



New York City Comptroller  
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BUREAU OF FISCAL AND BUDGET STUDIES

# **Fiscal Year 2014 Annual Report on Capital Debt and Obligations**

**December 2013**

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# Executive Summary

New York City's (the "City") debt has grown from \$2,951 per capita in FY 1990 to \$9,522 in FY 2013, an increase of 223 percent. Over the same 23 year period, the NYC area Consumer Price Index (CPI) grew by 86 percent. This growth in the City's capital spending for infrastructure is a corollary of the neglect of the 1970's. While such spending is necessary, it is costly because of the City's 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 50 million tourists annually.

The City may issue long-term debt only for capital purposes and only for assets with useful lives of five years or greater. Almost forty-seven (46.7) 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 Future Tax Secured (NYCTFA FTS), 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 2014 general debt-incurring power of \$79.10 billion is projected to increase to \$81.66 billion in FY 2015, to \$85.26 billion in FY 2016, and to \$89.33 billion by FY 2017.

Outstanding City debt counted towards the debt limit totaled \$54.27 billion as of July 1, 2013. This total included \$41.22 billion of outstanding GO debt, \$8.32 billion of outstanding NYCTFA debt and \$6.67 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, 2013 was \$24.83 billion.

By the beginning of FY 2017, the City's total indebtedness is expected to grow to \$65.41 billion. The City is projected to have remaining debt-incurring capacity of \$20.7 billion on July 1, 2014, \$21.3 billion on July 1, 2015, and \$23.9 billion on July 1, 2016.

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 (but not its related principal of \$3 billion) to the extent that revenues from the Hudson Yards district are insufficient to pay interest. 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 raised a total of \$1.3 billion for capital construction in the City between FYs 2000 and 2006, it will likely not provide any further support to the City's capital program.

Based on a survey of other jurisdictions, in FY 2012 New York City's debt burden per capita was double the average sample of large U.S. cities. Among the cities surveyed in this report, New York City 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 2012 was 9.5 percent. This is almost twice the sample city average of 4.8 percent. Of the sample Cities only San Antonio, at 9.1 percent and Philadelphia, at 7.7 percent have debt to real property ratios similar to New York City's. The next two largest cities-by population, Los Angeles and Chicago, have ratios that are a good deal lower than New York City's, 4.3 and 7.4 percent, respectively. New York City's debt as a percentage of personal income in FY 2011 was 16.1 percent, almost twice the average of the other sample cities in the survey.<sup>1</sup> San Antonio and Houston were the next highest, at 13.7 and 12.5 percent, respectively, while Boston had the lowest debt to personal income ratio at 3.2 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 Future Tax Secured (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.

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<sup>1</sup> 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 2011. Both the respective cities and counties of San Francisco and Philadelphia are coterminous geographic entities.

## NYC Debt-Incurring Power

(\$ in millions)

	July 1, 2013	July 1, 2014 <sup>a</sup>	July 1, 2015 <sup>a</sup>	July 1, 2016 <sup>a</sup>
<b>Gross Statutory Debt-Incurring Power</b>	<b>\$79,100</b>	<b>\$81,661</b>	<b>\$85,256</b>	<b>\$89,331</b>
Actual Bonds Outstanding as of June 30, 2013 (net) <sup>b</sup>	\$41,215	\$39,301	\$37,097	\$34,811
Plus New Capital Commitments <sup>c</sup>				
FY 2014		9,433	9,433	9,433
FY 2015			5,421	5,421
FY 2016				3,718
Less: Appropriations	(1,929)	(2,215)	(2,310)	(2,264)
Incremental NYCTFA Bonds Outstanding Above \$13.5 billion	8,315	7,774	7,645	7,620
<b>Subtotal: Net Funded Debt Against the Limit</b>	<b>\$47,601</b>	<b>\$54,293</b>	<b>\$57,286</b>	<b>\$58,739</b>
Plus: Contract and Other Liability	6,671	6,671	6,671	6,671
<b>Subtotal: Total Indebtedness Against the Limit</b>	<b>\$54,272</b>	<b>\$60,964</b>	<b>\$63,957</b>	<b>\$65,410</b>
<b>Remaining Debt-Incurring Power within General Limit</b>	<b>\$24,828</b>	<b>\$20,697</b>	<b>\$21,299</b>	<b>\$23,921</b>

<sup>a</sup> FYs 2015 through 2017 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.

<sup>b</sup> 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 \$41.22 billion is derived from the \$41.592 billion GO total minus \$377 million of the aforementioned adjustments.

<sup>c</sup> Reflects City-funds capital commitments as of the FY 2014 Adopted Capital Commitment Plan (released in October 2013) and includes cost of issuance and certain Inter-Fund Agreements. In July 2009, the State Legislature included future debt of the NYCTFA Future Tax Secured 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 2013 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 \$15.08 billion at the end of FY 2014.

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, and 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 and other category (See Table 1).<sup>2</sup> New York Water Municipal Finance Authority (NYW) bonds are not included in this figure as they are paid for 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 5.5 percent per year from FY 2000 to FY 2013. The FY 2014 Adopted Budget and Financial Plan projects that over the next four years, Gross NYC Debt will increase by approximately 3.9 percent annually.<sup>3</sup>

## A. COMPOSITION OF DEBT

The City issues six types of debt to finance its capital program, with General Obligation (GO) bonds accounting for 52.5 percent of the total, as shown in Table 1. 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 continued to issue taxable Qualified School Construction bonds (QSCBs) until October 2013 when the federal allocation was exhausted. 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 82.5 percent of the total value of the City's outstanding debt at the end of FY 2013.<sup>4</sup>

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<sup>2</sup> All bonds cited are paid from General Fund revenues except for STAR Corporation.

<sup>3</sup> 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.

<sup>4</sup> 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.

To diversify its interest rate risk, NYC debt consists of both fixed and variable rate debt, with the bulk of the debt in fixed rate borrowing. In FY 2013, fixed rate debt accounted for 85.7 percent of Gross New York City Debt outstanding.

**Table 1. Gross NYC Debt Outstanding as of June 30, 2013**

(\$ in millions)

	<b>GO Bonds</b>	<b>NYCTFA</b>	<b>TSASC</b>	<b>STAR Corporation</b>	<b>Capital Lease Obligations &amp; Other<sup>a</sup></b>	<b>Gross Debt Outstanding</b>
<b>Tax-Exempt</b>						
Fixed Rate	\$26,864	\$19,654 <sup>c</sup>	\$1,245	\$1,869	\$4,574	\$54,206
Variable Rate <sup>b</sup>	<u>7,442</u>	<u>3,543<sup>c</sup></u>	<u>0</u>	<u>0</u>	<u>156</u>	<u>11,141</u>
Subtotal	\$34,306	\$23,197	\$1,245	\$1,869	\$4,730	\$65,347
<b>Taxable</b>						
Fixed Rate	\$7,063	\$6,005 <sup>d</sup>	\$0	\$116	\$496	\$13,680
Variable Rate <sup>b</sup>	<u>223</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>223</u>
Subtotal	\$7,286	\$6,005	\$0	\$116	\$496	\$13,903
<b>Total</b>	<b>\$41,592</b>	<b>\$29,202</b>	<b>\$1,245</b>	<b>\$1,985</b>	<b>\$5,226</b>	<b>\$79,250</b>
<b>Percent of Total</b>	<b>52.5%</b>	<b>36.8%</b>	<b>1.6%</b>	<b>2.5%</b>	<b>6.6%</b>	<b>100.0%</b>

<sup>a</sup> This figure includes capital leases of \$496 million, City University Construction Fund (CUCF) debt of \$125 million, and \$3 billion of Hudson Yards Infrastructure Corporation debt but excludes FY 2005 Securitization Corporation debt.

<sup>b</sup> 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.

<sup>c</sup> The New York City Transitional Finance Authority (NYCTFA) fixed rate figure includes \$6.154 billion for NYCTFA Building Aid Revenue Bonds (BARBs). The variable rate figure contains \$986 billion of Recovery Bonds.

<sup>d</sup> The NYCTFA taxable fixed rate figure includes \$3.34 billion of Build America Bonds (BABs) and \$1.25 billion of Qualified School Construction Bonds (QSCB).

SOURCE: Comprehensive Annual Financial Report of the Comptroller for the Fiscal Year Ended June 30, 2013, p.338.

## 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, 2013, GO debt totaled \$41.59 billion and accounted for 52.5 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 2013 GO debt total is \$694 million, or 1.6 percent, less than at the same time the year prior. During FY 2013, the City issued \$1.6 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 2013, NYCTFA debt totaled \$29.20 billion, comprised of \$23.05 billion of PIT supported debt and \$6.15 billion of BARBs. This total is 11.2 percent greater than at the close of FY 2012. As a result, the NYCTFA’s share of Gross NYC Debt outstanding increased from 34 percent in FY 2012 to 36.8 percent in FY 2013. The increase is the result of the issuance of \$2.93 billion of NYCTFA PIT bonds in support of the City’s capital program in FY 2013.

The NYCTFA was created as a State authority 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 did not count against the City's general debt limit.<sup>5</sup> The City exhausted the \$13.5 billion bonding authority in FY 2007. In 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 building aid payments the City receives from the state. 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. The NYCTFA issued \$1.3 billion of additional BARBs in FYs 2011 and 2012. In FY 2013, another \$850 million of BARBs debt was issued. As a result, there are currently \$6.15 billion of BARBs outstanding. NYCTFA BARBs are excluded from the calculation of the City's debt counted against the debt limit.

TSASC debt totaled \$1.25 billion as of June 30, 2013. This represents an \$8 million decrease from FY 2012. 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.<sup>6</sup> 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 \$1.985 billion at the end of FY 2013. This represents a decrease of \$69 million from FY 2012. The proceeds of STAR bonds were used to pay off the remaining debt of the Municipal Assistance Corporation in FY 2005. 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

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<sup>5</sup> The debt limit is discussed in further detail in Section II.

<sup>6</sup> The former TSASC indenture called for all tobacco revenues to flow first to TSASC and then to the City's general fund.

is paid by the Local Government Assistance Corporation (LGAC), a State agency and is not included when calculating the City's debt limit.<sup>7</sup>

*Capital Lease, Conduit Debt and Other Obligations* totaled \$5.23 billion as of June 30, 2013, a decrease of \$103 million, or 1.9 percent, from FY 2012.

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 Health and Hospitals Corporation (HHC) (\$654 million), DASNY for the New York City Courts Capital Program (\$531 million), the Educational Construction Fund (\$268 million), the City University Construction Fund (\$125 million), the Industrial Development Agency (\$93 million), the Primary Care Development Corporation (\$37 million), the Urban Development Corporation (\$22 million), as well as general lease obligations (\$496 million).<sup>8</sup>

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 11<sup>th</sup> 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. There are no further bond issuances anticipated by the HYIC. The bonds are structured as term bonds with a final maturity of 2047. Principal will not amortize until the project has demonstrated self-support from recurring revenues. To the extent project revenues are insufficient to meet interest payments; HYIC receives interest support payments from the City, subject to annual appropriation, sufficient to enable the Corporation to pay interest on the bonds. HYIC had debt outstanding of \$3 billion as of June 30, 2013.

### ***Other Issuing Authorities***

In addition to the financing mechanisms cited above, a number of independent authorities issue bonds to finance large infrastructure projects in the City and throughout the metropolitan area. The two largest issuers are the New York City Municipal Water Finance Authority (NYW) and the Metropolitan Transportation Authority (MTA). The debt of NYW and MTA is not an obligation of the City; nevertheless, bond proceeds are used to support services provided to City residents. The outstanding debt of these two authorities is summarized in Tables 2 and 3.

*New York City Municipal Water Finance Authority:* As of June 30, 2013, NYW had \$29.494 billion in debt outstanding, an increase of \$1.1 billion, or 3.96 percent from FY 2012. Debt issued by NYW is supported by user fees and certain other revenues. Debt issued by NYW is supported by rates, fees and charges for the use of services provided by the System. Created by

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<sup>7</sup> 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.

<sup>8</sup> Although for reporting purposes \$654 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.

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 development help the goals of continued water quality. DEP’s FYs 2014-2017 Four-Year Capital Program assumes an average annual cash funding need of \$1.52 billion.<sup>9</sup> 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 annual average of \$1.855 billion per year is 11.1 percent higher than the agency’s capital commitments between FYs 2010 – 2013, when DEP City-funds capital commitments averaged \$1.67 billion per year.

**Table 2. NYW Debt Outstanding as of June 30, 2013**

(\$ in millions)

Tax Exempt	
Fixed Rate	\$25,353 <sup>a</sup>
Variable Rate	4,141 <sup>b</sup>
<b>Total</b>	<b>\$29,494</b>

<sup>a</sup> Includes \$423 million of Bond Anticipation Notes.

<sup>b</sup> Includes \$500 million of Commercial Paper.

SOURCE: NYC Municipal Water Finance Authority.

*New York Metropolitan Transportation Authority:* The State controlled MTA is composed of six major agencies providing commuter transportation throughout the metropolitan area. The MTA is responsible for the maintenance and operation of the New York City Transit buses 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 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.

**Table 3. MTA Debt Outstanding as of June 30, 2013**

(\$ in millions)

Tax Exempt	
Fixed Rate	\$27,643
Variable Rate	5,232
<b>Total</b>	<b>\$32,875</b>

SOURCE: Metropolitan Transportation Authority.

As of June 30, 2013, the MTA had \$32.9 billion of debt outstanding, an increase of \$1.38 billion, or 4.4 percent, from June 30, 2012. Outstanding MTA debt has increased in all but one of the last fifteen years. MTA debt has grown by 132 percent or \$18.7 billion since FY 2000. This growth rate is more than 31 percent higher than the growth in gross NYC indebtedness during the same period. Due to the lack of on-going direct State debt issuance support, the MTA managed debt outstanding will continue its recent trend of increases.

<sup>9</sup> This figure represents the estimated borrowing need for DEP, issued via NYW. This differs from the commitment plan figure.

## 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 outside the water and sewer system 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.

Based on Office of Management and Budget (OMB) forecasts, the annual growth rate in debt outstanding, which averaged 5.5 percent per year from FY 2000 to FY 2013, is expected to slow to 1.3 percent between FY 2013 to FY 2023.<sup>10</sup> 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 2013 and 2017 the growth rate averages 3.9 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 2020 to 2023 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 future projections in the outyears are typically skeletal in nature.

**Table 4. NYC Projected Bonds Outstanding, Three Major Issuers, FYs 2013 – 2023**

(\$ in millions)

End of Fiscal Year	Debt Outstanding for GO, NYCTFA, & TSASC	Percent Change
2013	\$74,025	3.0%
2014	78,464	6.0%
2015	82,080	4.6%
2016	84,584	3.1%
2017	86,244	2.0%
2018	87,172	1.1%
2019	87,530	0.4%
2020	87,225	(0.3%)
2021	86,580	(0.7%)
2022	85,406	(1.4%)
2023	83,956	(1.7%)

SOURCE: *Comprehensive Annual Financial Report of the Comptroller for the Fiscal Year Ended June 30, 2013* and the NYC Office of Management and Budget, June 2013 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 shown in Table 5.<sup>11</sup> The Financial Plan assumes principal repayments totaling \$2.593 billion in FY 2014, \$3.126 billion in FY 2015, \$3.309 billion in FY 2016, and \$3.292 billion in FY 2017.

<sup>10</sup> *Comprehensive Annual Financial Report of the Comptroller for the Fiscal Year Ended June, 30, 2013*, page 338, used as source for FY 2000 to FY 2013 rate of growth. Includes \$3 billion of HYIC bonds.

<sup>11</sup> Since NYCTFA BARB and STAR debt service are not paid with City general fund revenues, they are not included in Table 5.

Principal is estimated to comprise 43.4 percent of debt service in FY 2014, 45.8 percent in FY 2015, 45.7 percent in FY 2016 and 44.0 percent in FY 2017.<sup>12</sup>

**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
2014	\$2,593	\$3,378	\$5,971	43.4%
2015	\$3,126	\$3,693	\$6,819	45.8%
2016	\$3,309	\$3,935	\$7,244	45.7%
2017	\$3,292	\$4,184	\$7,476	44.0%

SOURCE: NYC Office of Management and Budget, June 2013 Financial Plan and the City of New York, Office of the Comptroller.

NOTE: Adjusted for prepayments and includes interest on short-term notes but not debt service for capital lease / conduit debt.

During FY 2013, the City issued \$4.55 billion of GO debt, of which \$2.92 billion was used for refunding transactions with present-value savings of \$375 million. The remaining \$1.63 billion represented new debt for capital purposes. The refundings produced savings of \$25.9 million in FY 2013, \$249.7 million in FY 2014, and \$100.3 million in FY 2015. At the end of FY 2013, outstanding GO debt totaled \$41.59 billion. Approximately \$21.86 billion of the total GO debt currently outstanding (52.5 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 <sup>a</sup>	TSASC	Total	Percent of Total
2014-2023	\$21,855	\$11,542	\$257	\$33,654	46.7%
2024-2033	\$15,318	\$11,321	\$616	\$27,255	37.8%
2034 and After	\$ 4,419	\$6,339	\$372	\$11,130	15.5%
<b>Total</b>	<b>\$41,592</b>	<b>\$29,202</b>	<b>\$1,245</b>	<b>\$72,039</b>	<b>100.0%</b>

<sup>a</sup> Includes \$986 million of Recovery Bonds and \$6.15 billion of NYCTFA BARBs.

In FY 2013, NYCTFA issued \$4.68 billion of debt of which \$2.93 billion was new debt. Of the new debt issued, \$350 million was issued as Qualified School Construction Bonds (QSCBs). The remaining \$1.75 billion of debt issuance was for refunding transactions that produced budgetary savings of \$21.1 million in FY 2013, and \$213.6 million in FY 2014. In all, NYCTFA's debt outstanding was \$29.2 billion at the end of FY 2013. Of the total NYCTFA debt outstanding, \$11.54 billion, or 39.5 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, 46.7 percent is scheduled to come due over the next ten years.

<sup>12</sup> Debt service excludes lease-purchase debt, interest on short-term notes, and debt service on STAR debt as of the FY 2014 Adopted Budget and June 2013 Financial Plan.

## 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 of five years or more 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, 2013, the City's outstanding GO debt was \$41.592 billion, an increase of \$23.78 billion, or 134 percent, from year-end FY 1992 as seen in Table 7. Excluding GO debt issued for water and sewer purposes, the debt outstanding was \$41.20 billion at the end of FY 2013, \$24.90 billion or 153 percent greater than the \$16.31 billion debt outstanding at the end of FY 1992.<sup>13</sup> Funding for education capital projects rose from 13.4 percent of GO debt outstanding in FY 1992 to 33.4 percent on June 30, 2013, an increase of \$11.5 billion, or 483 percent over this period.<sup>14</sup>

Outstanding debt for housing and economic development has increased by \$751 million since FY 1992. However, housing and economic development's share of GO debt outstanding has declined from 14 percent in FY 1992 to 7.8 percent in FY 2013, as capital funding for other categories has 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 from \$1.5 billion or 8.4 percent of debt outstanding in FY 1992, to \$387 million, or 0.9 percent of debt outstanding as of June 30, 2013. 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.

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<sup>13</sup> Water and Sewer projects were financed by GO bonds prior to July 1, 1985.

<sup>14</sup> 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 2013 and FY 1992**

(\$ in millions)

<b>Categories</b>	<b>Debt Outstanding as of June 30, 2013</b>	<b>Percent of Total</b>	<b>Debt Outstanding as of June 30, 1992</b>	<b>Percent of Total</b>
Education (DOE & CUNY)	\$13,878	33.4%	\$2,382	13.4%
Bridges, Tunnels, Highways and Streets	4,773	11.5	1,658	9.3
Parks, Recreational and Cultural	4,089	9.8	996	5.6
Public Safety, Correction and Courts	3,770	9.1	1,729	9.7
Housing and Urban Development	3,254	7.8	2,502	14.0
Public Buildings & Equipment	2,929	7.0	429	2.4
Undistributed and Other	2,066	5.0	1,694	9.5
Mass Transit	2,078	5.0	2,365	13.3
Sanitation	1,928	4.6	1,141	6.4
Health Services	1,439	3.5	863	4.8
Off-Street Parking, Airports, Ferries and Markets	544	1.3	167	1.5
Social Services	457	1.1	283	1.6
Water Pollution Control, Water Mains and Sewers <sup>a</sup>	387	0.9	1,502	8.4
<b>Total<sup>b</sup></b>	<b>\$41,592</b>	<b>100.0%</b>	<b>\$17,811</b>	<b>100.0%</b>

<sup>a</sup> Represents debt issued for water and sewer purposes prior to July 1, 1985.

<sup>b</sup> Over the past ten years the NYCTFA PIT and TSASC debts have supplanted some of GO borrowing with over \$26.5 billion of these bonds issued over the period. Details for NYCTFA and TSASC debt use are not available from OMB for the period ending June 30, 2013.

SOURCE: *Comprehensive Annual Financial Report of the Comptroller for the Fiscal Year Ended June 30, 2013*, and the NYC Office of Management and Budget, *Adopted Budget Debt Service Statement II, FY 2014 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 a contract to construct, rehabilitate, or purchase a capital asset is registered. 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 2014 Adopted Capital Plan (the Plan), after the reserve for unattained commitments, total approximately \$27 billion for FYs 2014-2017. Capital Commitments on education projects make up the largest share of the city-funded portion of the Plan. Over the four-years, planned commitments for education projects total \$4.83 billion or 16.7 percent of the total Four-Year Capital Plan. Other GO and NYCTFA supported programs include \$3.07 billion for bridges, tunnels, streets, and highways, \$2.43 billion for housing and urban renewal, \$3.12 billion for capital projects related to public buildings and computer equipment, and \$2.78 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 \$7.42 billion of planned City-funded commitments. These projects represent 25.6 percent of estimated total City capital commitments between FYs 2014 – 2017.

Total City-funded commitments, including DEP and less the reserve for unattained commitments, average approximately \$6.74 billion per year during the FYs 2014 – 2017 Plan period. This is an increase of about \$250 million over the FYs 2013 – 2016 annual average of \$6.49 billion from this time last year.

**Table 8. FY 2014 Adopted Capital Commitment Plan by Category, City-Funds, FYs 2014 – 2017**

(\$ in millions)

<b>Categories</b>	<b>Projected FYs 2014 – 2017 Commitments</b>	<b>Percent of Subtotal</b>	<b>Percent of Subtotal without Water &amp; Sewer</b>
Education (DOE & CUNY)	\$4,825	16.7%	22.4%
Public Buildings & Computer Equipment	3,115	10.8	14.5
Bridges, Tunnels, Highways and Streets	3,069	10.6	14.3
Housing and Urban Development	2,428	8.4	11.3
Parks, Recreational and Cultural	2,783	9.6	12.9
Public Safety, Correction and Courts	2,152	7.4	10.0
Sanitation	1,071	3.7	5.0
Health Services	1,077	3.7	5.0
Mass Transit	462	1.6	2.1
Social Services	422	1.5	2.0
Off-Street Parking, Airports, Ferries and Markets	113	0.4	0.5
Water Pollution Control, Water Mains and Sewers <sup>a</sup>	<u>7,420</u>	<u>25.6</u>	N/A
Subtotal before Reserve for Unattained Commitments	<b><u>\$28,938</u></b>	<b><u>100.0%</u></b>	<b><u>100.0%</u></b>
Reserve for Unattained Commitments	<u>(\$1,970)</u>	<u>(N/A)</u>	<u>(N/A)</u>
<b>Total <sup>b</sup></b>	<b><u>\$26,968</u></b>	<b><u>100.0%</u></b>	<b><u>100.0%</u></b>

<sup>a</sup> Will be funded with nearly 100 percent of NYW bonds.

<sup>b</sup> This represents City-funded capital commitments as of the *FY 2014 Adopted Capital Commitment Plan* issued in October 2013 and includes a \$1.97 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 15<sup>th</sup>, 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 5<sup>th</sup>, 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 1<sup>st</sup>, the start of each fiscal year.

Table 9 illustrates the calculation of the FY 2014 debt limit. The full market value for each of FYs 2010 through 2014 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 2014 debt limit (\$79.1 billion) is derived by multiplying the five-year average value (\$791.003 billion) by 10 percent.

**Table 9. Calculation of Full Value of Real Property in New York City and the General Debt Limit, FY 2014**

<b>Fiscal Year</b>	<b>Billable Assessed Value of Taxable Real Estate</b>	<b>Special Equalization Ratio</b>	<b>Full Value</b>
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	0.2048	\$767,192,402,280
2013	\$164,036,985,806	0.2014	\$814,483,544,220
2014	\$173,429,032,559	0.1924	\$901,398,298,124
5 - Year Average Value			\$791,003,165,544
10 Percent of the 5-Year Average			\$79,100,316,554

SOURCE: New York City Council Tax Fixing Resolution for FY 2014.

Table 10 summarizes the estimated growth in the City’s debt-incurring power. The City’s FY 2014 general debt-incurring power of \$79.10 billion is projected to increase to \$81.66 billion in FY 2015, \$85.26 billion in FY 2016, and \$89.33 billion by FY 2017.<sup>15</sup> The City’s indebtedness counted against the statutory debt limit is projected to grow from \$54.27 billion at the beginning of FY 2014 to \$65.41 billion by the beginning of FY 2017. NYCTFA and TSASC together have provided resources totaling over \$26.5 billion through FY 2013.<sup>16</sup> The NYCTFA is authorized 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.

<sup>15</sup> The full value of taxable real property in the outyears is based on the Comptroller’s Office forecast of future real estate trends.

<sup>16</sup> The figure used excludes the issuance of \$2 billion of NYCTFA recovery bonds and \$6.15 billion of NYCTFA BARBs.

**Table 10. NYC Debt-Incurring Power**

(\$ in millions)

	July 1, 2013	July 1, 2014 <sup>a</sup>	July 1, 2015 <sup>a</sup>	July 1, 2016 <sup>a</sup>
<b>Gross Statutory Debt-Incurring Power</b>	<b>\$79,100</b>	<b>\$81,661</b>	<b>\$85,256</b>	<b>\$89,331</b>
Actual Bonds Outstanding as of June 30, 2013 (net) <sup>b</sup>	\$41,215	\$39,301	\$37,097	\$34,811
Plus New Capital Commitments <sup>c</sup>				
FY 2014		9,433	9,433	9,433
FY 2015			5,421	5,421
FY 2016				3,718
Less: Appropriations	(1,929)	(2,215)	(2,310)	(2,264)
Incremental NYCTFA Bonds Outstanding Above \$13.5 billion	8,315	7,774	7,645	7,620
<b>Subtotal: Net Funded Debt Against the Limit</b>	<b>\$47,601</b>	<b>\$54,293</b>	<b>\$57,286</b>	<b>\$58,739</b>
Plus: Contract and Other Liability	6,671	6,671	6,671	6,671
<b>Subtotal: Total Indebtedness Against the Limit</b>	<b>\$54,272</b>	<b>\$60,964</b>	<b>\$63,957</b>	<b>\$65,410</b>
<b>Remaining Debt-Incurring Power within General Limit</b>	<b>\$24,828</b>	<b>\$20,697</b>	<b>\$21,299</b>	<b>\$23,921</b>

<sup>a</sup> FYs 2015 through 2017 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.

<sup>b</sup> 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 \$41.22 billion is derived from the \$41.592 billion GO total minus \$377 million of the aforementioned adjustments.

<sup>c</sup> Reflects City-funds capital commitments as of the FY 2014 Adopted Capital Commitment Plan (released in October 2013) and includes cost of issuance and certain Inter-Fund Agreements. In July 2009, the State Legislature included future debt of the NYCTFA Future Tax Secured bonds under the general debt limit; thus City-funds capital commitments will be funded by the NYCTFA as well.

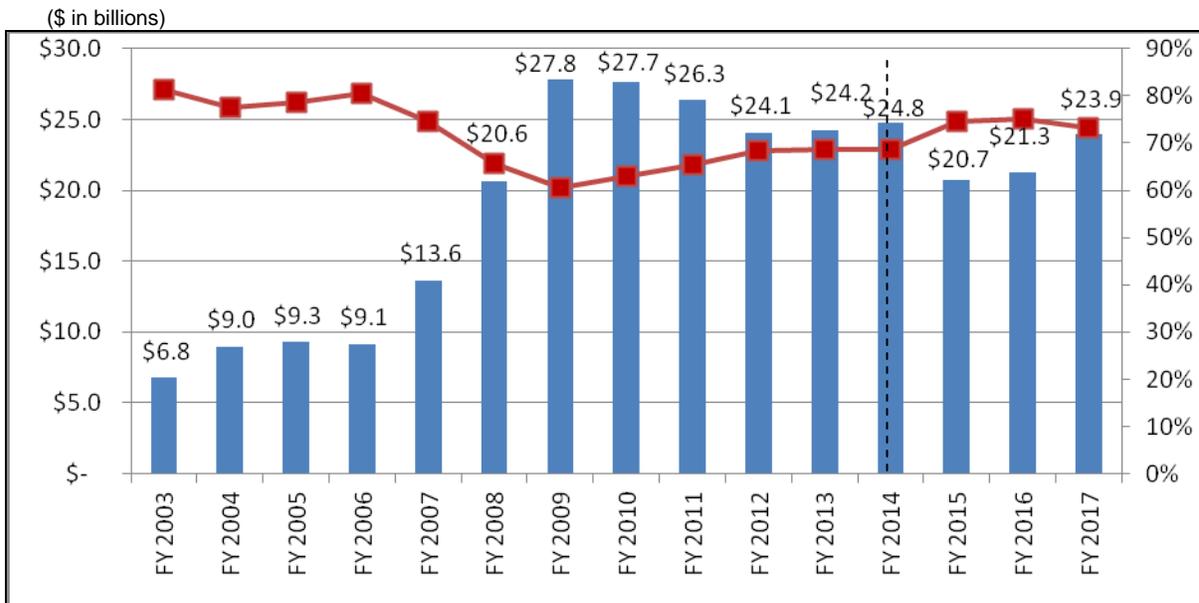
NOTE: The Debt Affordability Statement released by the City in May 2013 presents data for the last day of each fiscal year, June 30th, instead of the first day of each fiscal year, July 1, as reflected in this table. The City's Debt Affordability Statement forecasts that indebtedness would be below the general debt limit by \$15.08 billion at the end of FY 2014.

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

As represented in Chart 1, the City’s debt margin is forecast to decline from \$24.83 billion at the beginning of FY 2014 to \$20.70 billion in FY 2015, increasing to \$23.92 billion by the beginning of FY 2017. The debt limit, which is driven by the full market value of taxable properties, is projected to increase by 4.1 percent per year from FY 2014 to FY 2017, outpaced by the projected 6.4 percent annual increase of total indebtedness during the same period.

While the debt margin is forecast to decline from current levels in FYs 2015 through 2017, the FY 2014 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. The significant increase in the City’s debt margin over this period was a manifestation of the City’s rising real estate values. Between FY 2002 and FY 2010, the City’s debt limit grew at an average of 9.8 percent per year. The Comptroller’s Office does not project that the debt limit will experience similar growth rates in the near future as growth is estimated to be 4.1 percent annually over the next three years.

**Chart 1. NYC’s Remaining Debt-Incurring Power FYs 2003 – 2017, and Debt Outstanding as a Percent of Debt Limit**



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.<sup>17</sup> For several of these measures, comparisons with other jurisdictions are presented.

Recently, ratings agencies have moved towards assessing debt together with pension and other post-employment benefits liabilities. While these analyses are beyond the scope of this report, the combine metric is a growing interest to the rating community.

#### **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.

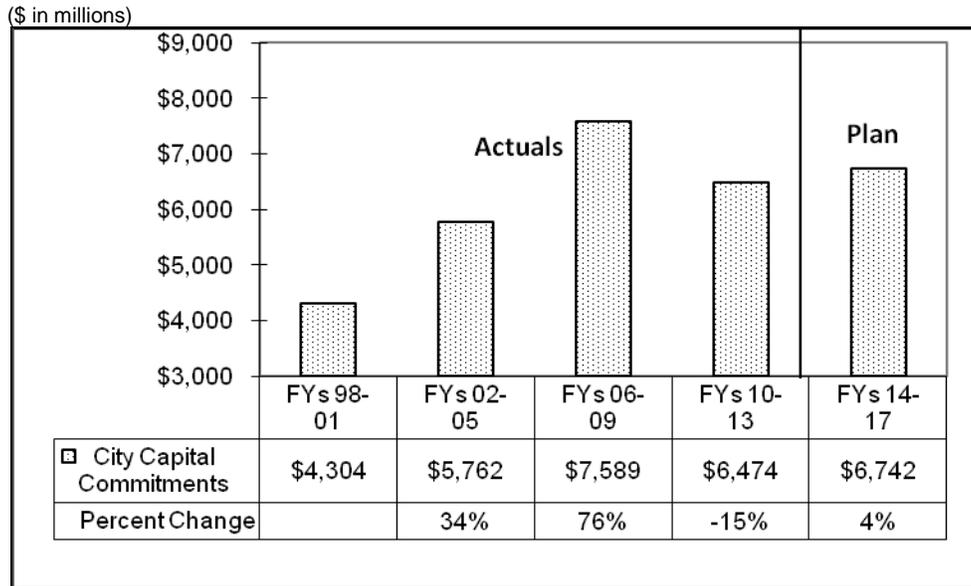
During the period spanning FY 1998 to FY 2001, the City committed an average of \$4.30 billion per year on capital projects. In the subsequent four years, this number increased to \$5.76 billion per year and increased again to \$7.59 billion per year during FYs 2006 through 2009. The average annual capital commitment declined to \$6.47 billion in the period between FY 2010 and FY 2013. In FYs 2014 – 2017, City-funded commitments are projected to average \$6.74 billion, 4.0 percent more than the prior four-year period, as shown in Chart 2.<sup>18</sup>

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<sup>17</sup> New York City FY 2012 debt per capita is used for comparison because the available data for the other sample cities are from either fiscal year or calendar year 2012.

<sup>18</sup> Figures include commitments for the DEP that are funded primarily with NYW debt.

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



SOURCE: Message of the Mayor, various FYs 1996 – 2009, and FY 2014 Adopted Capital Commitment Plan (Published October 2013).

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 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 2012, as shown in Table 11.

**Table 11. City Capital Commitments from FY 2001 to FY 2017**

(\$ in millions)

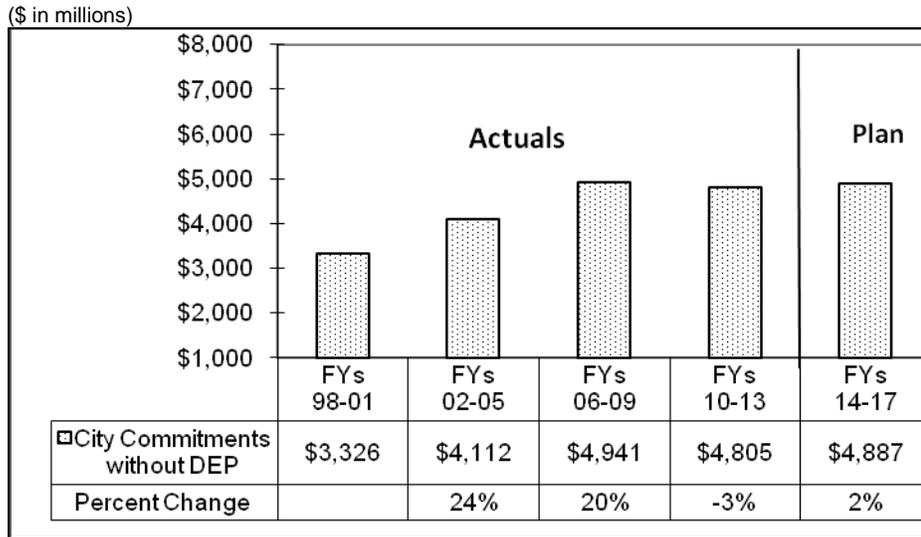
<b>Fiscal Year</b>	<b>City Capital Commitments</b>	<b>Year-over-Year Percent Change</b>
2001*	\$6,094	N/A
2002*	\$5,832	(4.3%)
2003*	\$5,389	(7.6%)
2004*	\$4,539	(15.8%)
2005*	\$7,288	60.6%
2006*	\$5,911	(18.9%)
2007*	\$8,171	38.2%
2008*	\$9,008	10.2%
2009*	\$7,264	(19.4%)
2010*	\$9,014	24.1%
2011*	\$5,369	(40.4%)
2012*	\$5,458	1.66%
2013**	\$6,056	11.0%
2014**	\$11,300	86.6%
2015**	\$7,760	(31.3%)
2016**	\$4,249	(45.2%)
2017**	\$3,659	(13.9%)

\* FYs 2001 – 2012 are actuals.

\*\* FYs 2013 – 2017 are estimates.

Chart 3 summarizes historical actual capital commitments exclusive of capital commitments made for DEP projects. Non-DEP City-funded capital commitments averaged \$3.33 billion in FYs 1998 — 2001, \$4.11 billion in FYs 2002 — 2005, \$4.94 billion in FYs 2006 — 2009, and \$4.81 billion in FYs 2010 — 2013. City-funded capital commitments exclusive of DEP commitments are projected to average \$4.89 billion per year between FYs 2014 — 2017, a 2.0 percent increase from the actual average of the four prior fiscal years.

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



SOURCE: Message of the Mayor, various FYs 1996 – 2009, and FY 2014 Adopted Capital Commitment Plan (Published October 2013).

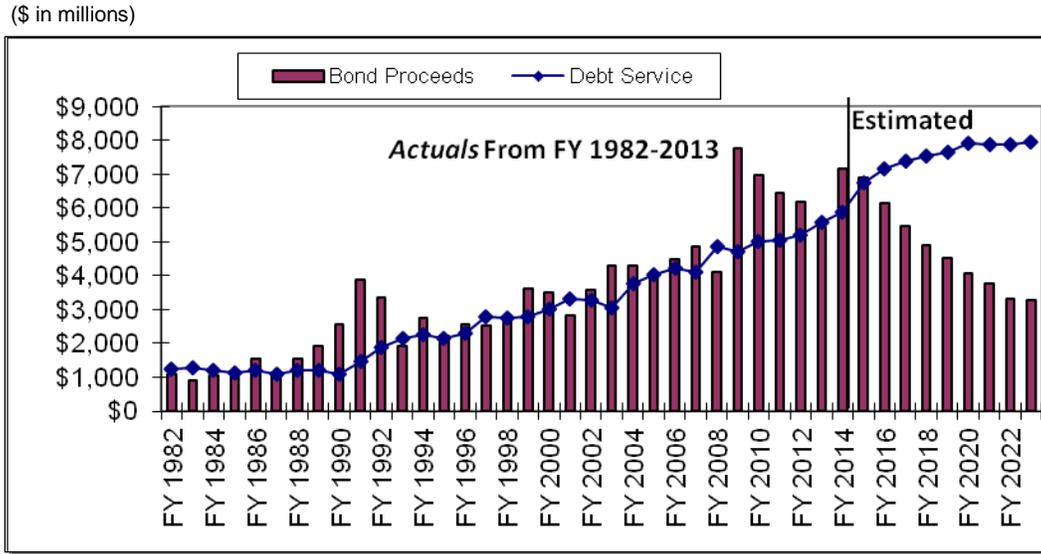
The City’s capital program relies almost exclusively on the issuance of bonds. The City’s annual borrowing excluding NYW debt grew from \$1.08 billion in FY 1982 to \$5.4 billion in FY 2013. The FY 2013 borrowing was the fifth highest annual borrowing in the City’s history, with the highest annual borrowing of \$7.75 billion occurring in FY 2009. These record borrowing levels reflect the aggressive Capital Commitment Plan in FYs 2008 through 2011 when City-funded commitments, excluding DEP, averaged \$5.46 billion per year. OMB expects the City’s borrowing to average \$6.41 billion annually between FYs 2014 through 2017, with the peak borrowing of \$7.15 billion in FY 2014.<sup>19</sup>

The annual average growth rate of City debt-service payments between FY 1982 and FY 2013 was 5.0 percent per year, growing from \$1.22 billion in FY 1982 to \$5.59 billion in FY 2013. According to the Office of Management and Budget, the City’s debt service is expected to grow at an average of 3.6 percent per year over the next ten years, to \$7.95 billion by FY 2023, as illustrated in Chart 4. Projected growth during the first four-years of the Financial Plan period is 7.9 percent, almost twice the projected average growth over the entire FYs 2013 – 2023 period. This implies an average annual growth of 1.1 percent per year in FYs 2018 – 2023, well below the 30-year average growth rate of 5.0 percent. This outyear growth assumption appears low and it is more than likely that debt service will be higher than projected over this period.<sup>20</sup>

<sup>19</sup> This includes estimated bond proceeds for GO, NYCTFA PIT, and NYCTFA BARB bonds. Without BARBs, estimated borrowing would be \$5.31 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.

<sup>20</sup> Debt service figures exclude TSASC, interest on short-term notes, and lease-purchase debt service as well as the State-supported BARBs debt service.

**Chart 4. Bond Proceeds and Debt Service, FYs 1982 – 2023**



SOURCE: City of New York, Office of the Comptroller, *Comprehensive Annual Financial Reports, 1982-2013* and Office of Management and Budget, *FY 2014 Adopted Financial Plan, June 2013*. 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, which was \$2,951 in FY 1990, has grown to \$9,522 in FY 2013, an increase of 223 percent.<sup>21</sup> The cumulative growth in debt per capita over this period was 2.6 times the City’s rate of inflation.<sup>22</sup> The debt per capita figure does not include the debt of the NYW and the MTA, both of which rely upon user fees paid by residents in the City and the metropolitan area. If this debt were included in the calculation, the FY 2013 debt per capita figure would increase to slightly more than \$17,000.<sup>23</sup>

### ***Historical Debt Outstanding as a Percent of Personal Income, FYs 1970 – 2013***

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

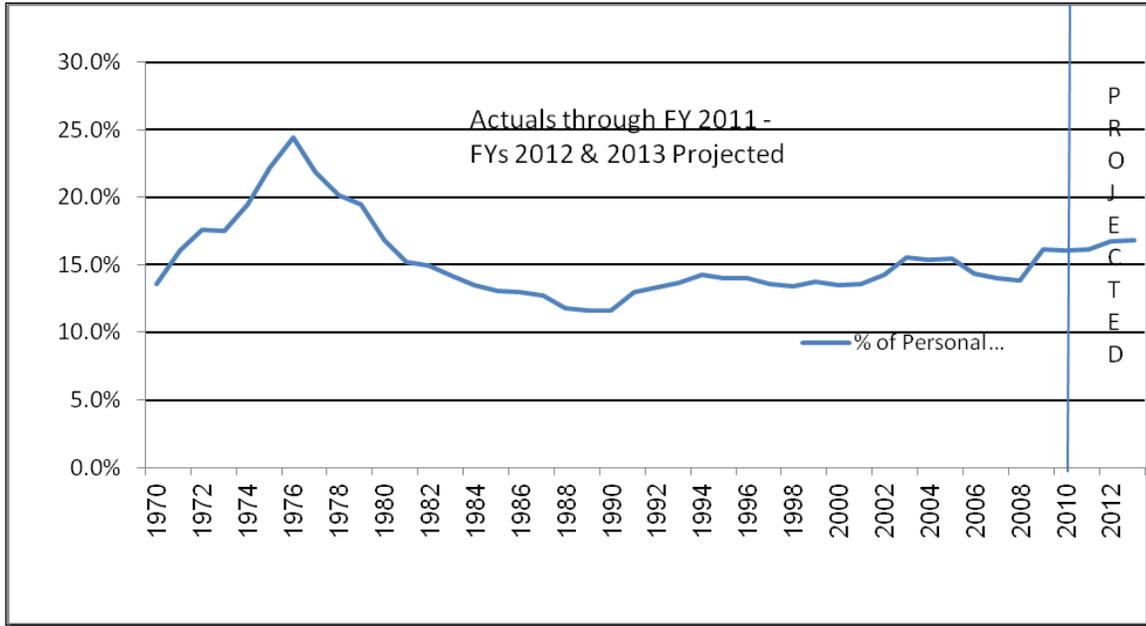
<sup>21</sup> Debt per capita is calculated by dividing Gross NYC Debt by total population as reported by the U.S. Department of Commerce, Bureau of Economic Analysis.

<sup>22</sup> FY 2013 debt per capita of \$9,522 is used for section B’s analysis; however, FY 2012’s debt per capita figure of \$9,378 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.

<sup>23</sup> Uses NYC’s population.

external controls in the aftermath of the fiscal crisis, the City rapidly brought down 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 1989.

**Chart 5. NYC Gross Debt as a Percent of Personal Income, FYs 1970 – 2013**



SOURCES: *Comprehensive Annual Financial Reports of the Comptroller for the Fiscal Year ended June 30, 1990, 1999, and 2012* and the U.S. Bureau of Economic Analysis, personal income for counties and NYC OMB, Message of the Mayor, May 2013.

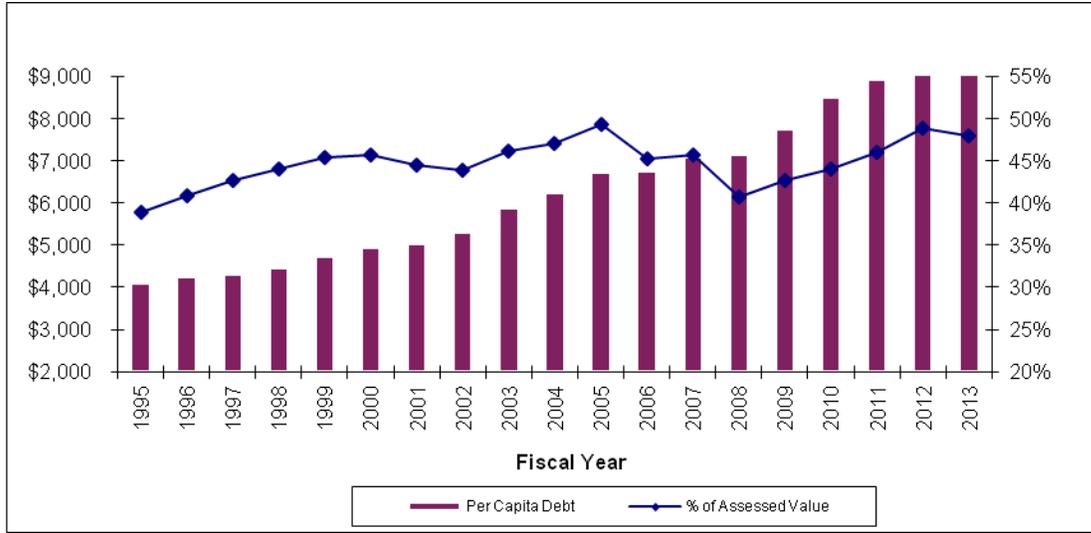
Chart 5 illustrates the historical trend of gross debt outstanding as a percentage of personal income from FYs 1970 to 2013. After reaching a peak of 24.4 percent in FY 1976, gross debt as a percent of NYC personal income trended downward, reaching a low of 11.6 percent in FY 1990. Through the 1990s, the ratio averaged 13.5 percent before spiking to 15.5 percent in FY 2003 in the aftermath of the September 11<sup>th</sup> attacks. Between FYs 2007 and 2011, the ratio averaged 15.2 percent. In FYs 2012 and 2013, however, this ratio is forecast to increase to 16.7 percent and 16.8 percent, respectively. Gross NYC Debt outstanding increased 2.7 percent from FY 2012 to FY 2013 outpacing the projected increase in personal income of 2.0 percent during the same time period.<sup>24</sup>

**NYC Debt as a Portion of Assessed Real Property**

With the exception of FY 2013, gross NYC debt as a proportion of the assessed value of taxable real property has been increasing since FY 2008. The decline in the ratio in FY 2013 is primarily due to the increase in outstanding debt of 2.7 percent compared to an assessed value increase of 4.7 percent over the same period. The City’s debt as a percentage of the assessed value of taxable real property remains high relative to FY 1995’s level of 39 percent.

<sup>24</sup> New York City’s OMB, Message of the Mayor, May 2013, p.18 was used for NYC personal income growth rate from FY 2012 to FY 2013. Actual personal income data is available through FY 2011.

**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 – 2013.

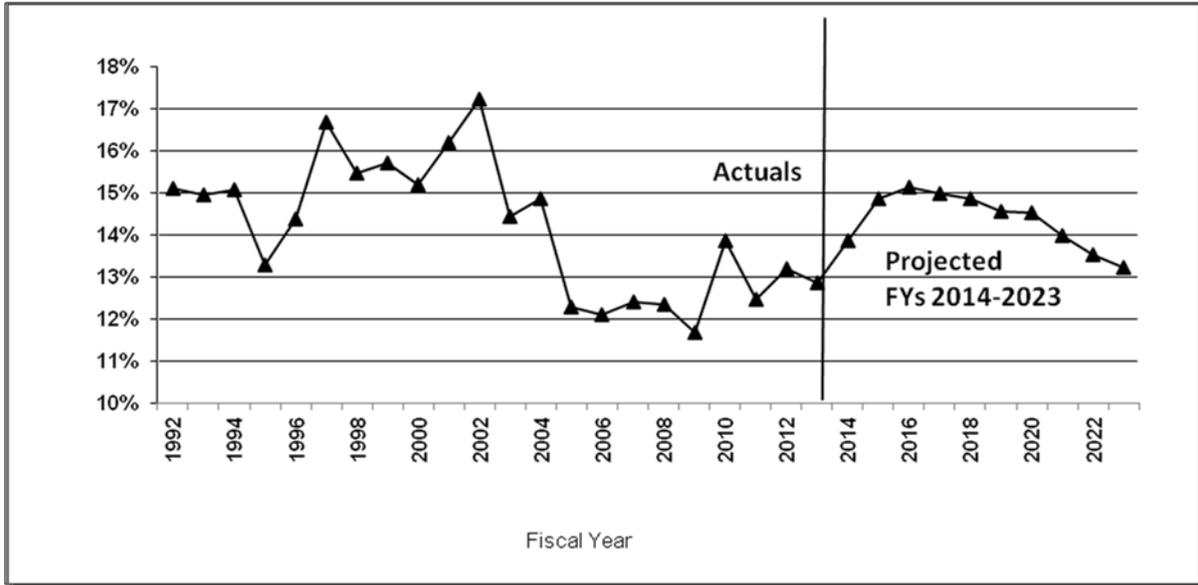
**NYC Debt Service as a Percent of Tax Revenues and City-Funds Expenditures**

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 2003.<sup>25</sup> By FY 2007, this ratio fell to a low of 11.6 percent before rising to approximately 12.8 percent in FY 2013, as shown in Chart 7. Debt service as a percentage of tax revenues is projected to reach a high of 15.1 percent in FY 2016 before declining to below 13.5 percent by FY 2023.<sup>26</sup> As discussed earlier, these outyear ratios are reflective of the projected capital borrowing and debt service in FYs 2018 – 2023, both of which are likely understated.

<sup>25</sup> 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 comparable to the early 1980’s and early and mid 1990’s when the City was emerging from recessionary periods.

<sup>26</sup> From the *City of New York, Office of the Comptroller, Comprehensive Annual Financial Reports, 1982-2013*, and *NYC Office of Management and Budget, Adopted Financial Plan, June 2013* and adjusted for prepayments and includes TSASC.

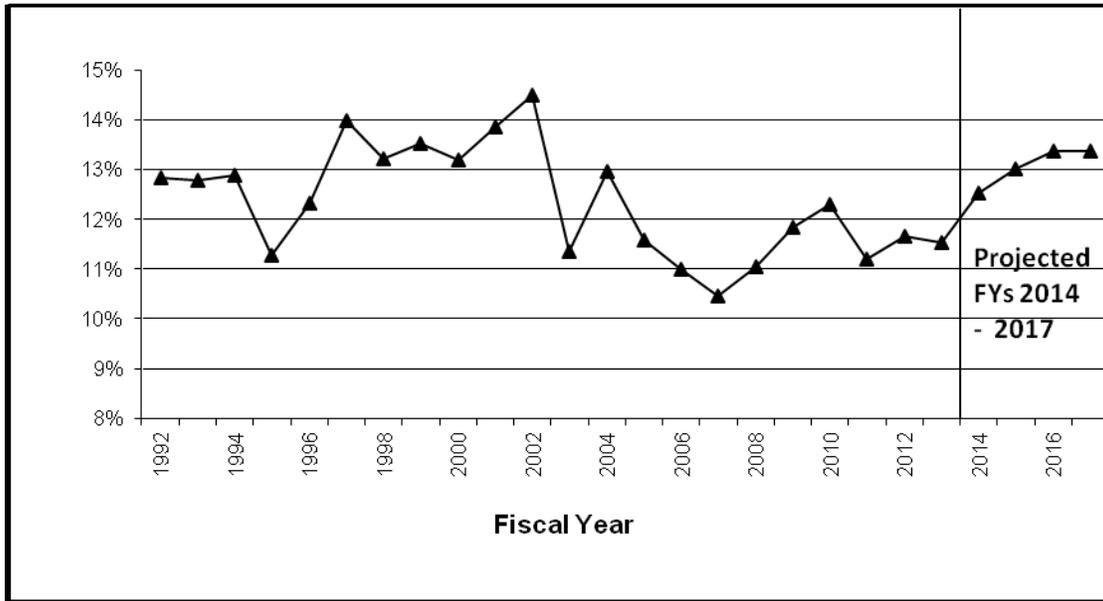
**Chart 7. NYC Debt Service as a Percent of Tax Revenues**



SOURCE: City of New York, Office of the Comptroller, Comprehensive Annual Financial Reports, FYs 1982 – 2013, and NYC Office of Management and Budget, FY 2014 Adopted Financial Plan, June 2013.

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 2013 was 11.6 percent and is projected to rise to 13.4 percent by FY 2017, 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 – 2013, and NYC Office of Management and Budget, FY 2014 Adopted Financial Plan, June 2013. 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.

As shown in Table 12, in FY 2012, NYC’s debt per capita was twice the average of a sample of eleven other large U.S. cities, and 1.48 times the per capita debt of Chicago which had the next highest debt burden.<sup>27</sup>

<sup>27</sup> 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, 2012**

City	Population	Direct and Overlapping Debt Outstanding (\$ 000)	Debt Per Capita <sup>a</sup>
Boston	625,087	\$1,103,226	\$1,765
Seattle	616,500	1,465,243	\$2,377
San Francisco	820,466	2,676,698	\$3,262
San Jose	971,000	3,655,233	\$3,764
Dallas	1,207,420	5,082,976	\$4,210
Los Angeles	3,825,297	16,919,831	\$4,423
Houston	2,145,933	9,653,743	\$4,499
Phoenix	1,464,405	6,831,825	\$4,665
Philadelphia	1,536,471	7,210,600	\$4,693
San Antonio	1,359,730	7,493,795	\$5,511
Chicago	2,695,598	17,056,354	\$6,327
<i>Average of Sample Cities</i>	<i>1,569,810</i>	<i>\$7,195,411</i>	<i>\$4,584</i>
<b>New York City</b>	<b>8,244,910</b>	<b>\$77,318,000</b>	<b>\$9,378</b>

<sup>a</sup> 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 91 percent from 2000 to 2012. This growth is below the average growth of 132 percent for the 11 sample cities as shown in Table 13.

**Table 13. Debt Per Capita Comparisons for Selected Cities – 2000 and 2012**

City	Debt per Capita in 2000	Debt per Capita in 2012	Percentage Change 2000 – 2012
Boston	\$1,376	\$1,765	28.3%
Seattle	\$1,674	\$2,377	40.3%
Philadelphia	\$3,241	\$4,693	44.8%
Houston	\$2,187	\$4,499	105.7%
Chicago	\$2,863	\$6,327	121.0%
Phoenix	\$2,041	\$4,665	128.6%
San Antonio	\$1,929	\$5,511	185.7%
San Francisco	\$1,139	\$3,262	186.4%
Los Angeles	\$1,464	\$4,423	202.1%
Dallas	\$1,273	\$4,210	230.7%
San Jose	\$943	\$3,623	284.2%
<i>Average of All Other Cities<sup>a</sup></i>	<i>\$1,974</i>	<i>\$4,584</i>	<i>132.2%</i>
<b>National CPI</b>	<b>\$172.2</b>	<b>\$229.6</b>	<b>33.5%</b>
<b>New York City</b>	<b>\$4,923</b>	<b>\$9,378</b>	<b>90.5%</b>

SOURCE: 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.

<sup>a</sup> 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. A survey of the largest cities and counties in New York State, found that the an average

debt per capita well below half of New York City's debt per capita in FY 2012, as shown in Table 14.<sup>28</sup> Of the municipalities surveyed, Nassau County's debt per capita of \$5,498 is the closest to New York City's.

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

City or County	Debt per Capita	Date of Observation
Buffalo	\$1,640	6/30/12
Rochester	2,075	6/30/12
Syracuse	2,044	8/2/13
Albany	2,169	6/10/13
Monroe County	2,587	12/31/12
Onondaga County	3,310	12/31/12
White Plains	4,015	6/30/12
Westchester County	4,591	6/30/12
Nassau County	5,498	12/31/12
Average of Above NY Cities and Counties <sup>a</sup>	<b>\$3,936</b>	<b>N/A</b>
New York City	\$9,522	6/30/13
New York City	\$9,378	6/30/12

SOURCE: Comprehensive Annual Financial Reports of various cities and counties.

<sup>a</sup> 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 this 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.

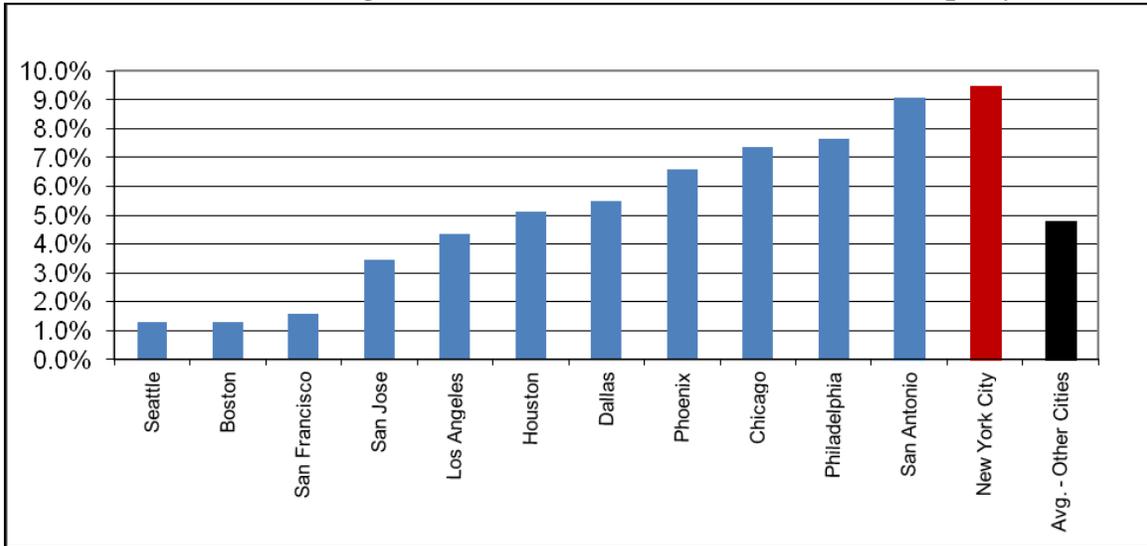
The rationale behind using personal income is that it is another relative measure of a locality's wealth. The wealthier a community, the greater its capacity to pay taxes, and to sustain local government debt and operations. Standard & Poor's considers both a debt to real property value ratio and a debt to income ratio of more than 6.0 percent to be high.<sup>29</sup>

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 2012 was 9.5 percent, nearly twice the sample city average of 4.8 percent. San Antonio at 9.1 percent and Philadelphia at 7.7 percent are the next highest cities in the survey.

<sup>28</sup> 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.

<sup>29</sup> Standard & Poor's Public Finance Criteria, 2000, p. 29.

**Chart 9. Debt Outstanding as a Percent of the Full Value of Real Property, FY 2012**

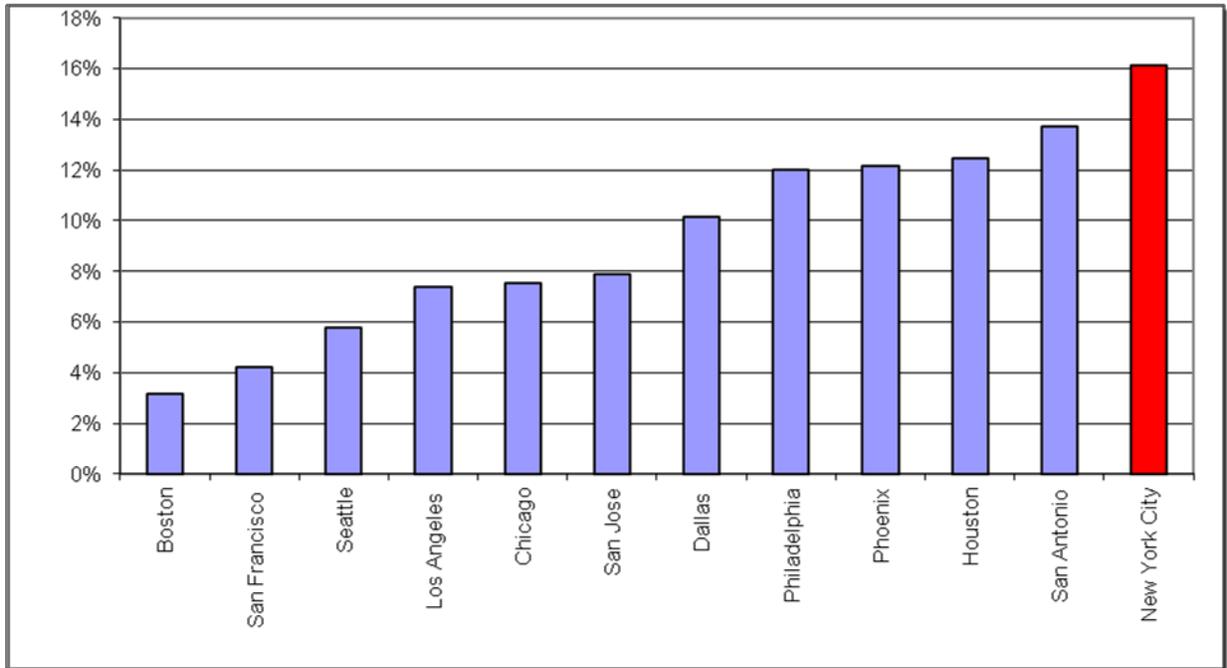


SOURCE: Each city's Comprehensive Annual Financial Report for FY 2012.

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 2011 was 16.1 percent, the highest among the sample cities as summarized in Chart 10. Gross NYC debt as a percentage of personal income is close to twice the 8.2 percent average of the 11 sample cities. Cities in the survey with comparable ratios to New York City include San Antonio at 13.7 percent, Houston at 12.5 percent, Phoenix at 12.1 percent, and Philadelphia with 12 percent.

**Chart 10. Debt Outstanding as a Percent of Personal Income, FY 2011**



SOURCE: FY 2011 Comprehensive Annual Financial Reports of Sample Counties and the U.S. Department of Commerce – Bureau of Economic Analysis (BEA).

<sup>1</sup> 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.

<sup>2</sup> The 2011 Personal Income is the most recent personal income data available from the BEA.

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# **Glossary of Acronyms**

<b>BAB</b>	Build America Bonds
<b>BARB</b>	Building Aid Revenue Bond
<b>BEA</b>	Bureau of Economic Analysis
<b>CAFR</b>	Comprehensive Annual Financial Report
<b>CPI</b>	Consumer Price Index
<b>CUCF</b>	City University Construction Fund
<b>CUNY</b>	City University of New York
<b>DASNY</b>	Dormitory Authority of the State of New York
<b>DEP</b>	Department of Environmental Protection
<b>DOE</b>	Department of Education
<b>EXCEL</b>	Expanding Our Children’s Education and Learning
<b>FTS</b>	Future Tax Secured
<b>FY</b>	Fiscal Year
<b>GO Debt</b>	General Obligation Debt
<b>HHC</b>	Health and Hospitals Corporation
<b>HYIC</b>	Hudson Yards Infrastructure Corporation

<b>LGAC</b>	Local Government Assistance Corporation
<b>MAC</b>	Municipal Assistance Corporation
<b>MTA</b>	Metropolitan Transportation Authority
<b>NY</b>	New York
<b>NYC</b>	New York City
<b>NYCTFA</b>	New York City Transitional Finance Authority
<b>NYW</b>	New York City Municipal Water Finance Authority
<b>OMB</b>	Office of Management and Budget
<b>ORPTS</b>	Office of Real Property Tax Services
<b>PIT</b>	Personal Income Tax
<b>QSCB</b>	Qualified School Construction Bonds
<b>S&amp;P</b>	Standard & Poor's
<b>STAR</b>	Sales Tax Asset Receivable Corporation
<b>TSASC</b>	Tobacco Settlement Asset Securitization Corporation
<b>TSR</b>	Tobacco Settlement Revenues
<b>TYCS</b>	Ten-Year Capital Strategy
<b>U.S.</b>	United States

**WTC**      World Trade Center