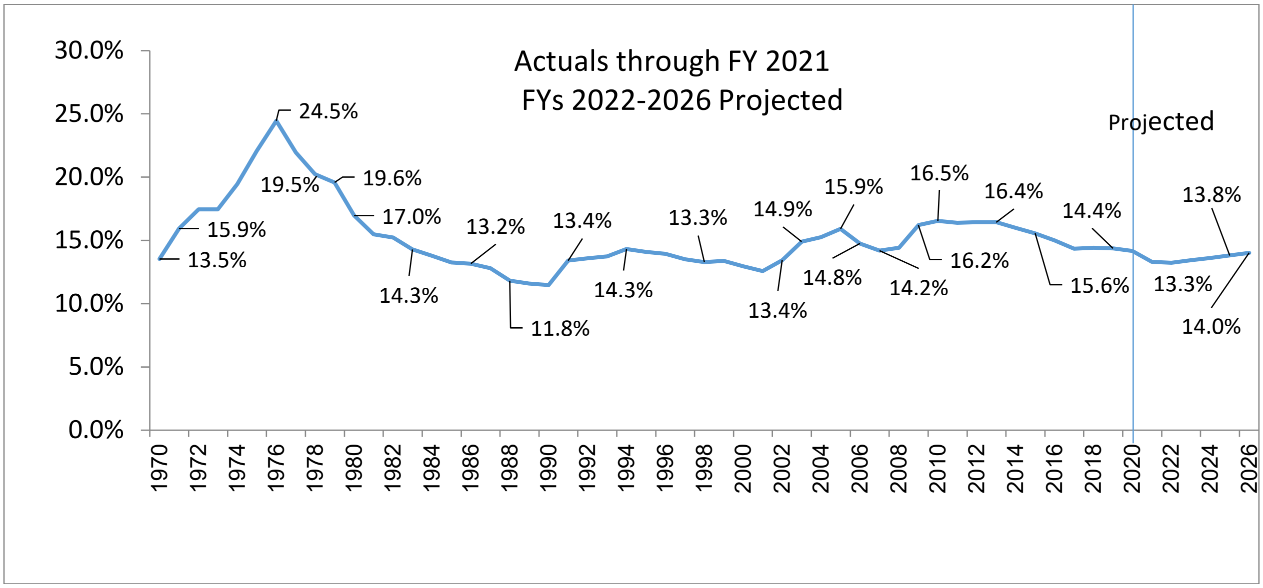
Chart 7 illustrates the historical trend of gross debt outstanding as a percentage of personal income from FY 1970 to FY 2026.[31] After reaching a peak of 24.5 percent in FY 1976, gross debt as a percent of NYC personal income trended downward, reaching a low of 11.5 percent in FY 1990. Through the 1990s, the ratio averaged 13.5 percent before rising to 15.9 percent in FY 2005 in the aftermath of the September 11th terrorist attacks. Between FY 2007 and FY 2020, the ratio averaged 15.3 percent. In FY 2021, the ratio was 13.3 percent and is estimated to be 13.2 percent in FY 2022 before increasing to 13.4 percent in FY 2023 and reaching 14.0 percent by FY 2026.

[29] The FY 2022 debt outstanding figure is from the FY 2022 NYC Comptroller's ACFR, page 458. It is the sum of Gross Debt Outstanding column of $94.62 billion plus $653 million of lease-purchase debt.

[30] FY 2022 figure for personal income is from the November Plan - NYC OMB.

[31] Personal income data from the Bureau of Economic Analysis as of 2021 was used.

Chart 7. NYC Gross Debt as a Percent of Personal Income, FY 1970 – FY 2026



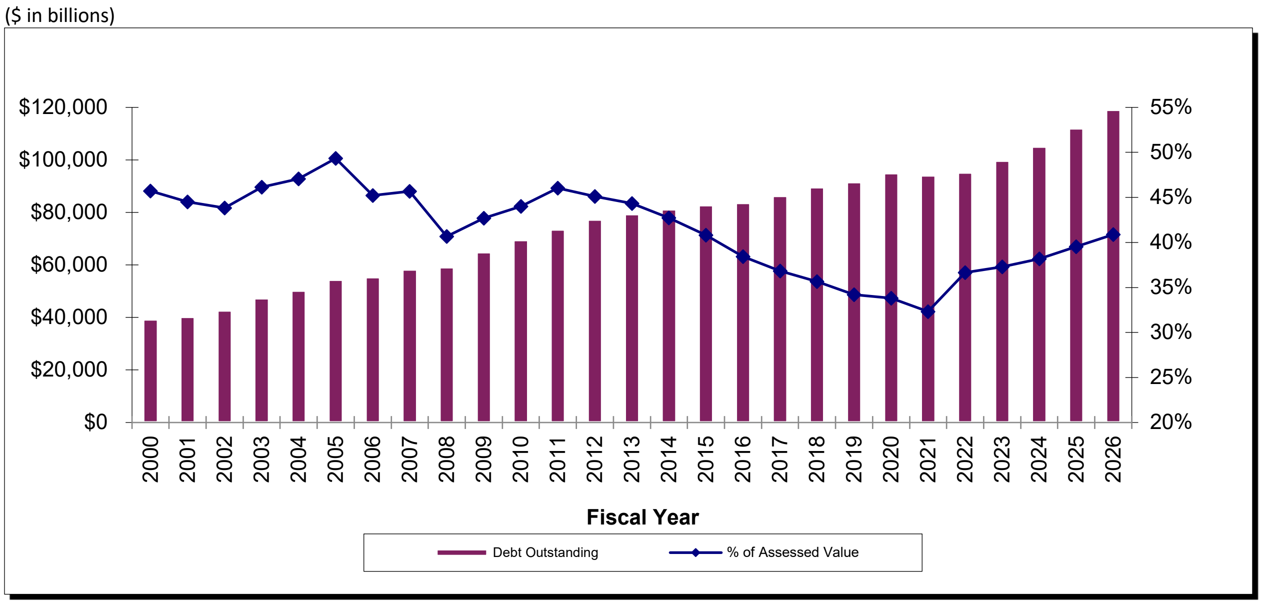
SOURCES: Office of the NYC Comptroller, Annual Comprehensive Financial Reports for the Fiscal Years ended June 30, 1990, 1999, 2010 and 2022. The U.S. Bureau of Economic Analysis, FY 2021 personal income for counties and NYC OMB November 2022 Plan.

NOTE: Actual figures are in FY 1970 – FY 2021. Projected figures are in FY 2022 – FY 2026.

NYC Debt Outstanding as a Percent of Assessed Value of Taxable Real Property

Over the period from FY 2000 – FY 2011, the ratio of debt outstanding to taxable assessed value of real property averaged 45.1 percent. The average ratio dropped to 39.1 percent over FY 2011 – FY 2022. This ratio declined in each fiscal year over this period from 46 percent in FY 2011 to 32.3 percent in FY 2021, but has now increased to 36.6 percent in FY 2022, as shown in Chart 8. This ratio is projected to increase to 37.3 percent by FY 2023, and continue to rise over the period, reaching an estimated 40.9 percent in FY 2026, driven by a disparity in growth between taxable assessed value and debt outstanding. Taxable assessed value is projected to grow by 2.9 percent annually from FY 2023 – FY 2026 compared to a projected 6.1 percent annual growth in debt outstanding.

Chart 8. NYC Outstanding Debt as a Percentage of the Assessed Value of Taxable Real Property



SOURCE: Annual Comprehensive Financial Reports of the Comptroller and NYC Department of Finance, FY 2022 Annual Report of the NYC Real Property Tax, NYC Dept. of Finance. Growth estimates for FY 2023 to FY 2026 by NYC Comptroller's Office.

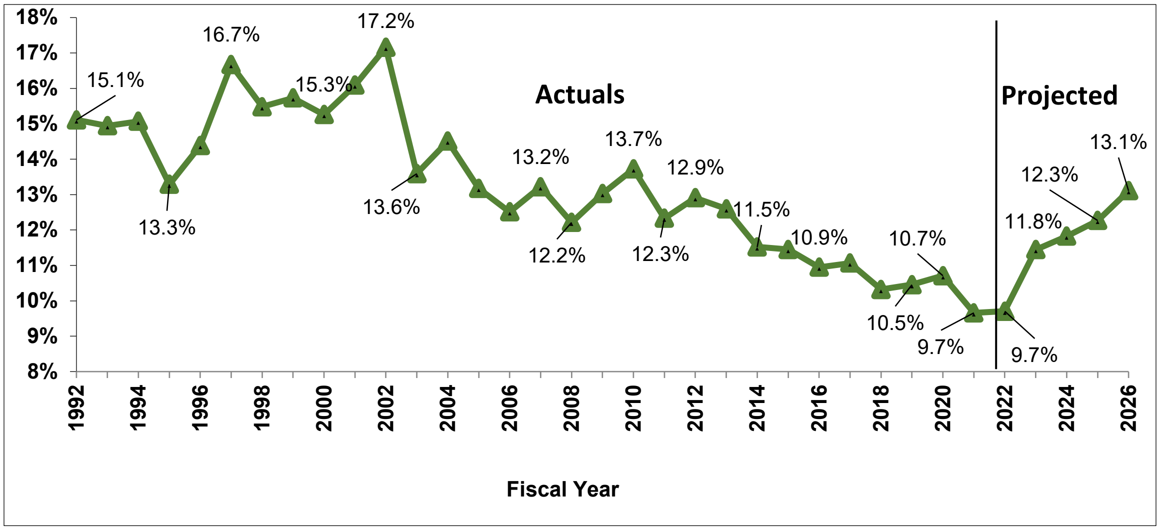
NYC Debt Service as a Percent of Tax Revenues

Another measure of debt affordability is annual debt service expressed as a percent of annual local tax revenues. This measure shows the pressure that debt service exerts on a municipality's locally generated revenues. Debt service exceeded 15 percent of tax revenues in 8 of the 11 years from FY 1992 to FY 2002, with a peak of 17.2 percent in FY 2002.[32] Since then, this ratio has trended downward, reaching 9.7 percent in FY 2022, as shown in Chart 9. Debt service as a percentage of tax revenues is projected to reach a high of 13.1 percent in FY 2026. This is driven by estimated debt service growth of 6.5 percent per year over the FY 2023 – FY 2026 Financial Plan period compared to 1.8 percent annual growth for local tax revenues.[33]

[32] Aside from the recent one-year aberration in FY 2002 related to the World Trade Center (WTC) disaster, the ratio of 15 percent is more characteristic of the early 1980's and early and mid-1990's when the City was emerging from recessionary periods.

[33] As of OMB's FY 2023 Adopted Budget and June 2022 Financial Plan.

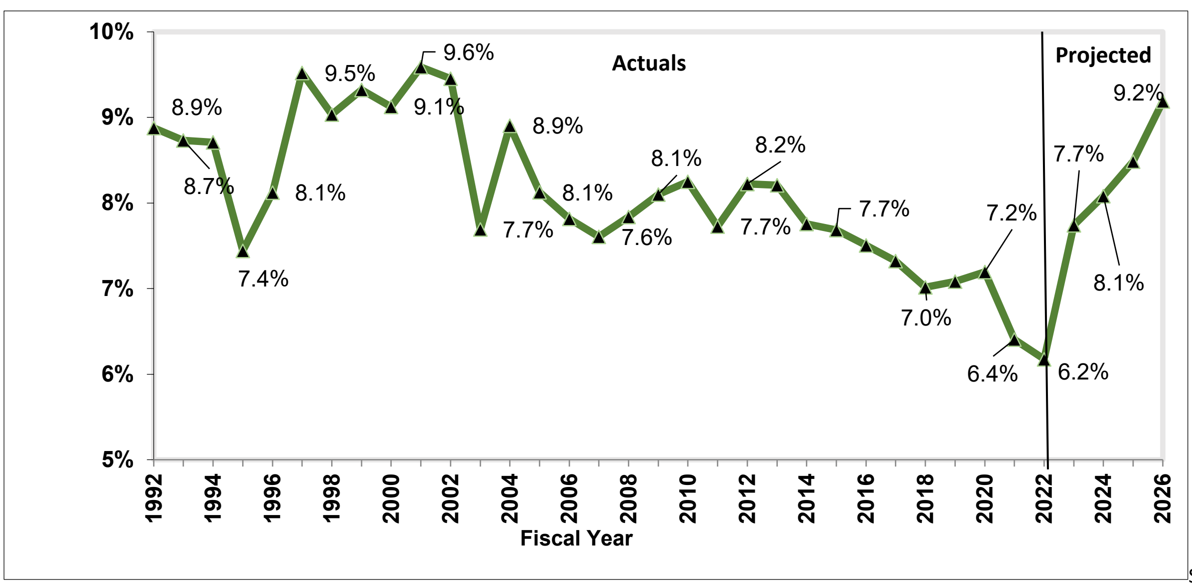
Chart 9. NYC Debt Service as a Percent of Tax Revenues



SOURCE: Annual Comprehensive Financial Reports of the Comptroller, FY 1992 – FY 2022, and NYC Office of Management and Budget, FY 2023 Adopted Budget, June 2022 Financial Plan.

Debt service as a percent of total revenues ranged from 7.0 percent to 9.6 percent over FY 1992 – FY 2022, as shown in Chart 10. Over this period, this ratio averaged 8.1 percent, with a median of 8.1 percent as well. The ratio is forecast to reach 9.2 percent in FY 2026 due to a projected average annual growth rate of debt service exceeding the estimated average annual growth rate of total revenues by a margin of over four percentage points, 4.8 percent versus 0.4 percent, respectively, from FY 2023 to FY 2026.

Chart 10. NYC Debt Service as a Percent of Total Revenues



SOURCE: Annual Comprehensive Financial Reports of the Comptroller, FY 1992 – FY 2022, and NYC Office of Management and Budget June 2022 Financial Plan.

While New York City has a large amount of outstanding debt, its credit rating remains strong, as shown in Table 12. In Fiscal Year 2022, Moody's Investors Service maintained the City's GO bond rating at Aa2. Standard and Poor's Global Ratings (S&P) maintained its rating of the City's GO bonds at AA. Fitch Ratings (Fitch) maintained its rating of GO bonds at AA- and changed its outlook to positive. In Fiscal Year 2022, the City's GO bonds received a rating of AA+ from Kroll Bond Rating Agency (Kroll). Rating agencies cite the City's large and diverse economy, strong financial management, and liquidity among positive credit attributes that support GO ratings. High TFA and NYW ratings reflect their strong legal frameworks and debt service coverage by pledged revenues.

Table 12. Ratings of Major New York City Debt

Rating Agency	GO	TFA Future Tax Secured (FTS) Senior	TFA FTS Subordinate	TFA BARBs	NYW First	NYW Second
S&P	AA	AAA	AAA	AA	AAA	AA+
Moody's	Aa2	Aaa	Aa1	Aa2	Aa1	Aa1
Fitch	AA-	AAA	AAA	AA	AA+	AA+
Kroll	AA+	Not Rated	Not Rated	Not Rated	Not Rated	Not Rated

Comparison with Selected Municipalities

New York City is the largest city in the U.S. and has a complex, varied, and aging infrastructure. The City has more school buildings, firehouses, health facilities, community colleges, roads and bridges, libraries, and police precincts than any other city in the country. Moreover, New York City has responsibilities that in other cities are distributed more broadly throughout their state, counties, unified school districts, public improvement districts, and public authorities. When comparing levels of debt with other jurisdictions, it is important to adjust the data to establish a comparable measure among and between jurisdictions. The use of the Direct and Overlapping Debt tables from each sample city's Annual Comprehensive Financial Report attempts to achieve greater comparability of the debt burden among municipalities. In addition, the use of debt per capita metrics serves as an aid to better compare a given city's outstanding debt with other cities.

As shown in Table 13, in FY 2021, NYC's debt per capita was more than twice the average of a sample of eleven other large U.S. cities and 1.4 times the per capita debt of San Francisco, which had the next highest debt per capita burden.[34]

[34] The sample cities consist mostly of the highest population cities in the U.S. Among the cities, San Francisco and Boston were selected due to their density.

Table 13. Debt Per Capita for Selected Cities, 2021

City	Population	Direct and Overlapping Debt Outstanding ($ 000)	Debt Per Capita
Seattle	769,500	$1,732,098	$2,251
Boston	691,531	1,501,389	2,171
Phoenix	1,652,815	7,347,108	4,445
San Jose	1,029,782	5,036,121	4,890
Los Angeles	3,923,341	17,087,787	4,355
Philadelphia	1,578,487	7,957,600	5,041
Dallas	1,304,379	6,451,500	4,946
Houston	2,320,268	11,699,155	5,042
San Francisco	851,916	6,679,703	7,841
San Antonio	1,555,370	12,175,637	7,828
Chicago	2,746,388	16,992,674	6,187
New York City	**8,467,513**	**$94,184,000**	**$11,123**

SOURCE: Annual Comprehensive Financial Reports of the NYC Comptroller, FY 2000, FY 2021, and FY 2022 for NYC population figure, along with Annual Comprehensive Reports of various cities, FY 2000 and FY 2021.

NOTE: Based on data extracted from each city's "Direct and Overlapping Debt Outstanding" exhibit included in that city's Annual Comprehensive Financial Report. While the individual exhibits are similar in format, there is no assurance that the components of the data published in those exhibits are comparable.

While gross NYC debt per capita is higher than all other cities in the sample, NYC's growth in debt per capita between FY 2000 and FY 2021 is lower than six of the eleven sample cities. Gross NYC debt per capita grew by 126 percent from FY 2000 to FY 2021. This growth is below the average growth of 210 percent for the 11 sample cities as shown in Table 14.[35]

Table 14. Debt per Capita Comparisons for Selected Cities – 2000 and 2021

City	Debt per Capita in 2000	Debt per Capita in 2021	Percentage Change 2000 – 2021
Seattle	$1,694	$2,251	32.9%
Philadelphia	$3,241	$5,041	55.5%
Boston	$1,376	$2,171	57.8%

[35] Collective sample city growth derived by average debt per capita among the eleven sample cities.

Chicago	$2,863	$6,187	116.1%
Phoenix	$2,041	$4,445	117.8%
Houston	$2,187	$5,042	130.6%
Los Angeles	$1,464	$4,355	197.5%
Dallas	$1,273	$4,946	288.5%
San Antonio	$1,929	$7,828	305.8%
San Jose	$943	$4,890	418.6%
San Francisco	$1,139	$7,841	588.4%
National CPI (FY)	**169.3**	**263.2**	**55.5%**
New York City	**$4,923**	**$11,123**	**125.9%**

SOURCE: Annual Comprehensive Financial Reports of the Comptroller, FY 2000 and FY 2021 and Annual Comprehensive Reports of various cities, FY 2000 and FY 2021.

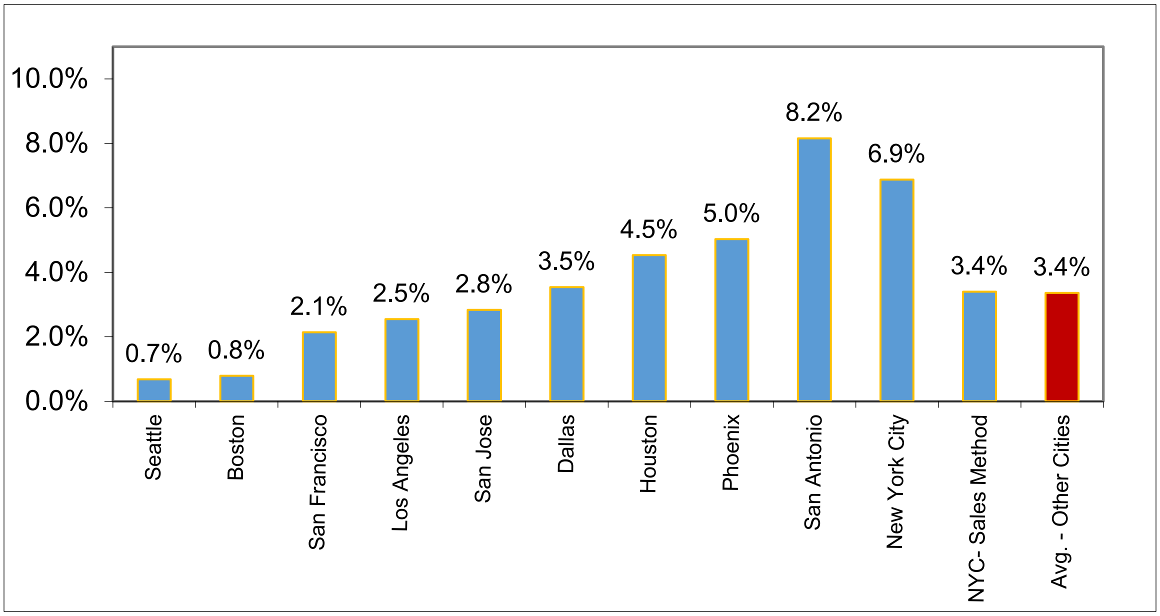
NOTE: Based on data extracted from each city's "Direct and Overlapping Debt Outstanding" exhibit included in that city's Annual Comprehensive Financial Report. While the individual exhibits are similar in format, there is no assurance that the components of the data published in those exhibits are comparable.

Another way to examine the debt burden of a municipality or city is to measure its debt relative to its taxable base. Two commonly used measures of this relationship are debt divided by the full value of real property and debt divided by personal income. The rationale behind the use of the full value of real property is that the property tax base provides a substantial revenue source for debt payment and that there is generally some reasonable limit on the amount of debt that can be borrowed against the property tax base. The debt to personal income ratio is conceptually related to the ability of the underlying population to repay, although municipalities may not have a personal income tax.

In FY 2021, gross NYC debt as a percentage of the value of real property was 3.4 percent when real property is valued using a sales-based methodology. The percentage rises to 6.9 percent if real property values are taken from the NYC Department of Finance's assessment rolls. This is because, under the sales-based methodology, the value of real estate is estimated at $2,774 billion, while the estimate is $1,369 billion in the assessment rolls, which are affected by statutory and other constraints.[36] A comparison with other cities is shown in Chart 11. Using the sales-based estimate, the City's ratio is on par with the average among the comparison cities.

[36] The sales-based estimate, as well as a description of the drivers of the difference, can be found in NYC Advisory Commission on Property Tax Reform (2021) *The Road to Reform*, https://www.nyc.gov/assets/propertytaxreform/downloads/pdf/final-report.pdf

Chart 11. Debt Outstanding as a Percent of the Full Value of Real Property, FY 2021

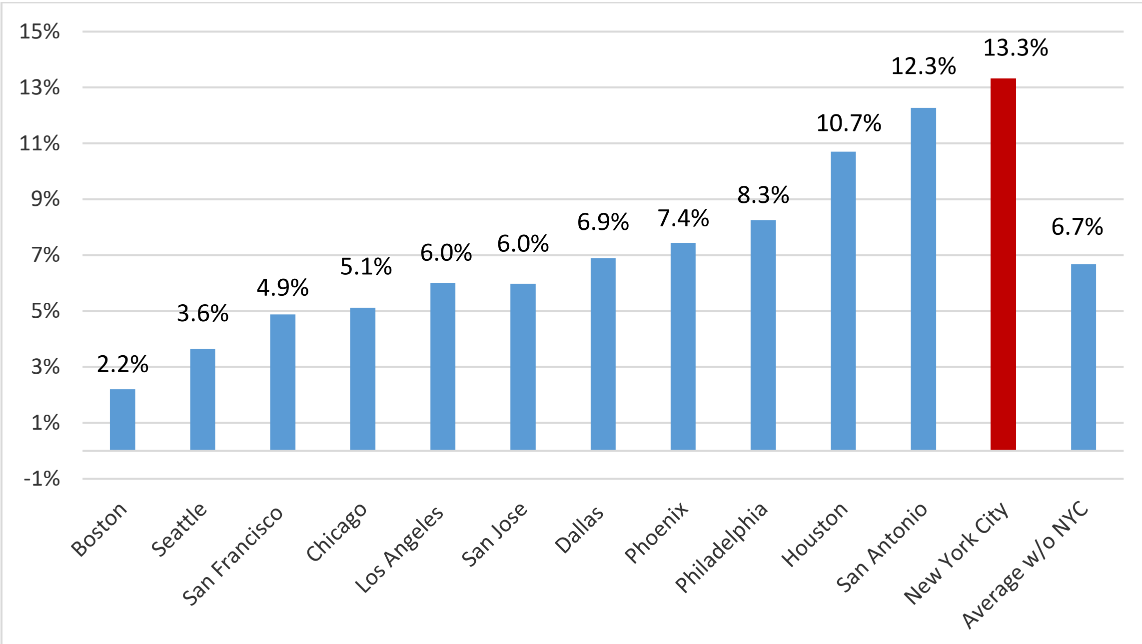


SOURCE: Each city's Annual Financial Report for FY 2021.

NOTE: Debt per capita is based on data extracted from each city's "Direct and Overlapping Debt Outstanding" exhibit included in that city's Annual Comprehensive Financial Report. While the individual exhibits are similar in format, there is no assurance that the components of the data published in those exhibits are comparable. *Chicago and Philadelphia are not included this year as their FY 2021 annual financial reports did not contain full value of real property estimates for FY 2021.*

Gross NYC debt per capita as a percentage of personal income per capita in FY 2021 was 13.3 percent, the highest among the sample cities as shown in Chart 12. Gross NYC debt as a percentage of personal income is almost twice the 6.7 percent average of the 11 sample cities. The next highest cities in the survey are San Antonio at 12.3 percent, Houston at 10.7 percent, and Philadelphia at 8.3 percent.

Chart 12. Debt Outstanding Per Capita as a Percent of Per Capita Personal Income, FY 2021



SOURCE: FY 2021 Annual Comprehensive Financial Reports of Sample Counties and the U.S. Department of Commerce, – BEA, along with City annual report information on outstanding debt when needed.

[1.] Debt per capita is based on data extracted from each city's and select counties' Direct and Overlapping Debt Outstanding exhibits included in that city's or county's Annual Comprehensive Financial Report. While the individual exhibits are similar in form, there is no assurance that the components of the data published in those exhibits are comparable.

[2.] 2021 Personal Income is the most recent personal income data available from the BEA.

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