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BUREAU OF FISCAL AND BUDGET STUDIES

Fiscal Year 2012 Annual Report on Capital Debt And Obligations

December 1, 2011

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Executive Summary

New York City's (the "City") debt has grown from \$2,951 per capita in FY 1990 to \$8,763 by FY 2011, an increase of 197 percent. Over the same period, the cumulative growth rate in debt per capita exceeded the rate of inflation by 118 percentage points. 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 8.4 million City residents, but also 800,000 daily commuters and 49 million tourists annually.

Despite its magnitude, the amount of City debt is well within the debt limit provided by State law. Forty-six (46.4) percent of the outstanding debt of the three primary issuers — General Obligation (GO), New York City Transitional Finance Authority (NYCTFA), Tobacco Settlement Asset Securitization Corporation (TSASC) — are scheduled to come due over the next ten years. (In an attempt to curtail capital expenditures, the Ten-Year Capital Strategy (TYCS) released in May 2011 was \$6.9 billion less than the prior strategy.)

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.

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 2012 general debt-incurring power of \$76.097 billion is projected to increase to \$77.768 billion in FY 2013, to \$79.508 billion in FY 2014, and \$81.210 billion by FY 2015.

At the beginning of FY 2012, the City's Outstanding General Obligation (GO) debt was \$41.25 billion. Including contract and other liability and adjusting for appropriations, the City's indebtedness that is counted toward the debt limit totals \$52.03 billion as shown in the Debt-Incurring Power Table on page vii. The City's total indebtedness is expected to grow to \$62.47 billion by the beginning of FY 2015.

The City was below its general debt limit by \$24.06 billion on July 1, 2011 and is projected to have remaining debt-incurring capacity of \$19.06 billion on July 1, 2012, \$18.28 billion on July 1, 2013, and \$18.74 billion on July 1, 2014. The decline in debt-incurring capacity is the result of the combined influence of a sizable capital plan and softening property values. While the debt-capacity is declining over the next three years, it is still higher than any other fiscal year prior to FY 2008.

In addition to the obligations counted toward the 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 development are insufficient to pay debt service (but not its related principal of \$2 billion).

The City maintains several additional credits, including bonds issued by the New York City Transitional Finance Authority (NYCTFA) and TSASC. Since its inception in 1997 through FY 2011, the NYCTFA has issued over \$21 billion of NYCTFA Personal Income Tax (PIT) bonds and \$2 billion of Recovery Bonds. In July 2009, the State Legislature granted NYCTFA the authority to issue additional debt for general capital purposes. This additional borrowing above the initial \$13.5 billion limit is secured by personal income tax revenues and counted under the City's general debt limit. In addition to this capacity, the NYCTFA is authorized to issue up to \$9.4 billion of Building Aid Revenue Bonds (BARBs) for education purposes. Approximately \$4.73 billion of these bonds have been issued to date. Debt service for these bonds is supported by State building aid revenues. Between FYs 2000 and 2006, TSASC contributed a total of \$1.3 billion to the City's capital program but 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 2010, 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 among 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 2010 was 8.7 percent. This was approximately double the sample city average of 4.3 percent. Only Philadelphia, at 14.9 percent, exceeded New York City's ratio, while cities like Chicago at 5.0 percent and Los Angeles at 4.3 percent have much less debt as a percentage of full market value.

New York City's debt as a percentage of personal income in FY 2009 was 15.9 percent, 1.97 times higher than the average of the other sample cities in the survey.¹ San Antonio and Philadelphia were the next highest, at 13.5 and 13.4 percent, respectively, with Boston the lowest at 3.0 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 bonds are rated AAA by all three rating agencies, while NYW bonds are rated AAA by Standard & Poor's, Aa1 by Moody's Investors Service, and AA+ by Fitch Ratings.

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 2009. Both the respective cities and counties of San Francisco and Philadelphia are coterminous geographic entities.

NYC Debt-Incurring Power

(\$ in millions)

	July 1, 2011	July 1, 2012 ^a	July 1, 2013 ^a	July 1, 2014 ^a
Gross Statutory Debt-Incurring Power	\$76,097	\$77,768	\$79,508	\$81,210
Actual Bonds Outstanding as of June 30,2011 (net) ^b	\$41,254	\$41,338	\$39,379	\$37,175
Plus New Capital Commitments ^c				
FY 2012		7,097	7,097	7,097
FY 2013			5,390	5,390
FY 2014				4,144
Less: Appropriations	(1,955)	(1,964)	(2,182)	(2,155)
Incremental NYCTFA Bonds Outstanding Above \$13.5 billion	4,124	3,627	2,933	2,208
Subtotal: Net Funded Debt Against the Limit	\$43,423	\$50,098	\$52,617	\$53,859
Plus: Contract and Other Liability	8,610	8,610	8,610	8,610
Subtotal: Total Indebtedness Against the Limit	\$52,033	\$58,708	\$61,227	\$62,469
Remaining Debt-Incurring Power within General Limit	\$24,064	\$19,060	\$18,281	\$18,741

^a FYs 2013 through 2015 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. \$41.785 billion from Table 1 minus \$531 million of the aforementioned adjustments equals \$41.254 billion.

^c Reflects City-funds capital commitments as of the FY 2012 September Capital Commitment Plan (released in September 2011) 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, 2011 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 \$21.05 billion at the end of FY 2011.

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. 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 2011. The FY 2012 Adopted Budget and Financial Plan projects that over the next four years, Gross NYC Debt will increase by approximately 3.0 percent annually.²

A. COMPOSITION OF DEBT

Debt used by the City to finance its capital program is divided into six categories with General Obligation (GO) bonds accounting for 56.9 percent of the total, as shown in Table 1 on page 2. Bonds in five of the categories are paid by general fund revenues, while the sixth, NYW, is paid 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, 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. Tax-exempt debt accounted for 81.9 percent of the total value of the City's outstanding debt at the end of FY 2011.³ In addition, the City was allowed to issue Build America Bonds (BABs) in calendar years 2009 and 2010 which are taxable in nature but financed the same public purposes as tax exempt debt.

NYC debt consists of both fixed and variable rate debt with the bulk of the debt in fixed rate borrowing. In FY 2011, fixed rate debt accounted for 85 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 18.1 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, 2011

(\$ in millions)

	GO Bonds	NYCTFA	TSASC	STAR Corporation	Capital Lease Obligations & Other ^a	Gross Debt Outstanding
Tax-Exempt						
Fixed Rate	\$27,341	\$15,492 ^c	\$1,260	\$1,869	\$3,725	\$49,687
Variable Rate ^b	<u>6,713</u>	<u>3,566^c</u>	<u>0</u>	<u>0</u>	<u>156</u>	<u>10,435</u>
Subtotal	\$34,054	\$19,058	\$1,260	\$1,869	\$3,881	\$60,122
Taxable						
Fixed Rate	\$7,483	\$4,590	\$0	\$247	\$550	\$12,870
Variable Rate ^b	<u>248</u>	<u>172</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>420</u>
Subtotal	\$7,731	\$4,762	\$0	\$247	\$550	\$13,290
Total	\$41,785	\$23,820	\$1,260	\$2,116	\$4,431	\$73,412
Percent of Total	56.9%	32.5%	1.7%	2.9%	6.0%	100.0%

^a This figure includes capital leases of \$550 million, City University Construction Fund (CUCF) debt of \$156 million, and \$2 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 \$4.73 billion for NYCTFA Building Aid Revenue Bonds (BARBs). The variable rate figure contains \$1.39 billion of Recovery Bonds. The NYCTFA taxable fixed rate figure includes \$3.34 billion of Build America Bonds (BABs) and \$497 million of Qualified School Construction Bonds (QSCB).

SOURCE: Comprehensive Annual Financial Report of the Comptroller for the Fiscal Year Ended June 30, 2011, p.322.

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, 2011, GO debt totaled \$41.79 billion and accounted for 56.9 percent of total 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 taxes are released to the City’s general fund. The FY 2011 GO debt total is \$230 million greater than at the same time the prior year. During FY 2011, the City issued \$2.18 billion of GO bonds for capital projects.

New York City Transitional Finance Authority (NYCTFA) debt is backed by both the City’s personal income tax (PIT) revenues and New York State building aid revenue. After the close of FY 2011 NYCTFA debt totaled \$23.82 billion, comprised of \$19.09 billion of PIT supported debt and \$4.73 billion of Building Aid Revenue Bonds, or BARBs. This total is 18.5 percent greater than at the close of FY 2010. As a result, the NYCTFA’s share of Gross NYC debt outstanding increased from 29 percent in FY 2010 to 32.5 percent in FY 2011. The significant increase is due to the issuance of over \$3.6 billion of NYCTFA PIT bonds in FY 2011.

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 limit in FY 2007. In July 2009,

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

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 to calculate the City's indebtedness within the debt limit.

Building Aid Revenue Bonds (BARBs) In April 2006, the State Legislature authorized the NYCTFA to issue up to \$9.4 billion of debt to fund a portion of the City's five-year educational facilities capital plan. This debt is supported by State education aid for building purposes and is an addition to the initial \$13.5 billion NYCTFA debt limit. In addition to this NYCTFA authorized portion, another \$1.8 billion of DASNY Expanding our Children's Education and Learning (EXCEL) bonds for education purposes, 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. After a fiscal year of no BARB issuances, the NYCTFA issued \$650 million of BARBs during FY 2011. NYCTFA BARBs are excluded in the calculation of the City's debt counted against the debt limit.

TSASC debt totaled \$1.260 billion as of June 30, 2011. This represents a decrease of \$5 million from FY 2010. 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.

STAR (Sales Tax Asset Receivable) Corporation debt totaled \$2.116 billion at the end of FY 2011. This represents a decrease of \$62 million from FY 2010. 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. It is separate and apart from the City of New York but is an instrumentality of the City. Debt service for STAR Corporation bonds is paid by the Local Government Assistance Corporation (LGAC), a State agency.

Capital Lease Obligations totaled \$4.431 billion as of June 30, 2011, an increase of \$144 million, or 3.36 percent, from FY 2010. 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 (\$575 million), the City University

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

Construction Fund (\$156 million), the Educational Construction Fund (\$281 million), the Primary Care Development Corporation (\$41 million), the Health and Hospitals Corporation (\$702 million), the Urban Development Corporation (\$28 million), the Industrial Development Agency (\$98 million), as well as general lease obligations (\$550 million).⁶

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. The first bond sale in the amount of \$2 billion took place in December 2006. The 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 \$2 billion as of June 30, 2011 as its principal is not scheduled to amortize until FY 2045.

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). Tables 2 and 3 show the debt outstanding of these two authorities.

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 \$58.87 billion combined debt of these two authorities.

New York City Water Finance Authority

As of June 30, 2011, NYW had \$26.87 billion in debt outstanding, an increase of \$2.29 billion, or 9.3 percent from FY 2010. 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 development help the goals of continued water quality. DEP's \$7.69 billion four-year capital program over the next four years will continue to place some pressure on water and sewer rates over the Financial Plan period. However, the current DEP City-funds commitment plan average of \$1.87 billion per year is 15 percent less than the agency's capital commitments between FYs 2008 – 2011 when DEP City-funds capital commitments averaged \$2.2 billion per year.

⁶ Although for reporting purposes \$702 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.

Table 2. NYW Debt Outstanding as of June 30, 2011

(\$ in millions)

Tax Exempt	
Fixed Rate	\$23,555
Variable Rate	3,316 ^a
Total	\$26,871

^a Includes \$400 million of commercial paper.

SOURCE: The 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. 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 its 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, 2011

(\$ in millions)

Tax Exempt	
Fixed Rate	\$22,161
Variable Rate	9,843
Total	\$32,004

SOURCE: The Metropolitan Transportation Authority.

As of June 30, 2011, the MTA had \$32 billion of debt outstanding. This is an increase of \$905 million, or 2.9 percent, from June 30, 2010. The 2.9 percent annual growth rate of MTA debt is less than the prior year's rate of 8.5 percent. MTA debt has grown by 125 percent, or \$17.8 billion from FY 2000, 39 percentage points higher than the growth of gross NYC indebtedness over 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 capital projects are: 1) NYC General Obligation, 2) NYCTFA, and 3) TSASC bonds. There is no additional planned debt issuance of TSASC debt. Legislation enacted in the summer of 2009 enabled the NYCTFA to issue its PIT secured debt under the general debt limit. As a result, new issuances will involve a mix of GO debt, NYCTFA PIT bonds, and NYCTFA BARBs. The average annual growth rate in debt outstanding is expected to slow to less than one percent from FY 2011 to FY 2021, compared to the average annual growth rate of 5.8 percent from FY 2000

to FY 2011.⁷ However, the estimated debt growth between FYs 2011 and 2015 is significantly above 1.0 percent, as shown in Table 4, averaging 2.8 percent per year over this period. Growth estimates beyond the Financial Plan period tend to be lower due to the inherent uncertainty of long-term capital planning. The decreases in debt outstanding shown in FYs 2019 to 2021 are unlikely to occur 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 2011 – 2021

(\$ in millions)

End of Fiscal Year	Debt Outstanding for GO, NYCTFA, & TSASC	Percent Change
2011	\$68,981	6.0%
2012	71,852	4.2%
2013	73,970	2.9%
2014	75,879	2.6%
2015	77,118	1.6%
2016	77,742	0.8%
2017	77,890	0.2%
2018	78,794	1.2%
2019	78,000	(1.0%)
2020	76,480	(1.9%)
2021	74,559	(2.5%)

SOURCE: *Comprehensive Annual Financial Report of the Comptroller for the Fiscal Year Ended June 30, 2011* and the NYC Office of Management and Budget, June 2011 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 5.⁸ Principal repayments are estimated to be \$2.443 billion in FY 2012, \$2.872 billion in FY 2013, \$3.133 billion in FY 2014, and \$3.404 billion in FY 2015. Principal is estimated to comprise 43.6 percent of debt service in FY 2012, 45 percent in FY 2013, 47.1 percent in FY 2014 and 48.5 percent in FY 2015.⁹

⁷ *Comprehensive Annual Financial Report of the Comptroller for the Fiscal Year Ended June, 30, 2011*, page 322, used as source for FY 2000 to FY 2011 rate of growth. Includes \$2 billion of HYIC bonds.

⁸ NYCTFA BARB and STAR debt service are not included in Table 5.

⁹ Debt service excludes lease-purchase debt, interest on short-term notes, and debt service on STAR debt as of the FY 2011 Adopted Budget and June 2011 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
2012	\$2,443	\$3,164	\$5,607	43.6%
2013	\$2,872	\$3,517	\$6,389	45.0%
2014	\$3,133	\$3,517	\$6,650	47.1%
2015	\$3,404	\$3,611	\$7,015	48.5%

SOURCE: NYC Office of Management and Budget, June 2011 Financial Plan and the City of New York, Office of the Comptroller.

NOTE: Adjusted for prepayments

During FY 2011, the City issued \$4.18 billion of GO debt, of which approximately \$2 billion was used for refunding transactions with present-value savings of \$125 million. The remaining \$2.18 billion represented new debt for capital purposes. The refundings produced dissavings of \$46 million in FY 2011, but will produce future year savings of \$173.5 million in FY 2012, and \$1.1 million in FY 2013. At the end of FY 2011, outstanding GO debt totaled \$41.79 billion, \$21.46 billion of this total (51.4 percent), will come due in the next ten years, as seen 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
2012-2021	\$21,458	\$9,411	\$201	\$31,070	46.4%
2022-2031	\$15,971	\$9,423	\$535	\$25,929	38.8%
2032 and After	\$ 4,356	\$4,986	\$524	\$9,866	14.8%
Total	\$41,785	\$23,820	\$1,260	\$66,865	100.0%

^a Includes \$1.466 billion of Recovery Bonds and \$4.73 billion of NYCTFA BARBs.

In FY 2011, NYCTFA issued \$4.25 billion of debt of which \$3.6 billion was new debt. Of the new debt issued, \$1.31 billion were issued as Build America Bonds (BABs) and \$147 million as Qualified School Construction Bonds (QSCBs). In all, NYCTFA's debt outstanding was \$23.82 billion at the end of FY 2011. The remaining \$650 million of debt issuance was for a refunding transaction that produced budgetary savings of \$13.8 million in FY 2011, \$17.5 million in FY 2012, and \$0.5 million in FY 2013. Of the total, \$9.41 billion, or 39.5 percent, will come due over the next ten years as reflected in Table 6. Of the outstanding debt of all three issuers, 46.4 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, 2011, the City's outstanding GO debt was \$41.79 billion, an increase of \$23.97 billion, or 135 percent, from year-end FY 1992 as seen in Table 7. Excluding GO debt issued for water and sewer purposes, the debt outstanding was \$41.36 billion at the end of FY 2011, and \$16.31 billion at the end of FY 1992, a growth of \$25.05 billion or 154 percent.¹⁰ Funding for education capital projects rose from 13.4 percent of GO debt outstanding in FY 1992 to 30.5 percent on June 30, 2011, an increase of \$10.4 billion, or 436 percent over this period.¹¹

Outstanding debt on housing and economic development has increased by \$1.2 billion since FY 1992. However, housing and economic development share of debt outstanding has declined from 14 percent in FY 1992 to 8.9 percent in FY 2011, 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 \$421 million, or 1.0 percent of the total as of June 30, 2011, 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.

¹⁰ GO bonds to fund water and sewer projects were issued prior to July 1, 1985.

¹¹ 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 2011 and FY 1992

(\$ in millions)

Categories	Debt Outstanding as of June 30, 2011	Percent of Total	Debt Outstanding as of June 30, 1992	Percent of Total
Education (DOE & CUNY)	\$12,759	30.5%	\$2,382	13.4%
Bridges, Tunnels, Highways and Streets	4,552	10.9	1,658	9.3
Housing and Urban Development	3,709	8.9	2,502	14.0
Public Safety, Correction and Courts	3,700	8.9	1,729	9.7
Undistributed and Other	3,494	8.4	1,694	9.6
Parks, Recreational and Cultural	3,439	8.2	996	5.6
Public Buildings	3,148	7.5	429	2.4
Mass Transit	2,246	5.4	2,365	13.3
Sanitation	1,772	4.2	1,141	6.4
Health Services	1,385	3.3	863	4.8
Off-Street Parking, Airports, Ferries and Markets	679	1.6	267	1.5
Social Services	481	1.2	283	1.6
Water Pollution Control, Water Mains and Sewers ^a	421	1.0	1,502	8.4
Total^b	\$41,785	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 and TSASC debts have supplanted some of GO borrowing with over \$21 billion of bonds over the period. Details for NYCTFA and TSASC debt use are not available from OMB for the period ending June 30, 2011.

SOURCE: *Comprehensive Annual Financial Report of the Comptroller for the Fiscal Year Ended June 30, 2011*, and the NYC Office of Management and Budget, Adopted Budget Debt Service Statement II, FY 2012 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 "project finance", so that bond proceeds from any given bond series can finance thousands of capital projects simultaneously.

As shown in Table 8, City-funded capital commitments in the FY 2012 September Capital Plan (the Plan) are estimated to total \$25.1 billion over FYs 2012-2015 after the reserve for unattained commitments. Education capital projects in the Plan period are projected to be \$4.9 billion or 24.8 percent of the total, excluding DEP projects. Other GO and NYCTFA supported programs include capital projects for bridges, tunnels, streets, and highways totaling \$2.3 billion, housing and urban renewal \$2.57 billion, public safety \$1.98 billion, and parks, libraries, and cultural affairs \$2.41 billion.

Projects involving water pollution control, water mains and sewers related to DEP are funded by NYW bonds, and are projected to comprise \$7.49 billion of estimated City-funded commitments. This represents 27.5 percent of estimated total City capital commitments between FYs 2012 – 2015. Total City-funded commitments, including DEP and less the reserve for

unattained commitments, will average about \$6.28 billion per year over FYs 2012 – 2015, virtually unchanged from September 2010, when the FYs 2011 – 2014 average was \$6.29 billion per year.

Table 8. FY 2012 September Capital Commitment Plan by Category, City-Funds, FYs 2012 – 2015

(\$ in millions)

Categories	Projected FYs 2012 – 2015 Commitments	Percent of Total	Percent of Total without Water & Sewer
Education (DOE & CUNY)	\$4,898	18.0%	24.8%
Bridges, Tunnels, Highways and Streets	2,304	8.5	11.7
Housing and Urban Development	2,576	9.5	13.0
Public Safety, Correction and Courts	1,981	7.3	10.0
Parks, Recreational and Cultural	2,411	8.8	12.2
Public Buildings	2,519	9.2	12.8
Mass Transit	494	1.8	2.5
Sanitation	1,104	4.1	5.6
Health Services	1,055	3.9	5.3
Off-Street Parking, Airports, Ferries and Markets	91	0.3	0.5
Social Services	318	1.2	1.6
Water Pollution Control, Water Mains and Sewers ^a	<u>7,488</u>	<u>27.5</u>	N/A
Subtotal before Reserve for Unattained Commitments	<u>\$27,239</u>	<u>100.0%</u>	<u>100.0%</u>
Reserve for Unattained Commitments	<u>(\$2,139)</u>	<u>(N/A)</u>	<u>(N/A)</u>
Total^b	<u>\$25,100</u>	<u>100.0%</u>	<u>100.0%</u>

^a Will be nearly 100 percent funded with NYW bonds.

^b This represents City-funded capital commitments as of the *FY 2012 Adopted Capital Commitment Plan* issued in September 2011 and includes a \$2.139 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 2012 debt limit. The full market value for each of FYs 2008 through 2012 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 2012 debt limit (\$76.097 billion) is derived by multiplying the five-year average value (\$760.967 billion) by 10 percent.

Table 9. Calculation of Full Value of Real Property in New York City and the General Debt Limit, FY 2012

Fiscal Year	Billable Assessed Value of Taxable Real Estate	Special Equalization Ratio	Full Value
2008	\$125,777,268,853	0.1703	\$738,562,941,004
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	0.1944	\$768,065,489,877
2012	\$157,121,003,987	0.1857	\$846,101,260,027
5 - Year Average Value			\$760,966,939,277
10 Percent of the 5-Year Average			\$76,096,693,928

SOURCE: New York City Council Tax Fixing Resolution for FY 2012.

Table 10 summarizes the estimated growth in the City’s debt-incurring power. The City’s FY 2012 general debt-incurring power of \$76.097 billion is projected to increase to \$77.768 billion in FY 2013, \$79.508 billion in FY 2014, and \$81.210 billion in FY 2015.¹² The City’s indebtedness is projected to grow from \$52.03 billion at the beginning of FY 2012 to \$62.47 billion by the beginning of FY 2015. NYCTFA and TSASC together have provided resources totaling over \$21 billion through FY 2011.¹³ 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.

¹² The full value of taxable real property in the outyears is based on the Comptroller’s Office forecast of future real estate trends.

¹³ The figure used excludes the issuance of \$2 billion of NYCTFA recovery bonds and \$4.73 billion of NYCTFA BARBs.

Table 10. NYC Debt-Incurring Power

(\$ in millions)

	July 1, 2011	July 1, 2012 ^a	July 1, 2013 ^a	July 1, 2014 ^a
Gross Statutory Debt-Incurring Power	\$76,097	\$77,768	\$79,508	\$81,210
Actual Bonds Outstanding as of June 30, 2011 (net) ^b	\$41,254	\$41,338	\$39,379	\$37,175
Plus New Capital Commitments ^c				
FY 2012		7,097	7,097	7,097
FY 2013			5,390	5,390
FY 2014				4,144
Less: Appropriations	(1,955)	(1,964)	(2,182)	(2,155)
Incremental NYCTFA Bonds Outstanding Above \$13.5 billion	4,124	3,627	2,933	2,208
Subtotal: Net Funded Debt Against the Limit	\$43,423	\$50,098	\$52,617	\$53,859
Plus: Contract and Other Liability	8,610	8,610	8,610	8,610
Subtotal: Total Indebtedness Against the Limit	\$52,033	\$58,708	\$61,227	\$62,469
Remaining Debt-Incurring Power within General Limit	\$24,064	\$19,060	\$18,281	\$18,741

^a FYs 2013 through 2015 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. \$41.785 billion from Table 1 minus \$531 million of the aforementioned adjustments equals \$41.254 billion.

^c Reflects City-funds capital commitments as of the FY 2012 September Capital Commitment Plan (released in September 2011) 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.

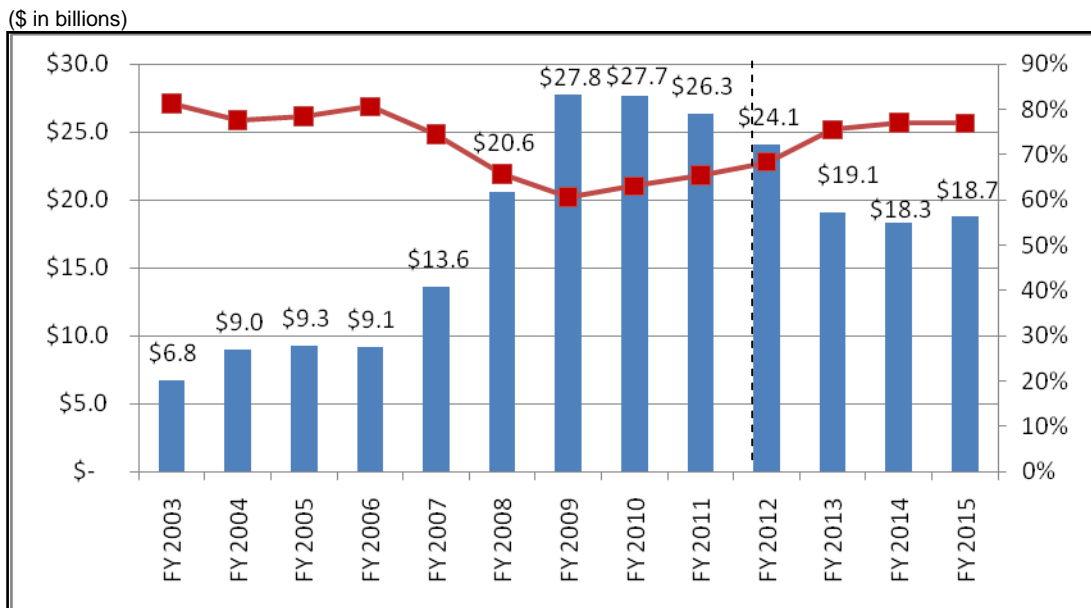
NOTE: The Debt Affordability Statement released by the City in May, 2011 presents data for the last day of each fiscal year, June 30th, instead of the first day of each fiscal year, July 1, as reflected in this table. The City's Debt Affordability Statement forecasts that indebtedness would be below the general debt limit by \$21.05 billion at the end of FY 2011.

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 decrease from \$24.06 billion at the beginning of FY 2012 to \$18.74 billion at the beginning of FY 2015. This decrease of over \$5.32 billion reflects the disparity in the projected growth rates of full market value of taxable properties and total indebtedness. The debt limit which is driven by the full market value of taxable properties is projected to increase by only 2.19 percent per year from FY 2012 to FY 2015, significantly below the projected 6.28 percent annual increase of total indebtedness over the same period. The disparity in these trends results in the decrease of the City's debt-incurring margin.

While the debt margin is forecast to decline in the subsequent three fiscal years, the FY 2012 level is near the high for the last decade. The 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.

Chart 1. NYC's Remaining Debt-Incurring Power FYs 2003 – 2015, 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.¹⁴ For several of these measures, comparisons with other jurisdictions are presented.

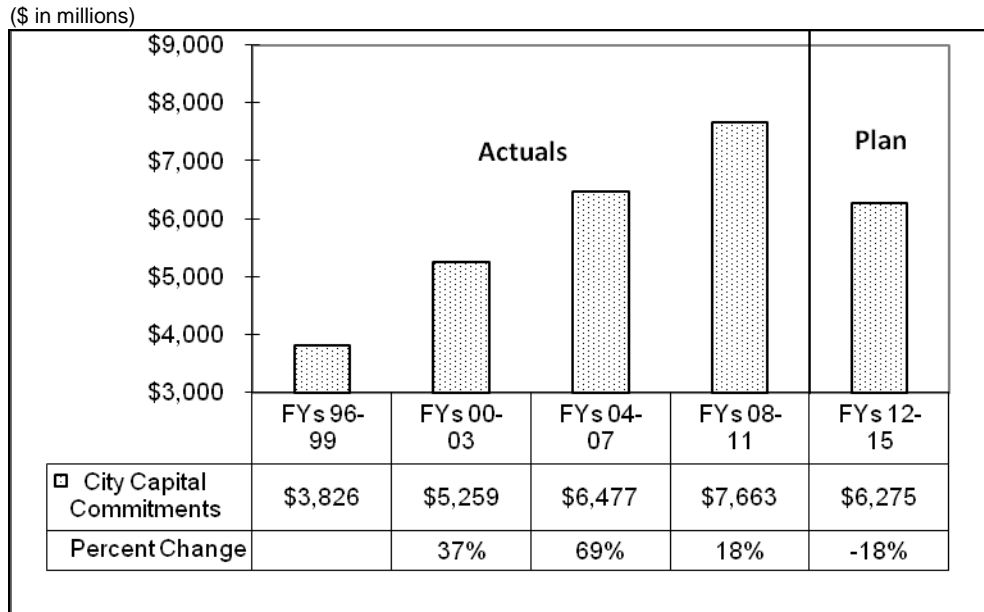
A. BACKGROUND

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 a series of ambitious capital plans to repair and maintain its infrastructure. This trend began in the early 1980s and has continued through FY 2011. The City committed resources averaging \$3.83 billion per year during FYs 1996 through 1999, \$5.26 billion per year during FYs 2000 through 2003, \$6.48 billion per year during FYs 2004 through 2007, and \$7.66 billion during FYs 2008 through 2011. During FYs 2012 – 2015, City-funded commitments are projected to average \$6.28 billion, 18 percent less than the average of \$7.66 billion during FYs 2008 to 2011, as shown in Chart 2.¹⁵ The significant decline in capital commitments from the prior four-year period is partly attributable to an almost 15 percent drop in DEP's City-funded capital commitments, from an annual average of \$2.20 billion over FYs 2008 – 2011 to \$1.87 billion over FYs 2012 – 2015.

¹⁴ New York City FY 2010 debt per capita is used for comparison because the available data for the other sample cities are from either fiscal year or calendar year 2010.

¹⁵ Figures include commitments for the DEP that are funded primarily with NYW debt.

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



In FY 2001, the City embarked on what was then a historically high capital commitment program, with City-funded capital commitments of \$6.1 billion, an increase of 63.8 percent 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 until 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 FY 2011 as shown in Table 11.

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

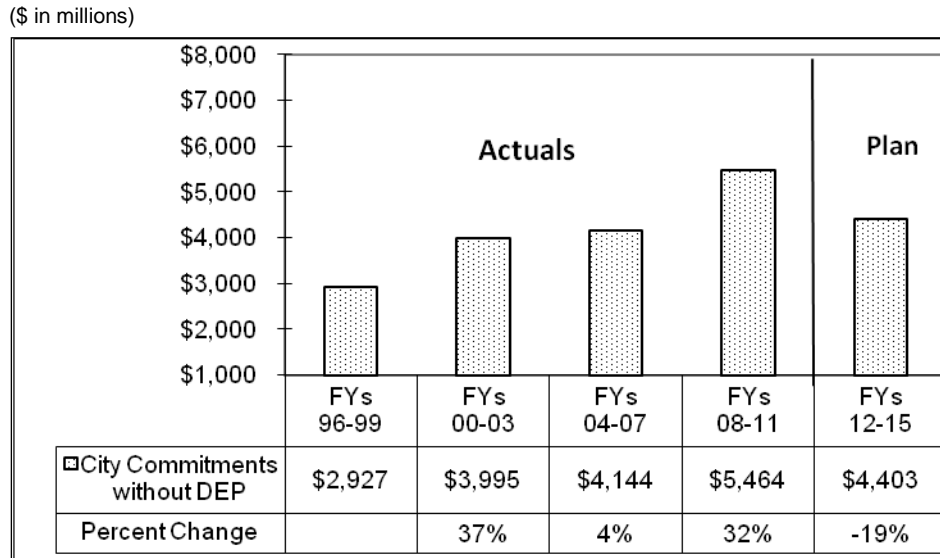
Fiscal Year	City Capital Commitments	Year-over-Year Percent Change
2000*	\$3,721	N/A
2001*	\$6,094	63.8%
2002*	\$5,832	(4.3%)
2003*	\$5,389	(7.6%)
2004*	\$4,539	(15.8%)
2005*	\$7,288	60.6%
2006*	\$5,911	(18.9%)
2007*	\$8,171	38.2%
2008*	\$9,008	10.2%
2009*	\$7,264	(19.4%)
2010*	\$9,014	24.1%
2011**	\$5,366	(40.5%)
2012**	\$9,349	74.2%
2013**	\$6,956	(25.6%)
2014**	\$4,824	(30.7%)
2015**	\$3,971	(17.7%)

* FYs 2000 – 2010 are actuals.

** FYs 2011 – 2015 are estimates.

Chart 3 summarizes actual capital commitments absent those capital commitments made for DEP projects. City-funded capital commitments averaged \$2.93 billion in FYs 1996 — 1999, \$4 billion in FYs 2000 — 2003, \$4.14 billion in FYs 2004 — 2007, and \$5.46 billion in FYs 2008 — 2011. City-funded capital commitments exclusive of DEP commitments are projected to average \$4.4 billion per year between FYs 2012 — 2015. This represents a decline of 19 percent from the actual average in FYs 2008 — 2011.

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



SOURCE: Message of the Mayor, various FYs 1991 – 2005, and FY 2012 September Capital Commitment Plan (Published September 2011).

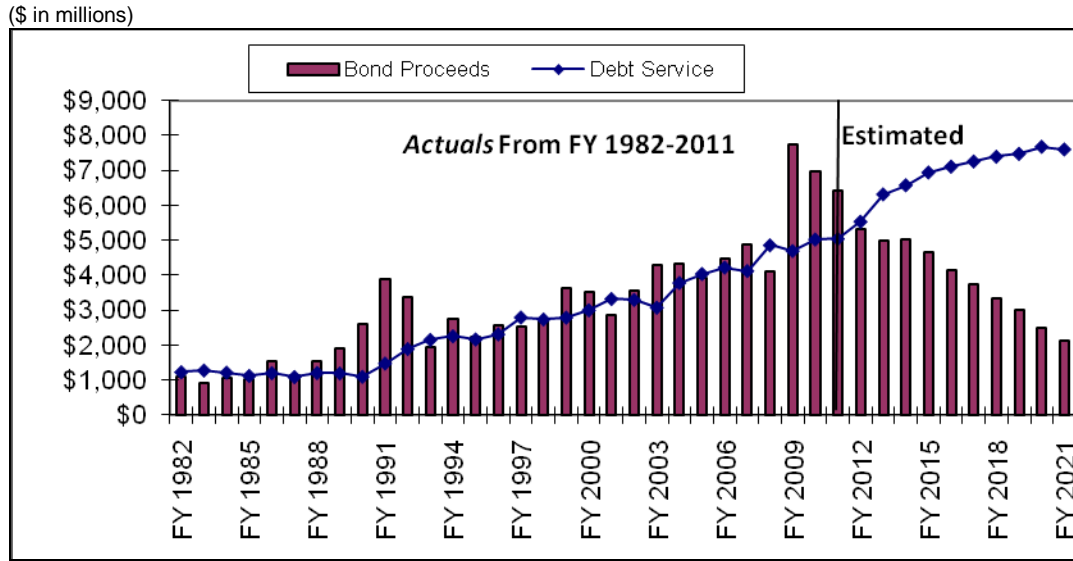
The City’s capital program relies almost exclusively on the issuance of bonds. The City’s annual borrowing excluding NYW debt grew from \$1.08 billion in FY 1982 to \$6.43 billion in FY 2011. The FY 2011 borrowing level of \$6.43 billion was the third highest level of borrowing in the City’s history, only trailing the FY 2009 borrowing of \$7.75 billion and the FY 2010 borrowing of \$6.98 billion. These record borrowing levels are reflective of 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 billion annually between FYs 2012 through 2015, with the highest estimated borrowing in FY 2012 at \$5.33 billion.¹⁶

The annual average growth rate of City debt-service payments between FY 1982 to FY 2011 was 5.0 percent per year, growing from \$1.23 billion in FY 1982 to \$5.04 billion in FY 2011. Debt service is expected to grow at an average of 4.2 percent per year, from \$5.04 billion in FY 2011 to \$7.6 billion by FY 2021, as illustrated in Chart 4. However, projected growth during the first four-years of the Financial Plan period is 8.3 percent, almost twice the projected average growth over the entire FYs 2011 – 2021 period. This implies an average annual growth of 1.3 percent per year in FYs 2016 – 2021, well below the 30-year average growth rate of 5.0 percent. This growth assumption appears unrealistically low and it is more than likely that debt service will be higher than projected over this period.¹⁷

¹⁶ This includes bond proceeds for GO and NYCTFA bonds only. While City-funded commitments include DEP 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.

¹⁷ Debt service figures exclude TSASC and lease-purchase debt service.

Chart 4. Bond Proceeds and Debt Service, FYs 1982 – 2021



SOURCES: City of New York, Office of the Comptroller, *Comprehensive Annual Financial Reports, 1982-2011* and Office of Management and Budget, *FY 2012 Adopted Financial Plan, June 2011*. Debt-service payments exclude interest on short-term notes, Municipal Assistance Corporation debt, and lease-purchase debt and are adjusted for budget surpluses prepaid to the debt-service fund.

B. DEBT BURDEN

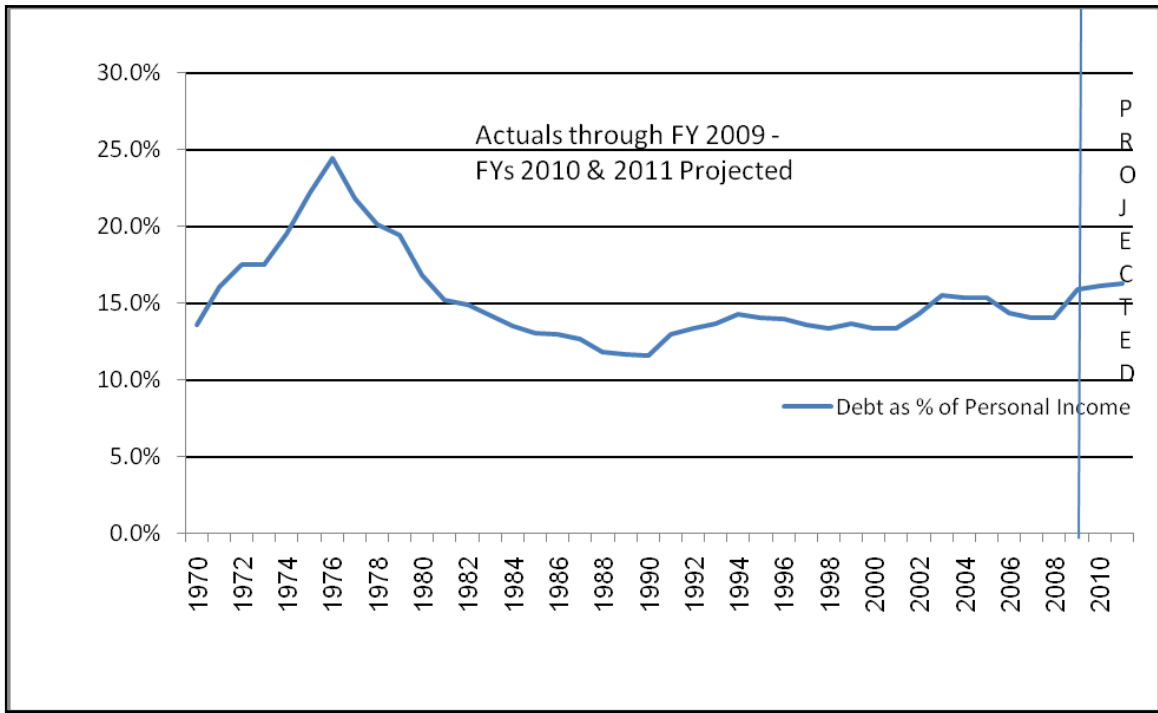
Even after adjusting for the effects of population change and tax revenue, New York City’s debt has expanded significantly since FY 1990. Debt per capita, which was \$2,951 in FY 1990, grew to \$8,763 by FY 2011, an increase of 197 percent. The cumulative growth in debt per capita over this period was nearly 2.5 times the City’s rate of inflation.¹⁸ The FY 2011 debt per capita is \$482, or 5.8 percent, greater than the FY 2010 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 \$15,700.

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

In the early 1970’s, 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 indebtedness in the late 1970’s. This, combined with the resurgence of Wall Street in the 1980’s, resulted in a decline of the ratio of debt to personal income from 1976 to 1989.

¹⁸ FY 2011 debt per capita of \$8,763 is used for section B’s analytical purpose; however, FY 2010’s debt per capita figure of \$8,281 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 is now based on *gross debt* outstanding.

Chart 5. NYC Gross Debt as a Percent of Personal Income, FYs 1970 – 2011



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 2011.

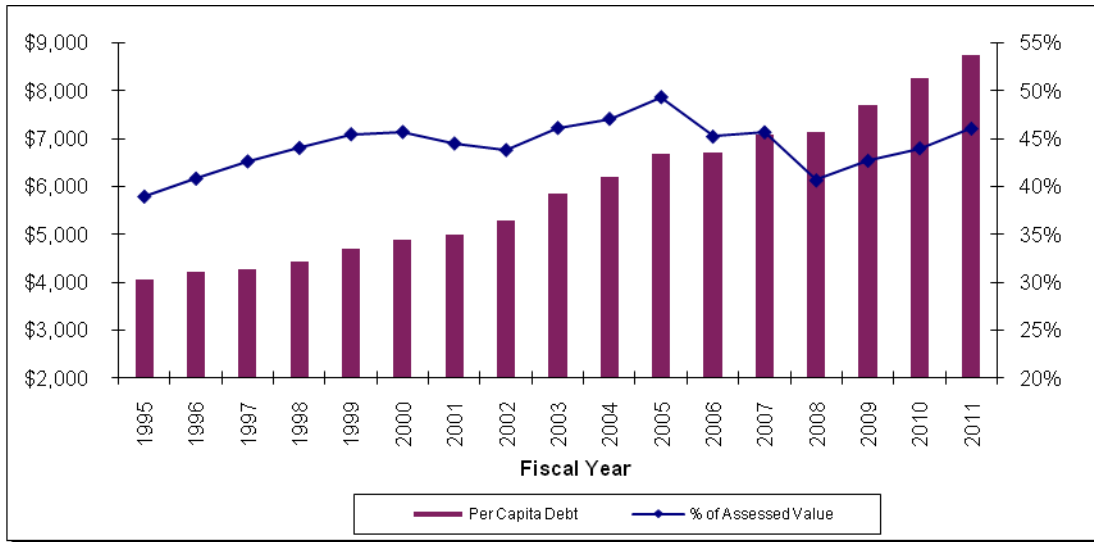
Chart 5 illustrates the historical trend of gross debt outstanding as a percentage of personal income from FYs 1970 to 2011. After reaching a peak of 24.4 percent in FY 1976, gross debt as a percent of NYC personal income trended downward, reaching a low of 11.6 percent in FY 1990. Through the 1990’s, 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 2010, the ratio averaged about 15 percent. In FY 2011, however, this ratio is forecast to increase to 16.3 percent. Gross debt outstanding increased 5.8 percent from FYs 2010 to 2011 outpacing the projected increase in personal income of 4.7 percent during the same time period.¹⁹

NYC Debt as a Portion of Assessed Real Property

The level of NYC’s debt as a proportion of the assessed value of taxable real property is also increasing. In FY 2011, 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. This FY 2011 ratio is a slight increase from FY 2010’s ratio of 44 percent due primarily to an increase in outstanding debt of 5.8 percent compared to an assessed value increase of 1.1 percent over the same period.

¹⁹ New York City’s OMB, Message of the Mayor, May 2011, p.19 used for NYC personal income growth rate from FY 2010 to FY 2011. Actual personal income data is available through FY 2009.

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 – 2011.

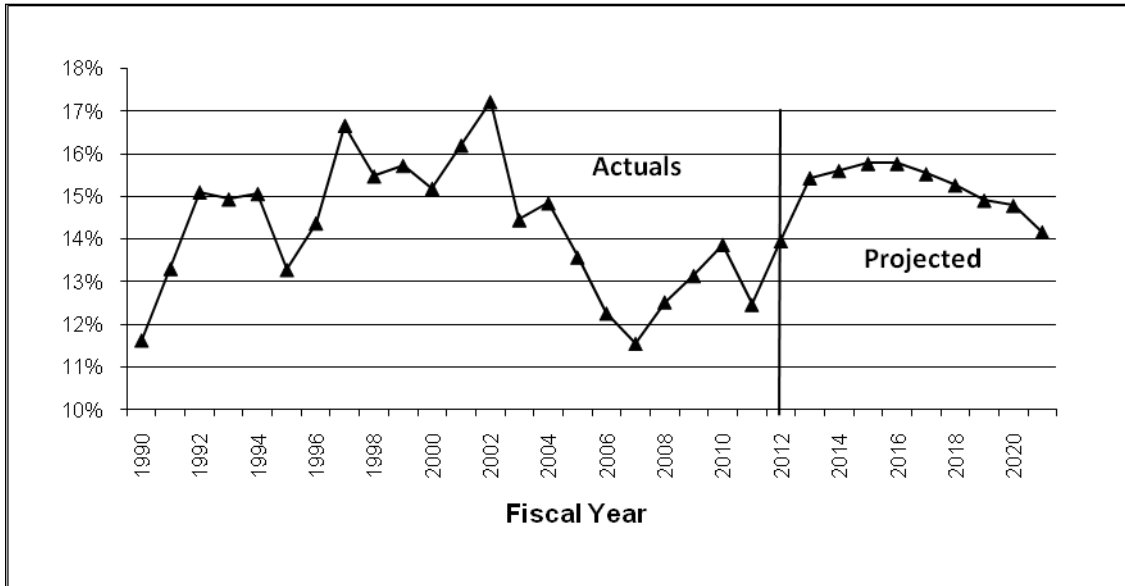
NYC Debt as a Percent of Tax Revenues and City-Funds Expenditures

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 2002.²⁰ By FY 2007, this ratio fell to a low of 11.6 percent rising to approximately 12.5 percent in FY 2011, as shown in Chart 7. Debt service as a percentage of tax revenues is projected to rise to 15.8 percent in FYs 2015 and 2016 before declining to a projected 14.2 percent by FY 2021.²¹ As discussed earlier, this growth is reflective of the lower projected capital borrowing and resulting lower debt service in FYs 2016 – 2021, both of which are likely understated.

²⁰ 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.

²¹ From the *City of New York, Office of the Comptroller, Comprehensive Annual Financial Reports, 1982-2011*, and *NYC Office of Management and Budget, Adopted Financial Plan, June 2011* and adjusted for prepayments.

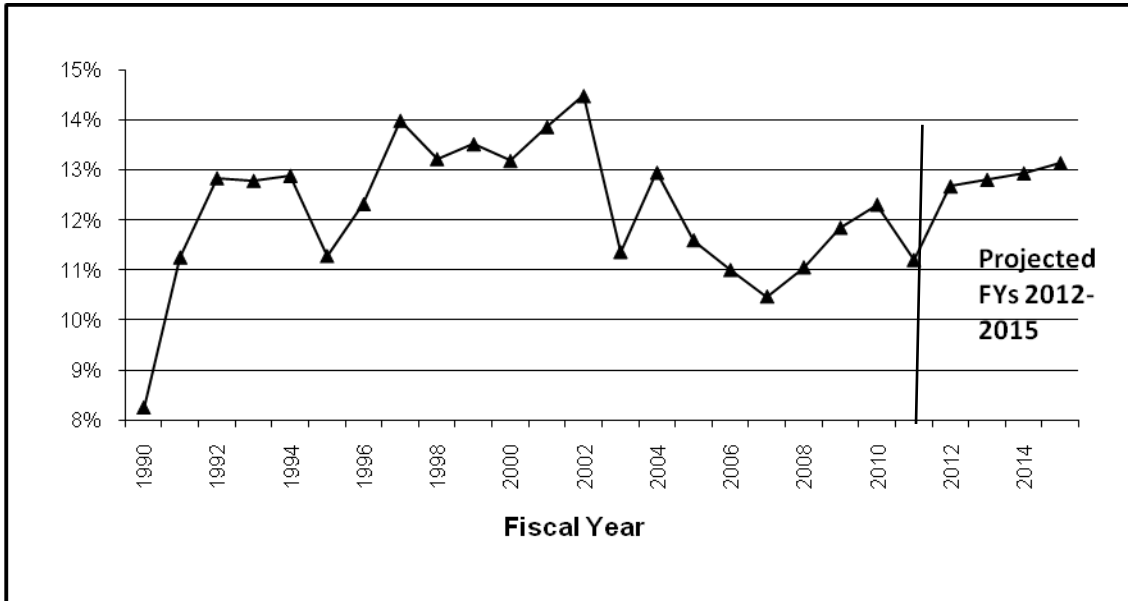
Chart 7. NYC Debt Service as a Percent of Tax Revenues



SOURCE: City of New York, Office of the Comptroller, Comprehensive Annual Financial Reports, FYs 1982 – 2011, and NYC Office of Management and Budget, FY 2012 Adopted Financial Plan, June 2011.

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 2011 was 11.2 percent in FY 2011 and is projected to rise to 13.1 percent by FY 2015, 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 – 2011, and NYC Office of Management and Budget, FY 2012 Adopted Financial Plan, June 2011. 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 2010, NYC’s \$8,281 debt per capita was almost twice the average of \$4,202 among a sample of large U.S. cities, and 1.44 times the per capita debt of Chicago which had the next highest debt burden of \$5,763 as shown in Table 12.²²

²² 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, 2010

City	Population	Direct and Overlapping Debt Outstanding (\$ 000)	Debt Per Capita ^a
Boston	645,169	\$1,068,939	\$1,657
Seattle	612,000	1,594,912	\$2,606
San Francisco	821,790	2,541,820	\$3,093
San Jose	1,023,000	3,464,937	\$3,387
Dallas	1,316,350	4,493,041	\$3,413
Phoenix	1,700,300	6,404,295	\$3,767
Los Angeles	4,094,764	16,858,132	\$4,117
Houston	2,257,926	9,617,446	\$4,259
Philadelphia	1,547,297	7,363,600	\$4,759
San Antonio	1,319,492	6,827,954	\$5,175
Chicago	2,695,598	15,535,530	\$5,763
<i>Average of Sample Cities</i>	<i>1,639,426</i>	<i>\$6,888,237</i>	<i>\$4,202</i>
New York City	8,391,881	\$69,494,000	\$8,281

^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 68 percent from 2000 to 2010. This growth is below the average growth of 113 percent for the 11 sample cities as shown in Table 13.

Table 13. Debt Per Capita Comparisons for Selected Cities – 2000 and 2010

City	Debt per Capita in 2000	Debt per Capita in 2010	Percentage Change 2000 – 2010
Boston	\$1,376	\$1,657	20.4%
Philadelphia	\$3,241	\$4,759	46.8%
Seattle	\$1,694	\$2,606	53.8%
Phoenix	\$2,041	\$3,767	84.6%
Houston	\$2,187	\$4,259	94.8%
Chicago	\$2,863	\$5,763	101.3%
Dallas	\$1,273	\$3,413	168.1%
San Antonio	\$1,929	\$5,175	168.3%
San Francisco	\$1,139	\$3,093	171.6%
Los Angeles	\$1,464	\$4,117	181.2%
San Jose	\$943	\$3,387	259.2%
<i>Average of All Other Cities^a</i>	<i>\$1,974</i>	<i>\$4,202</i>	<i>112.9%</i>
National CPI	\$168.8	\$218.1	29.2%
New York City	\$4,923	\$8,281	68.2%

SOURCES: NYC Comptroller's Office and based on 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 \$3,824, less than half of New York City's debt per capita in FY 2010, as shown in Table 14.²³ Nassau County is the next closest to New York City of the municipalities sampled in New York State with a debt per capita figure of \$5,508.

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

City or County	Debt per Capita	Date of Observation
Buffalo	\$1,522	6/30/10
Rochester	2,144	6/30/10
Syracuse	2,339	12/31/10
Albany	2,543	6/01/11
Monroe County	2,634	12/31/10
Onondaga County	2,905	12/31/10
White Plains	4,002	6/30/10
Westchester County	4,195	6/30/10
Nassau County	5,508	9/30/11
Average of Above NY Cities and Counties ^a	\$3,824	N/A
New York City	\$8,763	6/30/11
New York City	\$8,281	6/30/10

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.

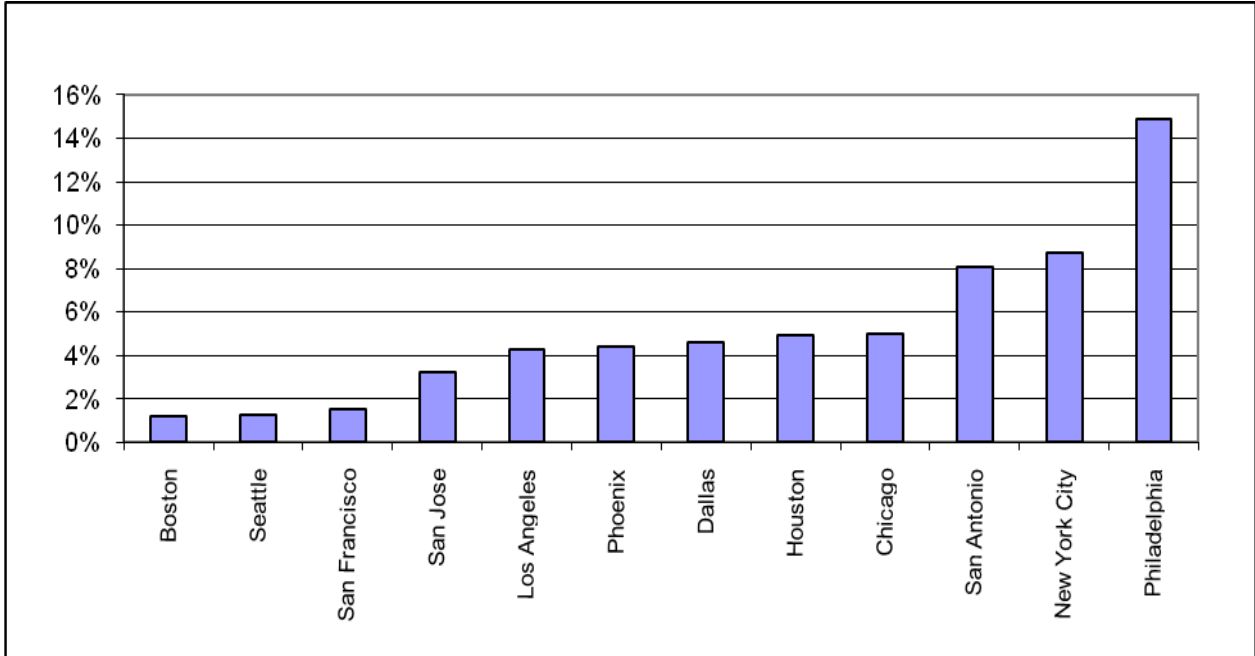
The rationale behind using personal income is that it is another relative measure of a locality's wealth. The wealthier a community, the greater its capacity to pay taxes, and to sustain local government debt and operations. Standard & Poor's considers both a debt to real property value ratio and a debt to income ratio of more than 6.0 percent to be high.²⁴

Among the cities surveyed in this report, New York City ranks among 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, New York City's outstanding debt as a percentage of full value of real property in FY 2010 was 8.7 percent. This is double the sample city average of 4.3 percent. Philadelphia at 14.9 percent is the only City that exceeds New York, with San Antonio at 8.1 percent having the next highest debt to real property value ratio.

²³ 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.

²⁴ Ibid.

Chart 9. Debt Outstanding as a Percent of the Full Value of Real Property, FY 2010

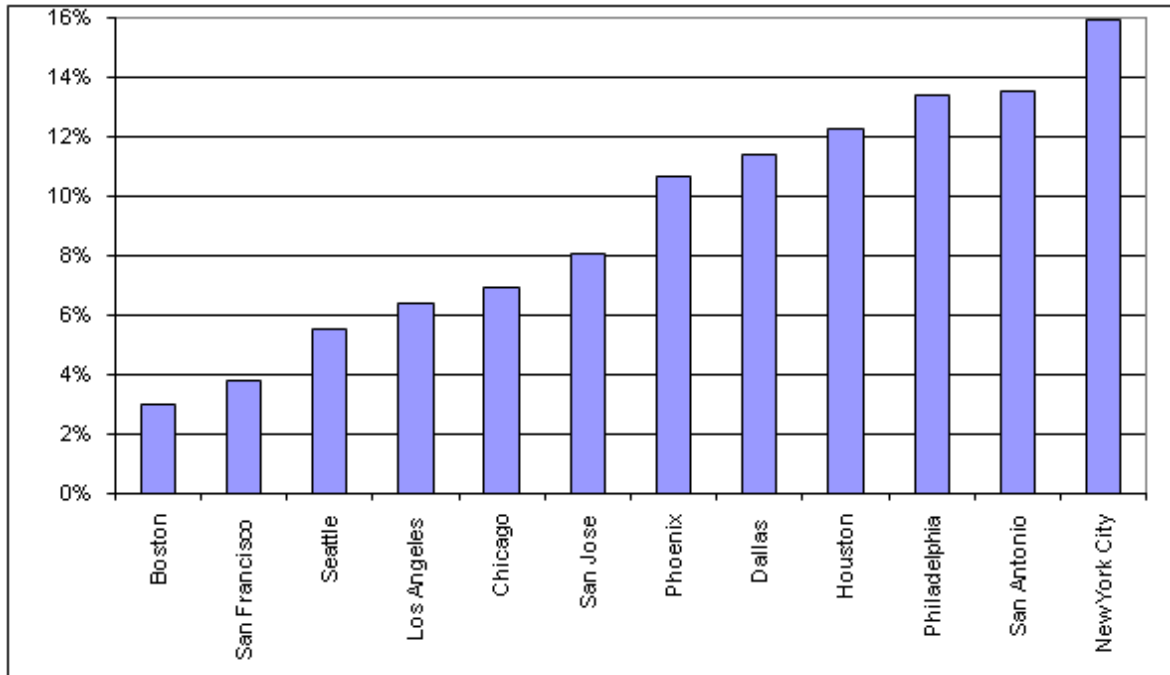


SOURCE: Each city's Comprehensive Annual Financial Report for FY 2010.

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.

New York City's debt as a percentage of personal income in FY 2009 is 15.9 percent, the highest among the sample cities as summarized in Chart 10. It is almost twice the 8.1 percent average of the 11 sample cities. The cities with comparable ratios are San Antonio at 13.5 percent and Philadelphia at 13.4 percent.

Chart 10. Debt Outstanding as a Percent of Personal Income, FY 2009



SOURCE: FY 2009 Comprehensive Annual Financial Reports of Sample Counties as proxies for the above cities and the U.S. Department of Commerce – Bureau of Economic Analysis – 2009 personal income data is the latest available.

NOTE: 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.

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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
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