New York City Comptroller
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BUREAU OF FISCAL AND BUDGET STUDIES

Fiscal Year 2013 Annual Report on Capital Debt and Obligations

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Executive Summary

New York City's (the "City") debt has grown from $2,951 per capita in FY 1990 to $9,378 by FY 2012, an increase of 218 percent. Over the same 22 year period, the NYC area Consumer Price Index (CPI) grew by 83 percent. This growth in the City's capital spending for infrastructure is a corollary of the neglect of the 1970's. While this spending is necessary, it is costly because New York City is the most populous City in the nation with a complex, varied, and aging infrastructure. The City's debt finances the maintenance and upkeep of an infrastructure that must accommodate not only 8.3 million City residents, but also 800,000 daily commuters and 49 million tourists annually.

The City issues long-term debt only for capital purposes and only for assets with useful lives of five years or greater. Forty-six (46.3) percent of the outstanding debt of the three primary issuers of debt backed by City General Fund revenues — General Obligation (GO), New York City Transitional Finance Authority (NYCTFA) Future Tax Secured, and Tobacco Settlement Asset Securitization Corporation (TSASC) — is scheduled to come due over the next ten years.

Debt is issued by the City, or on behalf of the City, through a number of different mechanisms. This report assesses the debt condition of the City of New York in accordance with Section 232 of the City Charter. The Charter requires the Comptroller 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.

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. The City's FY 2013 general debt-incurring power of $76.85 billion is projected to increase to $79.76 billion in FY 2014, to $83.49 billion in FY 2015, and to $87.65 billion by FY 2016.

Outstanding City debt counted towards the debt limit totaled $52.68 billion as of July 1, 2012. This total included $41.88 billion of outstanding General Obligation (GO) debt, $6.09 billion of outstanding NYCTFA debt and $6.7 billion in contract and other liabilities, as shown in the Debt-Incurring Power Table on page vii. As a result, the City's net debt-incurring power as of July 1, 2012 was $24.17 billion.

The City's total indebtedness is expected to grow to $61.96 billion by the beginning of FY 2016. The City is projected to have remaining debt-incurring capacity of $21.33 billion on July 1, 2013, $22.16 billion on July 1, 2014, and $25.69 billion on July 1, 2015. Certain other entities issue debt for the financing of capital programs within the City. While the City may be obligated to pay a certain portion of these debts, they are not counted towards the City's statutory debt limit. The City is responsible for the interest on Hudson Yards Infrastructure Corporation (HYIC) debt to the extent that revenues from the Hudson Yards district are insufficient to pay interest (but not its related principal of $3 billion). Significant funding for the City's Capital Plan is also provided by debt issued by the New York City Municipal Water Finance Authority (NYW), which is backed by water and sewer system revenues. NYCTFA Building Aid Revenue

Bonds (BARBs) are issued to finance construction in City schools and are funded through revenues the City receives from the State. While TSASC contributed a total of $1.3 billion to the City's capital program between FYs 2000 and 2006, it is unlikely to provide further support to the City's capital program.

Based on an analysis of financial statements released by other jurisdictions in FY 2011, New York City's debt burden per capita was nearly double the average sample of large U.S. cities. Among the cities surveyed in this report, New York City also ranks the highest in two measures of debt burden that factor in a locality's wealth, and is well above the averages of the sample cities and counties. New York City's outstanding debt as a percentage of full value of real property in FY 2011 was 9.3 percent. This is almost twice the sample city average of 4.8 percent. Ratios for San Antonio at 8.7 percent and Philadelphia of 7.8 percent are the next highest. Other populous cities like Chicago at 5.8 percent and Los Angeles at 4.5 percent have much less debt as a percentage of their full market value of real property.

New York City's debt as a percentage of personal income in FY 2010 was 16.3 percent, twice the average of the other sample cities in the survey.[1] San Antonio and Houston were the next highest, at 15 and 13 percent, respectively, with Boston the lowest at 3.1 percent.

While New York City has a large amount of outstanding debt and great capital needs, its credit rating remains strong. The City's GO credit is rated AA by Standard & Poor's, Aa2 by Moody's Investors Service, and AA by Fitch Ratings, and has a stable outlook from all three rating agencies. The NYCTFA FTS senior bonds are rated AAA by all three rating agencies, while its subordinate debt is rated AAA by Standard & Poor's, Aa1 by Moody's, and AAA by Fitch. NYW First Resolution bonds are rated AAA by Standard & Poor's, Aa1 by Moody's Investors Service, and AA+ by Fitch Ratings, while its Second Resolution bonds are rated AA + by Standard and Poor's, Aa2 by Moody's, and AA + by Fitch.

[1] Since the U.S. Department of Commerce's Bureau of Economic Analysis (BEA) provides personal income figures by county, the analysis in Chart 10 uses annual financial reports, when available, of the *county* in which each city is located. The latest available BEA data for personal income is 2010. Both the respective cities and counties of San Francisco and Philadelphia are coterminous geographic entities.

NYC Debt-Incurring Power

($ in millions)

	July 1, 2012	July 1, 2013 [a]	July 1, 2014 [a]	July 1, 2015 [a]
Gross Statutory Debt-Incurring Power	**$76,853**	**$79,760**	**$83,493**	**$87,645**
Actual Bonds Outstanding as of June 30,2012 (net) [b]	$41,880	$39,878	$37,715	$35,413
Plus New Capital Commitments [c]				
FY 2013		8,446	8,446	8,446
FY 2014			5,887	5,887
FY 2015				3,743
Less: Appropriations	(1,998)	(2,148)	(2,284)	(2,286)
Incremental NYCTFA Bonds Outstanding Above $13.5 billion	6,087	5,549	4,861	4,045
Subtotal: Net Funded Debt Against the Limit	**$45,969**	**$51,725**	**$54,625**	**$55,248**
Plus: Contract and Other Liability	6,710	6,710	6,710	6,710
Subtotal: Total Indebtedness Against the Limit	**$52,679**	**$58,435**	**$61,335**	**$61,958**
Remaining Debt-Incurring Power within General Limit	**$24,174**	**$21,325**	**$22,158**	**$25,687**

[a] FYs 2014 through 2016 debt limits are based on the NYC Comptroller's Office's forecast of billable assessed value and related full market value of real property estimates.

[b] Net adjusted for Original Issue Discount, Capital Appreciation Bonds, GO bonds issued for the water and sewer system, Business Improvement District debt, and cash on hand. The $41.88 billion is derived from the $42.286 billion GO total minus $406 million of the aforementioned adjustments.

[c] Reflects City-funds capital commitments as of the FY 2013 Adopted Capital Commitment Plan (released in October 2012) and includes cost of issuance and certain Inter-Fund Agreements. In July 2009, the State Legislature included future debt of the NYCTFA PIT bonds under the general debt limit; thus City-funds capital commitments will be funded by the NYCTFA as well.

NOTE: The Debt Affordability Statement released by the City in May 2012 presents data for the last day of each fiscal year, June 30^{th}, 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 $15.96 billion at the end of FY 2013.

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

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I. Profile of New York City Debt

Debt is issued by New York City, or on behalf of New York City, through a number of different mechanisms. This debt (Gross NYC Debt) is used to finance the City's capital projects. Gross NYC Debt includes all debt financed by revenues that would normally reside in the City's general fund. Such debt includes the City's General Obligation bonds, all categories of NYC Transitional Finance Authority bonds, TSASC bonds, STAR Corporation bonds and other conduit issuers included in the capital lease obligations category. (See Table 1) New York Water Finance Authority (NYW) bonds are not included in this figure as they are financed through fees and other revenues paid directly to the NYW.

In the 1980s, Gross NYC Debt grew at an average annual rate of 4.5 percent. During the 1990s, Gross NYC Debt 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 5.8 percent per year from FY 2000 to FY 2012. The FY 2013 Adopted Budget and Financial Plan projects that over the next four years, Gross NYC Debt will increase by approximately 4.0 percent annually.[2]

A. COMPOSITION OF DEBT

The City issues six types of debt to finance its capital program, with General Obligation (GO) bonds accounting for 54.9 percent of the total, as shown in Table 1 on page 2. General fund revenues are used to pay off the bonds in five of these categories, while the sixth, New York Water Finance Authority (NYW), is paid for by water and sewer user fees. Table 1 contains information on those debts paid for by general fund revenues.

Each of the categories of debt, with the exception of TSASC debt, which is only issued as tax-exempt, is comprised of both tax-exempt and taxable bonds.

Tax-exempt debt is issued to finance projects that have a public purpose, while taxable debt is issued for projects that have a public purpose but are ineligible for Federal tax exemptions, such as housing loan programs that benefit from Federal tax credits. 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 and continues to issue taxable Qualified School Construction bonds (QSCBs). BABs and QSCBs are taxable but because the City receives Federal interest subsidy payments for these bonds, they must meet the same public purpose standards as tax-exempt bonds. Tax-exempt debt accounted for 82.1 percent of the total value of the City's outstanding debt at the end of FY 2012.[3]

NYC debt consists of both fixed and variable rate debt, with the bulk of the debt in fixed rate borrowing. In FY 2012, fixed rate debt accounted for 85.6 percent of debt outstanding.

[2] GO, TSASC, and NYCTFA debt are used as a proxy for the estimated growth rate, due to the unavailability of data regarding future lease-purchase debt issuance.

[3] The remaining 17.9 percent of debt, categorized as taxable, includes Build America Bonds (BABs) and Qualified School Construction Bonds (QSCBs). However, although BABs and QSCBs are taxable, they must meet the same public purpose standards as tax-exempt bonds.

Table 1. Gross NYC Debt Outstanding as of June 30, 2012

($ in millions)

	GO Bonds	NYCTFA	TSASC	STAR Corporation	Capital Lease Obligations & Other[a]	Gross Debt Outstanding
Tax-Exempt						
Fixed Rate	$27,103	$17,581[c]	$1,253	$1,869	$4,651	$52,457
Variable Rate[b]	7,427	3,301[c]	0	0	156	10,884
Subtotal	$34,530	$20,882	$1,253	$1,869	$4,807	$63,341
Taxable						
Fixed Rate	$7,520	$5,385	$0	$185	$522	$13,612
Variable Rate[b]	236	0	0	0	0	236
Subtotal	$7,756	$5,385	$0	$185	$522	$13,848
Total	**$42,286**	**$26,267**	**$1,253**	**$2,054**	**$5,329**	**$77,189**
Percent of Total	**54.8%**	**34.0%**	**1.6%**	**2.7%**	**6.9%**	**100.0%**

[a] This figure includes capital leases of $522 million, City University Construction Fund (CUCF) debt of $141 million, and $3 billion of Hudson Yards Infrastructure Corporation debt but excludes FY 2005 Securitization Corporation debt.
[b] Variable rate debt varies in term from two to 30 years with interest-payment terms that are reset on a daily, weekly, or other periodic basis.
[c] The New York City Transitional Finance Authority (NYCTFA) fixed rate figure includes $5.313 billion for NYCTFA Building Aid Revenue Bonds (BARBs). The variable rate figure contains $1.37 billion of Recovery Bonds. The NYCTFA taxable fixed rate figure includes $3.05 billion of Build America Bonds (BABs) and $697 million of Qualified School Construction Bonds (QSCB).

SOURCE: Comprehensive Annual Financial Report of the Comptroller for the Fiscal Year Ended June 30, 2012, p.330.

Elements of Outstanding Gross NYC Debt

General Obligation (GO) debt is backed by the full faith and credit of the City. As of June 30, 2012, GO debt totaled $42.29 billion and accounted for 54.8 percent of Gross NYC Debt outstanding. Debt service for GO bonds is paid from the proceeds of 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. The FY 2012 GO debt total is $501 million, or 1.2 percent, greater than at the same time the year prior. During FY 2012, the City issued $2.7 billion of GO bonds for capital projects.

New York City Transitional Finance Authority (NYCTFA) issues two different types of debt, one backed by the City’s personal income tax (PIT) revenues and the other supported by revenue the City receives from New York State for school building aid (BARBs). At the close of FY 2012, NYCTFA debt totaled $26.27 billion, comprised of $20.96 billion of PIT supported debt and $5.31 billion of BARBs. This total is 10.3 percent greater than at the close of FY 2011. As a result, the NYCTFA’s share of Gross NYC Debt outstanding increased from 32.5 percent in FY 2011 to 34 percent in FY 2012. The increase is due to the issuance of $2.8 billion of NYCTFA PIT bonds in support of the City’s capital program in FY 2012.

The NYCTFA was created as a State authority in 1997 with the power and authorization to issue bonds up to an initial limit of $13.5 billion. This borrowing did not count against the City’s general debt limit.[4] The City exhausted the $13.5 billion bonding authority in FY 2007. In

[4] The debt limit is discussed in further detail in Section II.

July 2009, the State Legislature authorized NYCTFA to issue debt beyond the $13.5 billion limit. However, this additional borrowing was made subject to the City's general debt limit. Thus, the incremental NYCTFA PIT bond debt issued in FY 2010 and beyond has been combined with City GO debt when calculating the City's indebtedness within the debt limit.

Building Aid Revenue Bonds (BARBs) In April 2006, the State Legislature authorized the NYCTFA to issue an additional $9.4 billion of debt supported by funds the City receives from the State for education aid. This debt is to be used to finance a portion of the City's five-year educational facilities capital plan. In addition to the NYCTFA authorized portion, the legislature authorized $1.8 billion of DASNY Expanding our Children's Education and Learning (EXCEL) bonds for education purposes. These bonds, backed by State personal income tax revenues, were authorized to be issued by the Dormitory Authority of the State of New York (DASNY). Between FYs 2007 and 2009, $4.25 billion of BARBs and all $1.8 billion of EXCEL bonds were issued. While there were no new BARB issuances in FY 2010, the NYCTFA issued $1.3 billion of BARBs over FYs 2011 and 2012. As a result, there are currently $5.31 billion of BARBs outstanding. NYCTFA BARBs are excluded in the calculation of the City's debt counted against the debt limit.

TSASC debt totaled $1.25 billion as of June 30, 2012. This represents a $7 million decrease from FY 2011. There currently are no plans for future TSASC offerings. TSASC is a local development corporation organized under the Not-for-Profit Corporation Law of the State of New York. TSASC bonds are secured by tobacco settlement revenues as described in the Master Settlement Agreement among 46 states, six jurisdictions, and the major tobacco companies. In February 2006, TSASC refinanced all bonds issued under its original indenture. The new refunding bond structure allows the tobacco settlement revenues (TSRs) to flow to both TSASC and the City.[5] Approximately 40 percent of the TSRs are pledged to TSASC bondholders and the remainder goes to the City's general fund. This new indenture provides residual TSR revenues, after retention for debt service, directly to the general fund. Outstanding TSASC debt is not counted against the City's debt limit.

STAR (Sales Tax Asset Receivable) Corporation debt totaled $2.054 billion at the end of FY 2012. This represents a decrease of $62 million from FY 2011. The proceeds of STAR bonds were used to pay off the remaining debt of the Municipal Assistance Corporation in FY 2005. There are no plans to issue any additional debt for this credit. The STAR Corporation is a local development corporation organized under the Not-for-Profit Corporation Law of the State of New York. While the corporation is separate and apart from the City of New York, it is an instrumentality of the City. Debt service for STAR Corporation bonds is paid by the Local Government Assistance Corporation (LGAC), a State agency and is not included when calculating the City's debt limit.[6]

Capital Lease and Conduit Debt Obligations totaled $5.33 billion as of June 30, 2012, an increase of $899 million, or 24.8 percent, from FY 2011. This increase is the result of the

[5] The former TSASC indenture called for all tobacco revenues to flow first to TSASC and then to the City's general fund.

[6] LGAC receives its revenues primarily from amounts derived from the New York State 1.0 percent Sales Tax. Estimated revenues in FY 2013 were $2.85 billion.

issuance of $1 billion of Hudson Yards Infrastructure Corporation (HYIC) debt in the first-half of FY 2012. Otherwise, there was no growth in other capital lease or conduit debt issuers.

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. These leaseback obligations are included in the gross debt outstanding, 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 the New York City Courts Capital Program ($553 million), the City University Construction Fund ($141 million), the Educational Construction Fund ($275 million), the Primary Care Development Corporation ($39 million), the Health and Hospitals Corporation ($679 million), the Urban Development Corporation ($25 million), the Industrial Development Agency ($95 million), as well as general lease obligations ($522 million).[7]

The Hudson Yards Infrastructure Corporation (HYIC) is a not-for-profit local development corporation formed in July 2004 to issue debt to finance development in the Hudson Yards district of Manhattan - primarily to extend the number 7 subway line westward to 11th Avenue and 34th Street. HYIC issued its first tranche of bonds, totaling $2 billion, in December 2006. HYIC's second bond sale took place in October 2011 and totaled $1 billion due in FY 2047. There are no further bond issuances anticipated by the HYIC. The City is obligated to pay interest on HYIC bonds, subject to appropriation, until such time that revenues of the Hudson Yard District are sufficient to cover this expense. The City is not obligated to pay the principal of this debt. The HYIC had debt outstanding of $3 billion as of June 30, 2012 its principal is not scheduled to be fully amortized until FY 2047.

Other Issuing Authorities

In addition to the financing mechanisms cited above, a number of independent authorities issue bonds to finance projects in the NYC metropolitan area. The two largest issuers are the New York City Municipal Water Finance Authority (NYW) and the Metropolitan Transportation Authority (MTA). The outstanding debt of these two authorities is summarized in Tables 2 and 3.

NYW and MTA bonds are secured by dedicated revenues. As such, they are not considered debt of the City. Nevertheless, proceeds of these bonds are used to support services provided to City residents. In turn, City residents pay user fees and fares that support, in large part, the $59.88 billion combined debt of these two authorities.

New York City Water Finance Authority: As of June 30, 2012, NYW had $28.38 billion in debt outstanding, an increase of $1.5 billion, or 5.6 percent from FY 2011. Debt issued by NYW is supported by user fees and certain other revenues. Created by State law in 1984, NYW is responsible for funding water and sewer-related City capital projects administered by the City's Department of Environmental Protection (DEP) such as 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 the DEP capital program. Land acquisition strategies and measured local

[7] Although for reporting purposes $679 million of Health and Hospitals Corporation (HHC) debt is included in the category of *Capital Lease Obligations*, the debt of HHC is not fully guaranteed by New York City.

development help the goals of continued water quality. DEP's FY 2013-2016 Four-Year Capital Program assumes an annual expenditure of $1.73 billion. While the capital plan will continue to be a primary driver of water and sewer rate increases over the Financial Plan period, the current City-funds commitment plan average of $1.73 billion per year is 6.5 percent less than the agency's capital commitments between FYs 2009 – 2012, when DEP City-funds capital commitments averaged $1.85 billion per year.

Table 2. NYW Debt Outstanding as of June 30, 2012

($ in millions)

Tax Exempt	
Fixed Rate	$24,538
Variable Rate	3,840[a]
Total	**$28,378**

a Includes $400 million of commercial paper.
SOURCE: NYC Municipal Water Finance Authority.

New York Metropolitan Transportation Agency: The State controlled MTA is composed of six major agencies providing commuter transportation throughout the metropolitan area. New York City Transit and MTA Bus maintain approximately 660 miles of mainline subway track and a fleet of more than 5,500 buses for services within the five boroughs of New York City. The Long Island Railroad provides commuter train service to destinations in Queens, Nassau, and Suffolk counties from Midtown Manhattan and Downtown Brooklyn. Long Island Bus provides bus service to numerous destinations in Nassau, Queens, and Suffolk counties. The Metro-North Railroad serves commuters in the Bronx, Westchester, Putnam and Dutchess counties and portions of southern Connecticut. The Bridges and Tunnels agency operates all intra-State toll tunnels and bridges throughout the five boroughs of New York City.

Table 3. MTA Debt Outstanding as of June 30, 2012

($ in millions)

Tax Exempt	
Fixed Rate	$24,861
Variable Rate	6,637
Total	**$31,498**

SOURCE: Metropolitan Transportation Authority.

As of June 30, 2012, the MTA had $31.5 billion of debt outstanding. This is a decrease of just over $500 million, or 1.6 percent, from June 30, 2011. This marks the first time in the last fifteen years that the MTA debt outstanding has declined from year to year. Despite this one-year decline, MTA debt has grown by 121 percent or $17.3 billion since FY 2000. This represents a growth rate over 24 percentage points higher than the growth of gross NYC indebtedness during the same period.

B. ANALYSIS OF PRINCIPAL AND INTEREST AMONG THE MAJOR NYC ISSUERS

The three major credits that either have financed and/or continue to finance City capital projects are: NYC General Obligation, NYCTFA, and TSASC bonds. There is no additional planned debt issuance of TSASC debt. As a result, any new debt issuances will involve a mix of GO debt, NYCTFA PIT bonds, and NYCTFA BARBs.

The annual growth rate in debt outstanding which averaged 5.8 percent growth per year from FY 2000 to FY 2012 is expected to slow to 1.3 percent between FY 2012 to FY 2022.[8] However, the average annual growth rate of debt outstanding in the first half of this period is significantly higher than the rate for the period as a whole. As shown in Table 4, between FYs 2012 and 2016 the growth rate averages 4.0 percent per year. Growth estimates beyond the Financial Plan period tend to be lower due to the inherent uncertainty of long-term capital planning. Projections for decreases in debt outstanding planned for FYs 2019 to 2022 are likely to change as more detailed information about funding requirements becomes available. Because City agencies are not yet focused on the latter years of the Ten-Year Capital Strategy, their capital plans for the outyears are skeletal in nature.

Table 4. NYC Projected Bonds Outstanding, Three Major Issuers, FYs 2012 – 2022

($ in millions)

End of Fiscal Year	Debt Outstanding for GO, NYCTFA, & TSASC	Percent Change
2012	$71,860	4.2%
2013	75,639	5.3%
2014	79,523	5.1%
2015	82,278	3.5%
2016	84,009	2.1%
2017	84,991	1.2%
2018	85,349	0.4%
2019	85,246	(0.1%)
2020	84,462	(0.9%)
2021	83,374	(1.3%)
2022	81,625	(2.1%)

SOURCE: *Comprehensive Annual Financial Report of the Comptroller for the Fiscal Year Ended June 30, 2012* and the NYC Office of Management and Budget, June 2012 Financial Plan.
NOTE: Above figures include STAR debt and NYCTFA BARBs.

The principal and interest composition for the City's three major issuers combined is reflected in Table 5.[9] The Financial Plan assumes principal repayments totaling $2.659 billion in FY 2013, $2.962 billion in FY 2014, $3.191 billion in FY 2015, and $3.223 billion in FY 2016. Principal is estimated to comprise 45.2 percent of debt service in FY 2013, 45.6 percent in FY 2014, 45.9 percent in FY 2015 and 44.6 percent in FY 2016.[10]

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[8] *Comprehensive Annual Financial Report of the Comptroller for the Fiscal Year Ended June, 30, 2012*, page 330, used as source for FY 2000 to FY 2012 rate of growth. Includes $3 billion of HYIC bonds.

[9] Since NYCTFA BARB and STAR debt service are not paid with City general fund revenues, they are not included in Table 5.

[10] Debt service excludes lease-purchase debt, interest on short-term notes, and debt service on STAR debt as of the FY 2012 Adopted Budget and June 2012 Financial Plan.

Table 5. Principal and Interest Estimated Payments, GO, NYCTFA, TSASC

($ in millions)

Fiscal Year	Estimated Principal Amount	Estimated Interest	Estimated Total Debt Service	Principal as Percent of Total
2013	$2,659	$3,223	$5,882	45.2%
2014	$2,962	$3,543	$6,505	45.6%
2015	$3,191	$3,763	$6,954	45.9%
2016	$3,223	$4,003	$7,226	44.6%

SOURCE: NYC Office of Management and Budget, June 2012 Financial Plan and the City of New York, Office of the Comptroller.
NOTE: Adjusted for prepayments and includes interest on short-term notes.

During FY 2012, the City issued $4.95 billion of GO debt, of which $2.23 billion was used for refunding transactions with present-value savings of $277 million. The remaining $2.72 billion represented new debt for capital purposes. The refundings produced dissavings of $9.4 million in FY 2012, but will produce future year savings of $222.15 million in FY 2013, and $69.7 million in FY 2014. At the end of FY 2012, outstanding GO debt totaled $42.29 billion. Approximately $21.77 billion of the total GO debt currently outstanding (51.5 percent) will come due in the next ten years, as shown in Table 6.

Table 6. Amortization of Principal of the Three Major Issuers

($ in millions)

Fiscal Years	GO	NYCTFA[a]	TSASC	Total	Percent of Total
2013-2022	$21,773	$10,331	$228	$32,332	46.3%
2023-2032	$15,933	$10,233	$574	$26,740	38.3%
2033 and After	$ 4,580	$5,703	$451	$10,734	15.4%
Total	**$42,286**	**$26,267**	**$1,253**	**$69,806**	**100.0%**

[a] Includes $1.37 billion of Recovery Bonds and $5.31 billion of NYCTFA BARBs.

In FY 2012, NYCTFA issued $3.5 billion of debt of which $2.8 billion was new debt. Of the new debt issued, $300 million was issued as Qualified School Construction Bonds (QSCBs). The remaining $700 million of debt issuance was for a refunding transaction that produced budgetary dissavings of $2 million in FY 2012, but savings of $50.3 million in FY 2013, and $0.3 million in FY 2014. In all, NYCTFA's debt outstanding was $26.27 billion at the end of FY 2012. Of the total NYCTFA debt outstanding, $10.33 billion, or 39.3 percent, will come due over the next ten years as reflected in Table 6. Of the outstanding debt of the City's three primary issuers, 46.3 percent is scheduled to come due over the next ten years.

C. INSTITUTIONAL USE OF CAPITAL DEBT

As per the NYC Comptroller's Office Internal Control and Accountability Directive 10, the City uses capital bond proceeds to fund long-term projects with useful lives greater than five years and values of at least $35,000. These projects include the purchase of trucks, computer systems, the construction and rehabilitation of schools, roads and bridges, correctional and court facilities, sanitation garages, parks and cultural facilities, public buildings, and housing and urban development initiatives. Over the past several years, capital expenditures for schools have significantly outpaced capital spending for other purposes as additional funding became available to address deteriorating facilities, overcrowding, and renovation of existing facilities.

As of June 30, 2012, the City's outstanding GO debt was $42.29 billion, an increase of $24.48 billion, or 137 percent, from year-end FY 1992 as seen in Table 7. Excluding GO debt issued for water and sewer purposes, the debt outstanding was $41.88 billion at the end of FY 2012, $25.57 billion or 157 percent greater than the $16.31 billion debt outstanding at the end of FY 1992.[11] Funding for education capital projects rose from 13.4 percent of GO debt outstanding in FY 1992 to 32.8 percent on June 30, 2012, an increase of $11.5 billion, or 482 percent over this period.[12]

Outstanding debt on housing and economic development has increased by $1 billion since FY 1992. However, housing and economic development share of GO debt outstanding has declined from 14 percent in FY 1992 to 8.3 percent in FY 2012, as capital funding for other categories have outpaced these types of projects. Other categories that have declined on a percent of total basis include mass transit, public safety, correction, and courts, sanitation, and health and social services.

Since FY 1986, NYW has financed virtually all capital expenditures of the DEP, thereby decreasing the outstanding portion of GO bonds used for the rehabilitation and maintenance of the water and sewer system. Water and sewer related GO debt has declined to $404 million, or 1.0 percent of the total as of June 30, 2012, from a level of $1.5 billion in FY 1992, or 8.4 percent of debt outstanding. This percentage should continue to decline each year as the remaining debt is paid off and no new GO debt is issued for this purpose.

[11] Water and Sewer projects were financed by GO bonds prior to July 1, 1985.

[12] FY 1992 was chosen as base comparison year to provide a consistent reference point to prior Capital Debt and Obligation Reports.

Table 7. Use of GO Debt, FY 2012 and FY 1992

($ in millions)

Categories	Debt Outstanding as of June 30, 2012	Percent of Total	Debt Outstanding as of June 30, 1992	Percent of Total
Education (DOE & CUNY)	$13,870	32.8%	$2,382	13.4%
Bridges, Tunnels, Highways and Streets	4,697	11.1	1,658	9.3
Parks, Recreational and Culturals	3,977	9.4	996	5.6
Public Safety, Correction and Courts	3,799	9.0	1,729	9.7
Housing and Urban Development	3,525	8.3	2,502	14.0
Public Buildings & Equipment	3,036	7.2	429	2.4
Undistributed and Other	2,407	5.7	1,694	9.5
Mass Transit	2,125	5.0	2,365	13.3
Sanitation	1,976	4.7	1,141	6.4
Health Services	1,406	3.3	863	4.8
Off-Street Parking, Airports, Ferries and Markets	585	1.4	167	1.5
Social Services	478	1.1	283	1.6
Water Pollution Control, Water Mains and Sewers[a]	404	1.0	1,502	8.4
Total [b]	**$42,286**	**100.0%**	**$17,811**	**100.0%**

[a] Represents debt issued for water and sewer purposes prior to June 30, 1985.

[b] Over the past ten years the NYCTFA PIT and TSASC debts have supplanted some of GO borrowing with over $24 billion of these bonds issued over the period. Details for NYCTFA and TSASC debt use are not availlable from OMB for the period ending June 30, 2011.

SOURCE: *Comprehensive Annual Financial Report of the Comptroller for the Fiscal Year Ended June 30, 2012*, and the NYC Office of Management and Budget, Adopted Budget Debt Service Statement II, FY 2013 and FY 1993.

City-Funded Capital Commitments

New York City's Plan for the expenditure of debt proceeds is laid out in the Capital Commitment Plan (Commitment Plan). The Commitment Plan sets forth the list of capital priorities to be undertaken in a given fiscal year. A capital commitment occurs when the City Comptroller registers (although sometimes agencies register directly under certain circumstances) a contract to construct, rehabilitate, or purchase a capital asset. The entire contract amount is registered as a commitment in a given fiscal year but the related spending can take place over several fiscal years.

The City of New York issues debt through its various financing vehicles to cover the cost of the registered contracts. The City does not finance individual projects on a project by project basis, but rather uses bond proceeds from any given bond series to finance thousands of capital projects simultaneously.

As shown in Table 8, City-funded capital commitments in the FY 2013 Adopted Capital Plan (the Plan) total approximately $26 billion for FYs 2013-2016 after the reserve for unattained commitments. Capital expenditures on education projects make up largest share of the city-funded portion of the Plan. Over the Four-Years Planned Commitments for education projects total $4.9 billion or 23.8 percent of the total Four-Year Capital Plan. Other GO and NYCTFA supported programs include $2.66 billion for bridges, tunnels, streets, and highways, funds for housing and urban renewal totaling $2.66 billion, $2.79 billion for capital projects related to public buildings and computer equipment, and $2.55 billion for parks, libraries, and cultural affairs capital projects.

DEP capital projects involving water pollution control, water mains and sewers are funded by NYW bonds, and are projected to comprise $6.9 billion of planned City-funded commitments. This represents 24.8 percent of estimated total City capital commitments between FYs 2013 – 2016.

Total City-funded commitments, including DEP and less the reserve for unattained commitments, average approximately $6.49 billion per year over the FY 2013 – 2016 Plan period. This is an increase of nearly $200 million over the FYs 2012 – 2015 annual average of $6.28 billion per year.

Table 8. FY 2013 Adopted Capital Commitment Plan by Category, City-Funds, FYs 2013 – 2016

($ in millions)

Categories	**Projected FYs 2013 – 2016 Commitments**	**Percent of Total**	**Percent of Total without Water & Sewer**
Education (DOE & CUNY)	$4,881	17.9%	23.8%
Public Buildings & Computer Equipment	2,791	10.0	13.3
Bridges, Tunnels, Highways and Streets	2,662	9.6	12.7
Housing and Urban Development	2,658	9.5	12.7
Parks, Recreational and Culturals	2,551	9.2	12.2
Public Safety, Correction and Courts	2,174	7.8	10.4
Sanitation	1,294	4.6	6.2
Health Services	912	3.3	4.3
Mass Transit	543	1.9	2.6
Social Services	280	1.0	1.3
Off-Street Parking, Airports, Ferries and Markets	98	0.4	0.5
Water Pollution Control, Water Mains and Sewers[a]	6,903	24.8	N/A
Subtotal before Reserve for Unattained Commitments	**$27,847**	**100.0%**	**100.0%**
Reserve for Unattained Commitments	($1,888)	(N/A)	(N/A)
Total [b]	**$25,959**	**100.0%**	**100.0%**

[a] Will be funded with nearly 100 percent of NYW bonds.

[b] This represents City-funded capital commitments as of the *FY 2013 Adopted Capital Commitment Plan* issued in October 2012 and includes a $1.888 billion reserve for unattained commitments.

II. Debt Limit

A. THE CITY'S DEBT-INCURRING POWER

NYC's general debt limit, as provided in the New York State Constitution, is 10 percent of the five-year rolling average of the full value of taxable real property. The process by which the City's annual debt limit is established involves a number of different elements:

- No later than February 15th, the City's Department of Finance issues a preliminary estimate of the assessed valuation 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 and 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 the most recent market survey and a projection of market values based on recent surveys to obtain the full market value for the ensuing fiscal year. The special equalization ratio is then expressed as the ratio of the assessed value of taxable real property over 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. Market values of the ensuing fiscal years are forecasted by the Comptroller's Office.

- The State Constitution provides that, with certain exceptions, the City's general debt limit cannot be greater than 10 percent of the average full value of taxable real property in the City over the most recent five years. Full values are established using the equalization ratios and the assessed values of taxable real property for the relevant five-year period. The City's debt limit for the ensuing fiscal year is then calculated by averaging the estimated full values of real property over the five-year period.

- On or about June 5th, the 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 9 illustrates the calculation of the FY 2013 debt limit. The full market value for each of FYs 2009 through 2013 was calculated by dividing the assessed value of taxable real estate for each year by the special equalization ratios provided by ORPTS. The average of the computed full values of this five-year period is calculated. Finally, the FY 2013 debt limit ($76.853 billion) is derived by multiplying the five-year average value ($768.527 billion) by 10 percent.

Table 9. Calculation of Full Value of Real Property in New York City and the General Debt Limit, FY 2013

Fiscal Year	Billable Assessed Value of Taxable Real Estate	Special Equalization Ratio	Full Value
2009	$134,294,731,881	0.1847	$727,096,545,106
2010	$143,334,172,616	0.1977	$725,008,460,374
2011	$149,311,931,232	0.1999	$746,933,122,721
2012	$157,121,003,987	0.2001	$785,212,413,728
2013	$164,036,985,806	0.1911	$858,382,971,251
5 - Year Average Value			$768,526,702,636
10 Percent of the 5-Year Average			$76,852,670,264

SOURCE: New York City Council Tax Fixing Resolution for FY 2013.

Table 10 summarizes the estimated growth in the City's debt-incurring power. The City's FY 2013 general debt-incurring power of $76.853 billion is projected to increase to $79.760 billion in FY 2014, $83.493 billion in FY 2015, and $87.645 billion in FY 2016.[13] The City's indebtedness counted against the statutory debt limit is projected to grow from $52.68 billion at the beginning of FY 2013 to $61.96 billion by the beginning of FY 2016. NYCTFA and TSASC together have provided resources totaling over $24 billion through FY 2012.[14] The NYCTFA is now free to borrow beyond its original $13.5 billion limit provided the combined additional NYCTFA debt and GO debt does not exceed the City's general debt limit. The impact of these capital costs is discussed in Section III.

[13] The full value of taxable real property in the outyears is based on the Comptroller's Office forecast of future real estate trends.

[14] The figure used excludes the issuance of $2 billion of NYCTFA recovery bonds and $5.31 billion of NYCTFA BARBs.

Table 10. NYC Debt-Incurring Power

($ in millions)

	July 1, 2012	July 1, 2013 [a]	July 1, 2014 [a]	July 1, 2015 [a]
Gross Statutory Debt-Incurring Power	**$76,853**	**$79,760**	**$83,493**	**$87,645**
Actual Bonds Outstanding as of June 30,2012 (net) [b]	$41,880	$39,878	$37,715	$35,413
Plus New Capital Commitments [c]				
FY 2013		8,446	8,446	8,446
FY 2014			5,887	5,887
FY 2015				3,743
Less: Appropriations	(1,998)	(2,148)	(2,284)	(2,286)
Incremental NYCTFA Bonds Outstanding Above $13.5 billion	6,087	5,549	4,861	4,045
Subtotal: Net Funded Debt Against the Limit	**$45,969**	**$51,725**	**$54,625**	**$55,248**
Plus: Contract and Other Liability	6,710	6,710	6,710	6,710
Subtotal: Total Indebtedness Against the Limit	**$52,679**	**$58,435**	**$61,335**	**$61,958**
Remaining Debt-Incurring Power within General Limit	**$24,174**	**$21,325**	**$22,158**	**$25,687**

[a] FYs 2014 through 2016 debt limits are based on the NYC Comptroller's Office's forecast of billable assessed value and related full market value of real property estimates.

[b] Net adjusted for Original Issue Discount, Capital Appreciation Bonds, GO bonds issued for the water and sewer system, Business Improvement District debt, and cash on hand. The $41.88 billion is derived from the $42.286 billion GO total minus $406 million of the aforementioned adjustments.

[c] Reflects City-funds capital commitments as of the FY 2013 Adopted Capital Commitment Plan (released in October 2012) and includes cost of issuance and certain Inter-Fund Agreements. In July 2009, the State Legislature included future debt of the NYCTFA PIT bonds under the general debt limit; thus City-funds capital commitments will be funded by the NYCTFA as well.

NOTE: The Debt Affordability Statement released by the City in May 2012 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 $15.96 billion at the end of FY 2013.

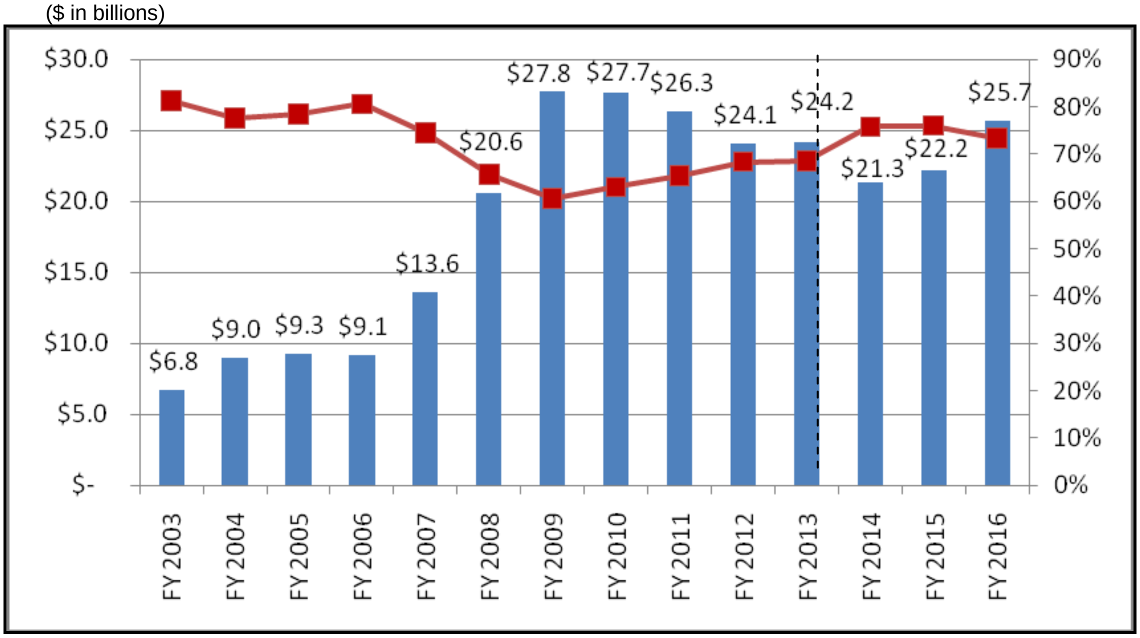
SOURCE: NYC Comptroller's Office and the NYC Office of Management and Budget.

As depicted in Chart 1, the remaining debt margin is forecast to decline from $24.17 billion at the beginning of FY 2013 to $21.3 billion in FY 2014, rebounding to $25.69 billion by the beginning of FY 2016. The debt limit, which is driven by the full market value of taxable properties, is projected to increase by 4.5 percent per year from FY 2013 to FY 2016, outpaced by the projected 5.6 percent annual increase of total indebtedness during the same period. The 1.1 percent variance between the growth in indebtedness and the growth in the debt limit is a decline from a year-ago when it was estimated that indebtedness growth would average 6.3 percent per year versus an estimated debt limit growth of 2.2 percent per year over the same period.

While the debt margin is forecast to decline in FYs 2014 and 2015 before increasing in FY 2016, the FY 2013 level is near the high for the last decade. The City's debt margin reached a high of $27.8 billion in FY 2009 up from the low of $6.8 billion at the beginning of FY 2003. This increase was a manifestation of the City's rising real estate values over that period of time. Between FY 2002 and FY 2010 debt limit grew at an average of 9.8 percent per year. The Comptroller's Office does not project that the growth in debt limit will approach this level in the near future.

***Chart 1.* NYC's Remaining Debt-Incurring Power FYs 2003 – 2016, and Debt Outstanding as a Percent of Debt Limit**

($ in billions)



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

III. Debt Burden and Affordability of City Debt

This section presents statistics assessing the size of the City's debt burden and its affordability. The proper measure of affordability is subject to debate since there are alternative measures that can be used to assess a locality's available resources. 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 City-funds expenditures.[15] For several of these measures, comparisons with other jurisdictions are presented.

A. BACKGROUND

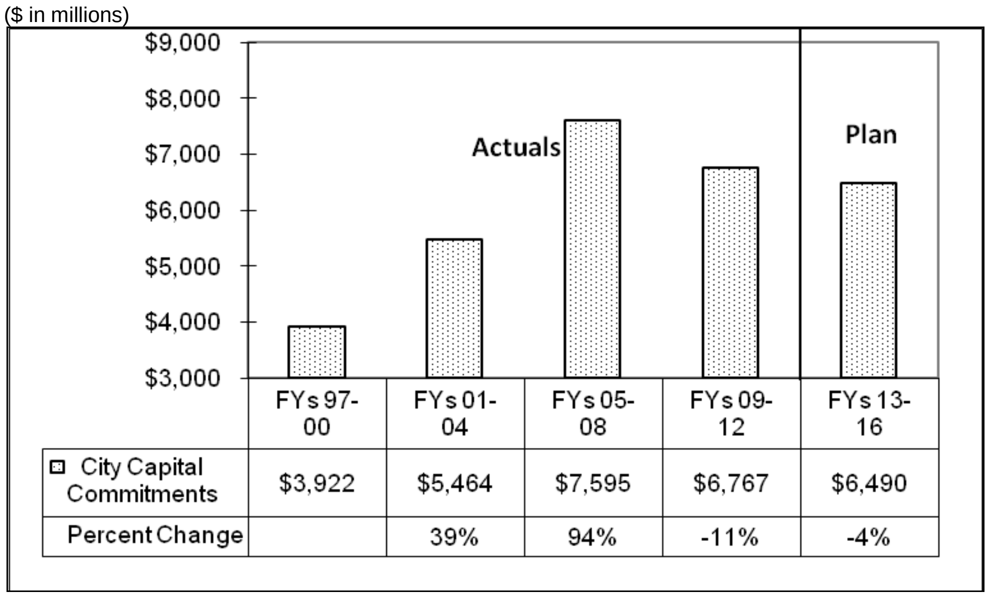
The City's infrastructure was greatly neglected during the fiscal crisis of the 1970s. Deferred maintenance led to dilapidated roads, bridges, and schools. Following that difficult period, the City commenced with a series of ambitious capital plans to repair and maintain its infrastructure. This trend, which began in the early 1980s continues today.

During the period spanning FY 1997 to FY 2000, the City committed an average of $3.92 billion per year on capital projects. In the subsequent three years, this number increased to $5.46 billion per year and increased again to $7.6 billion per year during FYs 2005 through 2008. The average annual capital commitment declined to $6.77 billion in the period between FY 2009 and FY 2012. In FYs 2013 – 2016, City-funded commitments are projected to average $6.49 billion, 4.0 percent less than the prior four-year period, as shown in Chart 2.[16]

[15] New York City FY 2011 debt per capita is used for comparison because the available data for the other sample cities are from either fiscal year or calendar year 2011.

[16] Figures include commitments for the DEP that are funded primarily with NYW debt.

Chart 2. **Actual and Projected Capital Commitment Averages, City-Funds**



SOURCE: Message of the Mayor, various FYs 1996 – 2005, and FY 2013 Adopted Capital Commitment Plan (Published October 2012).

In FY 2001, the City embarked on what was then an historically high capital commitment program, with City-funded capital commitments reaching $6.1 billion, a 63.8 percent increase over FY 2000. City-funded commitments declined slightly to $5.83 billion in FY 2002, $5.39 billion in FY 2003 and $4.54 billion in FY 2004. The trend reversed in FY 2005 when City-funded commitments increased to $7.29 billion. Capital commitments continued to grow each year reaching a high of $9 billion in FY 2008. Capital commitments declined to $7.26 billion in FY 2009 before rising again to $9 billion in FY 2010 and dropping considerably to $5.4 billion in both FYs 2011 and FY 2012, as shown in Table 11.

Table 11. City Capital Commitments from FY 2000 to FY 2015

Fiscal Year	City Capital Commitments	Year-over-Year Percent Change
2000*	$3,721	N/A
2001*	$6,094	63.8%
2002*	$5,832	(4.3%)
2003*	$5,389	(7.6%)
2004*	$4,539	(15.8%)
2005*	$7,288	60.6%
2006*	$5,911	(18.9%)
2007*	$8,171	38.2%
2008*	$9,008	10.2%
2009*	$7,264	(19.4%)
2010*	$9,014	24.1%
2011*	$5,369	(40.4%)
2012**	$5,419	0.93%
2013**	$11,040	103.7%
2014**	$7,212	(34.7%)
2015**	$4,199	(41.8%)
2016**	$3,507	(16.5%)

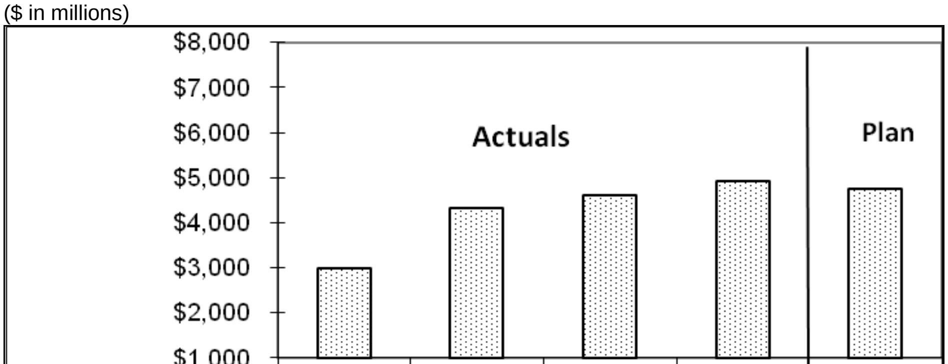
* FYs 2000 – 2011 are actuals.

** FYs 2012 – 2016 are estimates.

Chart 3 summarizes historical actual capital commitments exclusive of capital commitments made for DEP projects. Non-DEP City-funded capital commitments averaged $3 billion in FYs 1997 — 2000, $4.33 billion in FYs 2001 — 2004, $4.61 billion in FYs 2005 — 2008, and $4.92 billion in FYs 2009 — 2012. City-funded capital commitments exclusive of DEP commitments are projected to average $4.76 billion per year between FYs 2013 — 2016, a 3.0 percent decline from the actual average of the four prior fiscal years.

Chart 3. Actual and Projected Average City-Funds Capital Commitments, Excluding DEP

($ in millions)



	FYs 97-00	FYs 01-04	FYs 05-08	FYs 09-12	FYs 13-16
City Commitments without DEP	$3,006	$4,334	$4,614	$4,916	$4,764
Percent Change		44%	6%	7%	-3%

SOURCE: Message of the Mayor, various FYs 1996 – 2005, and FY 2013 Adopted Capital Commitment Plan (Published October 2012).

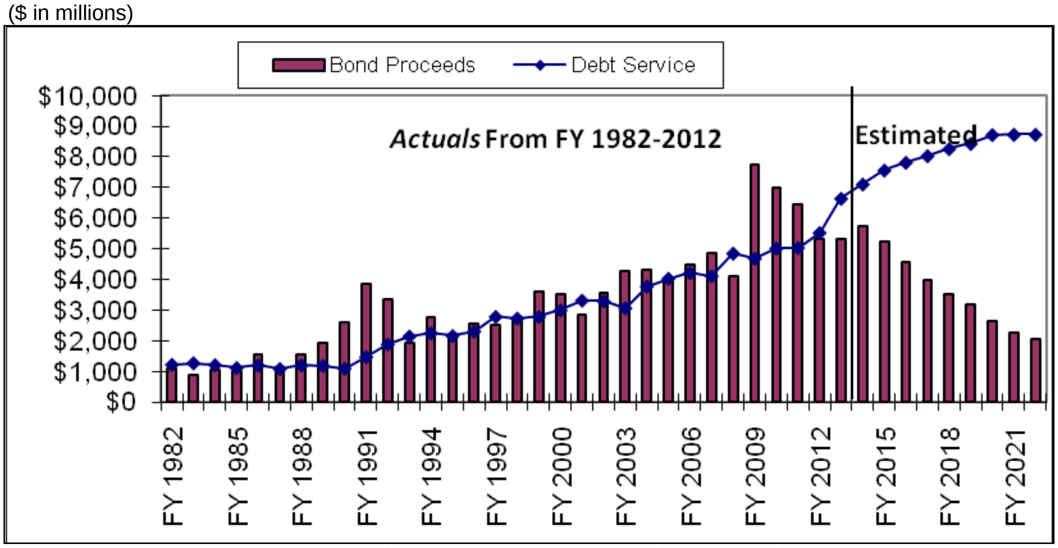
The City's capital program relies almost exclusively on the issuance of bonds. The City's annual borrowing excluding NYW debt grew from $1.08 billion in FY 1982 to $6.17 billion in FY 2012. The FY 2012 borrowing was the fourth highest annual borrowing in the City's history, with the highest annual borrowing of $7.75 billion occurring in FY 2009. These record borrowing levels reflects the aggressive Capital Commitment Plan in FYs 2008 through 2011 when City-funded Commitments, excluding DEP, averaged $5.46 billion per year. The City's borrowing is expected to average $5.98 billion annually between FYs 2013 through 2016, with the peak borrowing of $6.45 billion in FY 2013.[17]

The annual average growth rate of City debt-service payments between FY 1982 to FY 2012 was 4.9 percent per year, growing from $1.23 billion in FY 1982 to $5.21 billion in FY 2012. Over the next ten years, the City's debt service is expected to grow at an average of 4.0 percent per year, to $7.7 billion by FY 2022, as illustrated in Chart 4. Projected growth during the first four-years of the Financial Plan period is 8.2 percent, twice the projected average growth over the entire FYs 2012 – 2022 period. This implies an average annual growth of 1.0 percent per year in FYs 2017 – 2022, well below the 30-year average growth rate of 4.9 percent. This growth assumption appears unrealistically low and it is more than likely that debt service will be higher than projected over this period.[18]

[17] This includes bond proceeds for GO, NYCTFA PIT bonds and BARBs only. Without BARBs, the annual average borrowing would be $4.87 billion per year. While City-funded commitments include DEP commitments because it is a mayoral operating agency, borrowing for DEP capital projects are not included in our analysis of the City's debt. Financing for DEP's capital program is done by the NYW financing entity.

[18] Debt service figures exclude TSASC and lease-purchase debt service as well as the State-supported BARBs debt service.

Chart 4. **Bond Proceeds and Debt Service, FYs 1982 – 2022**



SOURCES: *City of New York, Office of the Comptroller, Comprehensive Annual Financial Reports, 1982-2012* and *Office of Management and Budget, FY 2013 Adopted Financial Plan, June 2012*. Debt-service payments exclude interest on short-term notes, Municipal Assistance Corporation debt, BARBs debt and lease-purchase debt and are adjusted for budget surpluses prepaid to the debt-service fund.

B. DEBT BURDEN

Even after adjusting for the effects of population change and tax revenue, New York City's debt has expanded significantly since FY 1990. Debt per capita,[19] which was $2,951 in FY 1990, grew to $9,378 by FY 2012, an increase of 218 percent. The cumulative growth in debt per capita over this period was 2.6 times the City's rate of inflation.[20] The FY 2012 debt per capita increased by $459, or 5.1 percent, over the FY 2011 figure. The debt per capita figure does not include the debt of the NYW and the MTA, both of which greatly affect user fees paid by City residents. If this debt were included in the calculation, the FY 2011 debt per capita figure would increase to more than $16,000.

Historical Debt Outstanding as a Percent of Personal Income, FYs 1970 – 2011

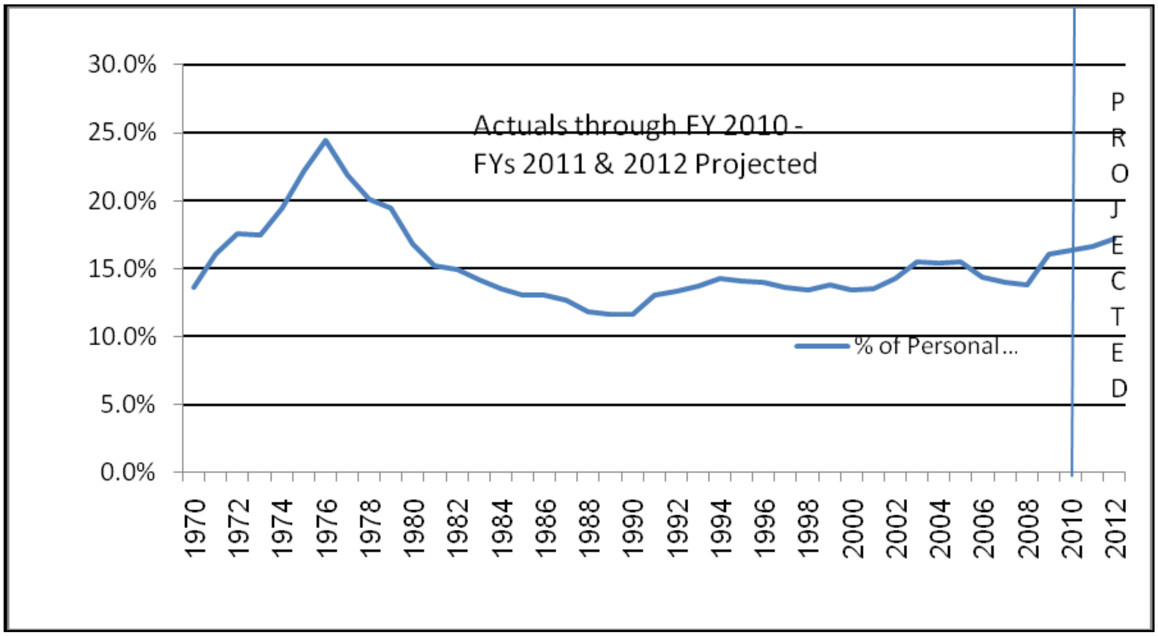
In the early 1970s, the City issued short-term notes which it did not entirely redeem at the end of each fiscal year. From 1970 to 1975, the City's year-end short-term note balance averaged $2.95 billion, with $4.44 billion outstanding at the end of FY 1975. This signal of financial stress contributed to the City's inability to access the credit markets and the eventual involvement of State and Federal governments beginning in March 1975. Confronted with external controls in the aftermath of the fiscal crisis, the City rapidly brought down its

[19] Debt per capita is calculated by dividing Gross NYC Debt by total population as reported by the US Department of Commerce, Bureau of Economic Analysis.

[20] FY 2012 debt per capita of $9,378 is used for section B's analysis; however, FY 2011's debt per capita figure of $8,919 is used when comparing other municipalities, due to data limitations. In addition, 1990 is used as the base year to provide a uniform reference point from report to report. In prior reports, FY 1990's debt per capita was reported as $2,490 which was based on *net debt* outstanding. For better comparability, the FY 1990 figure of $2,951 now based on *gross debt* outstanding.

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 1989.

***Chart 5.* NYC Gross Debt as a Percent of Personal Income, FYs 1970 – 2012**



SOURCES: *Comprehensive Annual Financial Reports of the Comptroller for the Fiscal Year ended June 30, 1990, 1999, and 2011* and the U.S. Bureau of Economic Analysis, personal income for counties and NYC OMB, Message of the Mayor, May 2012.

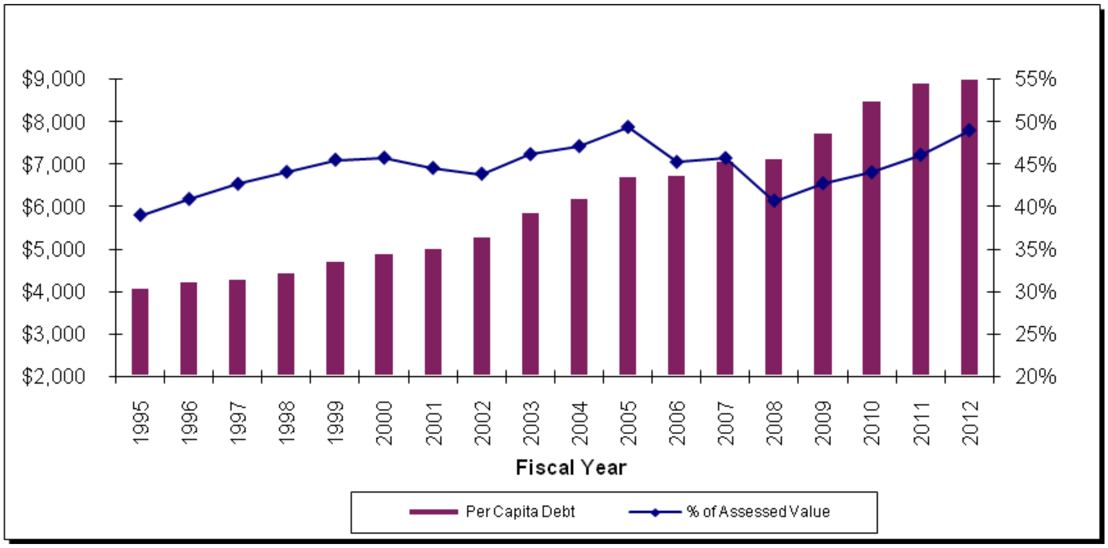
Chart 5 illustrates the historical trend of gross debt outstanding as a percentage of personal income from FYs 1970 to 2012. After reaching a peak of 24.4 percent in FY 1976, gross debt as a percent of NYC personal income trended downward, reaching a low of 11.6 percent in FY 1990. Through the 1990s, the ratio averaged 13.5 percent before spiking to 15.5 percent in FY 2003 in the aftermath of the September 11th attacks. Between FYs 2007 and 2011, the ratio averaged 15.7 percent. In FY 2012, however, this ratio is forecast to increase to 17.2 percent. Gross NYC Debt outstanding increased 5.1 percent from FY 2011 to FY 2012 outpacing the projected increase in personal income of 1.5 percent during the same time period.[21]

NYC Debt as a Portion of Assessed Real Property

Gross NYC Debt as a proportion of the assessed value of taxable real property has been increasing over the last four fiscal years. In FY 2011, Gross NYC Debt was 46 percent of the assessed value of the City's real property up from 39 percent in FY 1995, as shown in Chart 6. The FY 2012 ratio is estimated to increase to 49 percent from 46 percent in FY 2011, primarily due to an increase in outstanding debt of 5.1 percent compared to an assessed value decrease of 1.1 percent over the same period.

[21] New York City's OMB, Message of the Mayor, May 2012, p.19 used for NYC personal income growth rate from FY 2011 to FY 2012. Actual personal income data is available through FY 2010.

***Chart 6.* NYC Debt Per Capita and Debt as a Percentage of the Assessed Value of Taxable Real Property**



SOURCE: City of New York, Office of the Comptroller, Comprehensive Annual Financial Reports, FYs 1995 – 2012.

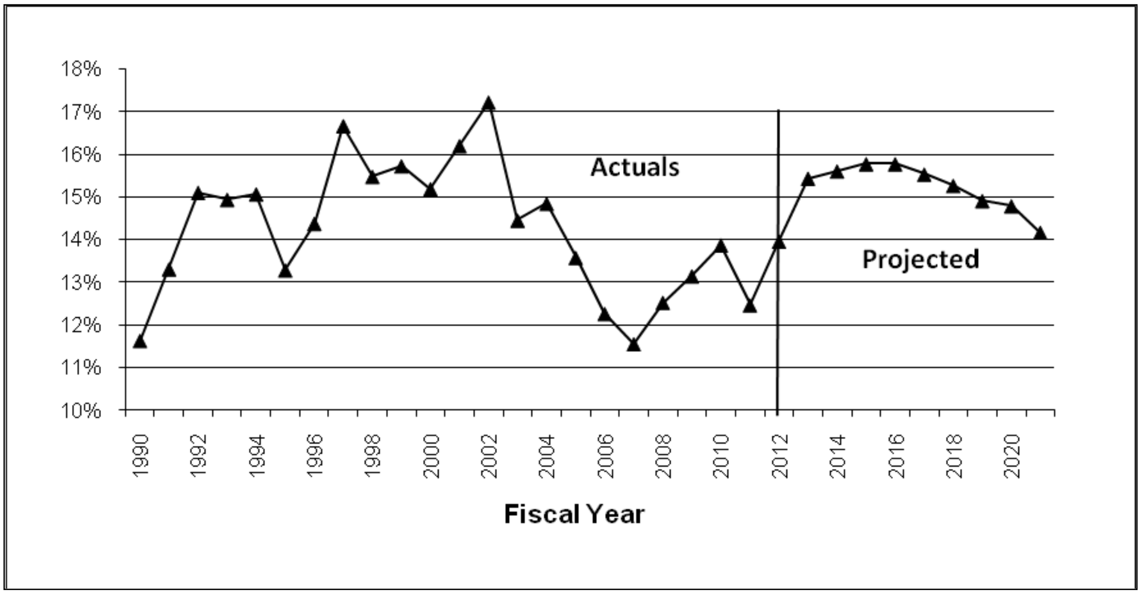
NYC Debt Service as a Percent of Tax Revenues and City-Funds Expenditures

Another measure of debt affordability is annual debt service expressed as a percent of annual 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 eight of the eleven years from FY 1992 to FY 2002.[22] By FY 2007, this ratio fell to a low of 11.6 percent rising to approximately 13.1 percent in FY 2012, as shown in Chart 7. Debt service as a percentage of tax revenues is projected to reach a high of 15.5 percent in FY 2016 before declining to below 14 percent by FY 2022.[23] As discussed earlier, these outyear ratios are reflective of the projected capital borrowing and debt service in FYs 2017 – 2022, both of which are likely understated.

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

[23] From the *City of New York, Office of the Comptroller, Comprehensive Annual Financial Reports, 1982-2012,* and *NYC Office of Management and Budget, Adopted Financial Plan, June 2012* and adjusted for prepayments.

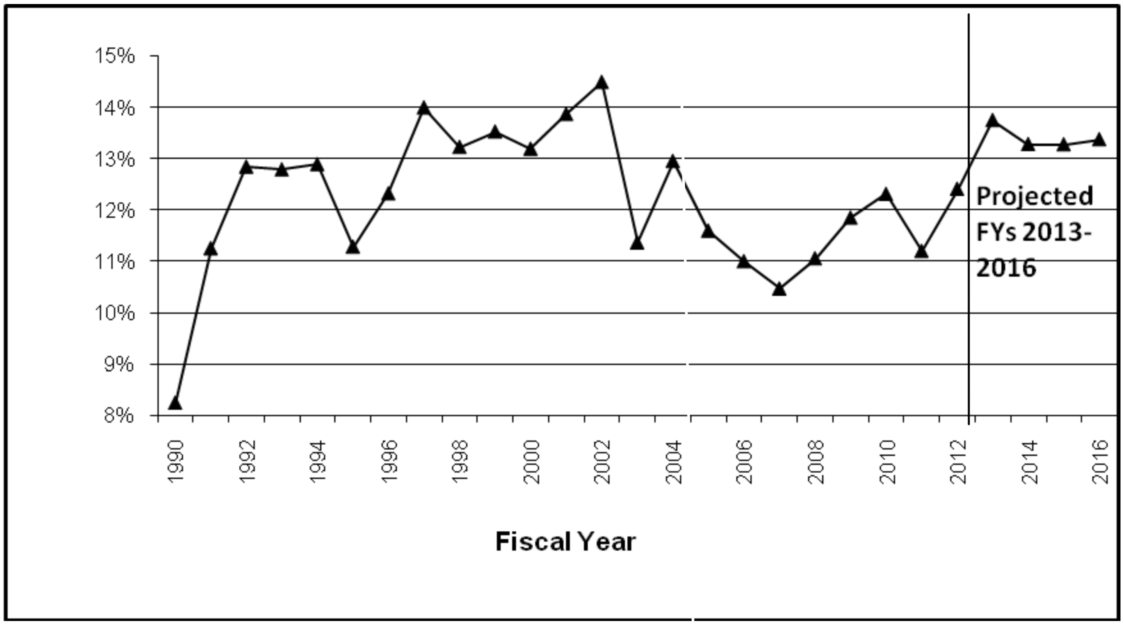
Chart 7. **NYC Debt Service as a Percent of Tax Revenues**



SOURCE: City of New York, Office of the Comptroller, Comprehensive Annual Financial Reports, FYs 1982 – 2012, and NYC Office of Management and Budget, FY 2013 Adopted Financial Plan, June 2012.

Standard & Poor's (S&P), one of the primary municipal bond rating agencies, uses the ratio of debt service to total general fund expenditures as one measure of the impact of debt service on a municipality's budget. S&P suggests that a City's annual debt service burden is high if it exceeds 15 percent of general fund expenditures. The City's debt service as a percent of total City-funds expenditures in FY 2012 was 11.7 percent and is projected to rise to 13.3 percent by FY 2016, as shown in Chart 8.

***Chart 8*. NYC Debt Service as a Percent of City-Funds Expenditures**



SOURCE: City of New York, Office of the Comptroller, Comprehensive Annual Financial Reports, FYs 1982 – 2012, and NYC Office of Management and Budget, FY 2013 Adopted Financial Plan, June 2012. Debt service is adjusted for prepayments.

C. COMPARISON WITH SELECTED MUNICIPALITIES

New York City is the largest City in the U.S. with a complex, varied, and aging infrastructure. The City has more school buildings, firehouses, health facilities, community colleges, roads, bridges, libraries, and police precincts than any other city in the country. Moreover, the City has responsibilities that in other cities are distributed more broadly among states, counties, unified school 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. Using debt per capita data to compare debt burden among municipalities provides such an adjustment.

In FY 2011, NYC's $8,919 debt per capita was almost twice the average of $4,642 among a sample of large U.S. cities, and 1.48 times the per capita debt of Chicago which had the next highest debt burden of $6,044 as shown in Table 12.[24]

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

Table 12. Debt Per Capita for Selected Cities, 2011

City	Population	Direct and Overlapping Debt Outstanding ($ 000)	Debt Per Capita[a]
Boston	645,169	$1,127,508	$1,748
San Francisco	795,238	2,478,458	$3,117
San Jose	959,000	3,474,754	$3,623
Dallas	1,200,530	5,227,072	$4,354
Los Angeles	3,810,129	17,324,151	$4,547
Houston	2,107,208	9,696,000	$4,601
Phoenix	1,502,757	6,940,439	$4,618
Philadelphia	1,528,306	7,149,200	$4,759
San Antonio	1,326,539	7,210,127	$5,435
Chicago	2,695,598	16,292,299	$6,044
Average of Sample Cities	*1,657,047*	*$7,692,001*	*$4,642*
New York City	**8,244,910**	**$73,538,000**	**$8,919**

[a] Table 12 above is based on data extracted from each city's "Direct and Overlapping Debt Outstanding" exhibit included in that city's Comprehensive Annual 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 NYC debt per capita is higher than other cities in the sample, NYC's growth in debt per capita is lower than all but three sample cities. NYC debt per capita grew by 81 percent from 2000 to 2011. This growth is below the average growth of 135 percent for the 10 sample cities as shown in Table 13.

Table 13. Debt Per Capita Comparisons for Selected Cities – 2000 and 2011

City	Debt per Capita in 2000	Debt per Capita in 2011	Percentage Change 2000 – 2011
Boston	$1,376	$1,748	27.0%
Philadelphia	$3,241	$4,678	44.3%
Houston	$2,187	$4,601	110.4%
Chicago	$2,863	$6,044	111.1%
Phoenix	$2,041	$4,618	126.3%
San Francisco	$1,139	$3,117	173.6%
San Antonio	$1,929	$5,435	181.8%
Los Angeles	$1,464	$4,547	210.6%
Dallas	$1,273	$4,354	242.0%
San Jose	$943	$3,623	284.2%
Average of All Other Cities[a]	*$1,974*	*$4,642*	*135.2%*
National CPI	**$172.2**	**$224.9**	**30.6%**
New York City	**$4,923**	**$8,919**	**81.2%**

SOURCES: NYC Comptroller's Office and Comprehensive Annual Financial Reports and/or official statements of various cities.

Note: Table 13 above is based on data extracted from each city's "Direct and Overlapping Debt Outstanding" exhibit included in that city's Comprehensive Annual 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.

[a] From Table 12, a weighted average derived by the sum of total debt outstanding divided by the sum of total population.

NYC's debt per capita also exceeds that of other cities and counties within New York State. Within the State, the average debt per capita of the cities and counties surveyed is $3,629, well below half of New York City's debt per capita in FY 2011, as shown in Table 14.[25] Of the municipalities surveyed Nassau County has the closest debt per capita to New York City with a figure of $4,838.

Table 14. Debt Per Capita Comparisons for Selected NY Cities and Counties

City or County	Debt per Capita	Date of Observation
Buffalo	$1,503	6/30/11
Rochester	2,058	6/30/11
Syracuse	2,127	12/31/11
Albany	2,191	6/15/12
Monroe County	2,602	12/31/11
Onondaga County	3,187	12/31/11
White Plains	3,609	6/30/11
Westchester County	4,224	6/30/11
Nassau County	4,838	12/31/11
Average of Above NY Cities and Counties[a]	**$3,629**	**N/A**
New York City	$9,378	6/30/12
New York City	$8,919	6/30/11

SOURCE: Comprehensive Annual Financial Reports of various cities and counties.
[a] This amount reflects a weighted average of total debt outstanding for all counties or cities divided by the total population for all the respective counties and cities.

Another way to examine the debt burden of a municipality or city is to measure its debt relative to its wealth. Two traditional measures of that relationship are outstanding 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 major 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.

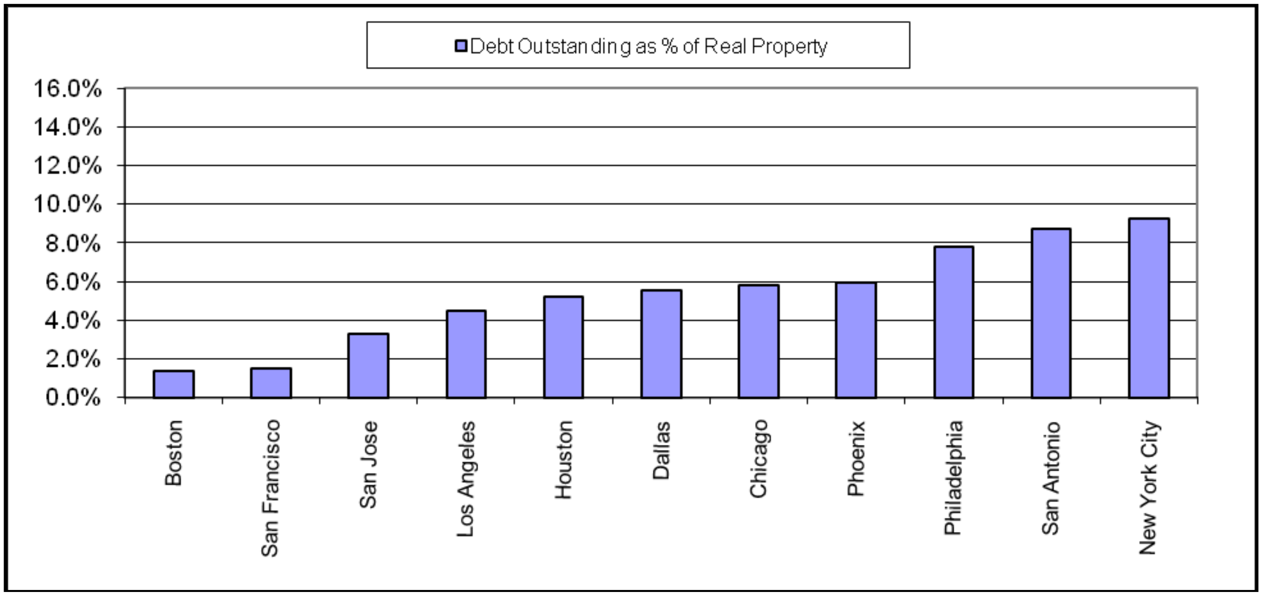
The rationale behind using personal income is that it is another relative measure of a locality's wealth. The wealthier a community, the greater its capacity to pay taxes, and to sustain local government debt and operations. Standard & Poor's considers both a debt to real property value ratio and a debt to income ratio of more than 6.0 percent to be high.[26]

Among the cities surveyed in this report, New York City ranks the highest in both measures of debt burden and is well above the averages of the sample cities and counties. As detailed in Chart 9, Gross NYC debt as a percentage of full value of real property in FY 2011 was 9.3 percent. This is just below twice the sample city average of 4.8 percent. San Antonio at 8.7 percent and Philadelphia at 7.8 percent are the next highest Cities.

[25] However, Nassau and Westchester counties do not have some of NYC's significant infrastructure such as subways, major bridges, and a complex system of highways.

[26] Standard & Poor's Public Finance Criteria, 2000, p. 29.

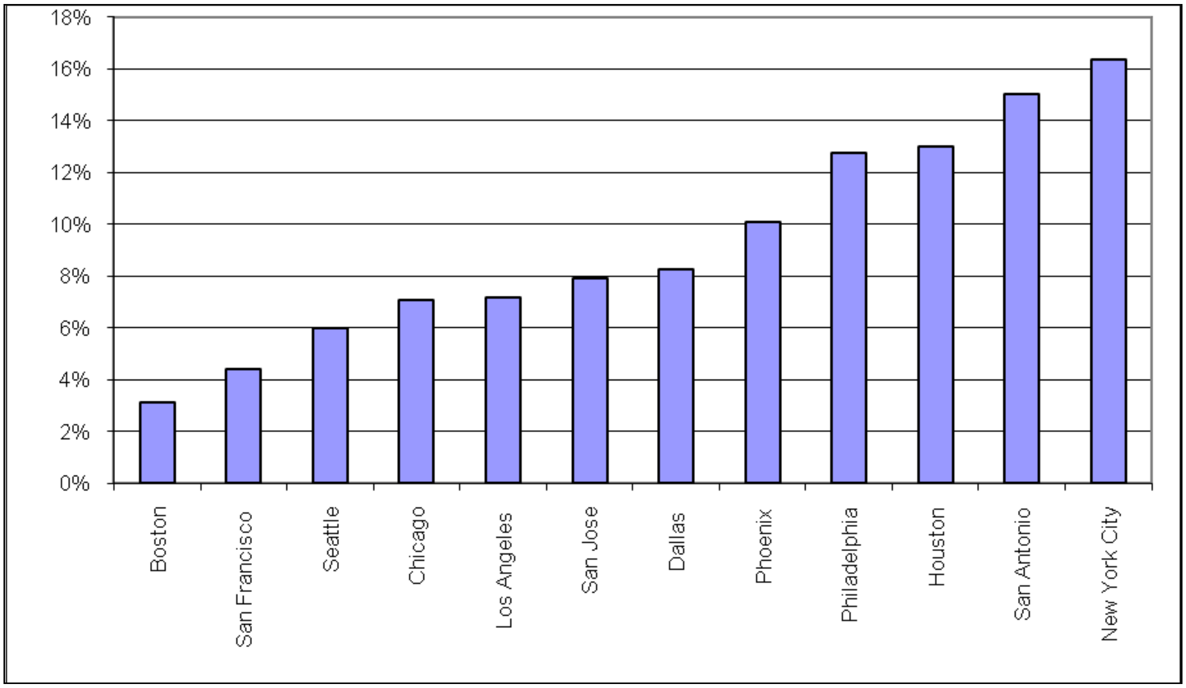
Chart 9. **Debt Outstanding as a Percent of the Full Value of Real Property, FY 2011**



SOURCE: Each city's Comprehensive Annual Financial Report for FY 2011.
NOTE: Debt per capita is based on data extracted from each city's Direct and Overlapping Debt Outstanding exhibit included in that city's Comprehensive Annual 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.

Gross NYC debt as a percentage of personal income in FY 2010 was 16.3 percent, the highest among the sample cities as summarized in Chart 10. Gross NYC Debt as a percentage of personal income is over twice the 8.1 percent average of the 11 sample cities. Cities in the survey with comparable ratios to New York City include San Antonio at 15 percent Houston at 13 percent, and Philadelphia with 12.8 percent.

Chart 10. Debt Outstanding as a Percent of Personal Income, FY 2010



SOURCE: FY 2010 Comprehensive Annual Financial Reports of Sample Counties and the U.S. Department of Commerce – Bureau of Economic Analysis (BEA).

[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 Comprehensive Annual 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.] The 2010 Personal Income is the most recent personal income data available from the BEA.

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Glossary of Acronyms

BAB	Build America Bonds
BAN	Bond Anticipation Notes
BARB	Building Aid Revenue Bond
BCI	Building Construction Index
BEA	Bureau of Economic Analysis
CAFR	Comprehensive Annual Financial Report
CCI	Construction Cost Index
CPI	Consumer Price Index
CUCF	City University Construction Fund
CUNY	City University of New York
CY	Calendar Year
DASNY	Dormitory Authority of the State of New York
DEP	Department of Environmental Protection
DOE	Department of Education
EXCEL	Expanding Our Children's Education and Learning
FASB	Financial Accounting Standards Board

FY	Fiscal Year
GASB	Government Accounting Standards Board
GO Debt	General Obligation Debt
HHC	Health and Hospitals Corporation
HYIC	Hudson Yards Infrastructure Corporation
LGAC	Local Government Assistance Corporation
MAC	Municipal Assistance Corporation
MTA	Metropolitan Transportation Authority
NY	New York
NYC	New York City
NYCTFA	New York City Transitional Finance Authority
NYW	New York City Municipal Water Finance Authority
OMB	Office of Management and Budget
ORPTS	Office of Real Property Tax Services
PIT	Personal Income Tax
QSCB	Qualified School Construction Bonds
S&P	Standard & Poor’s

STAR	Sales Tax Asset Receivable Corporation
TSASC	Tobacco Settlement Asset Securitization Corporation
TSR	Tobacco Settlement Revenues
TYCS	Ten-Year Capital Strategy
U.S.	United States
USDOT	United States Department of Transportation
WTC	World Trade Center