State of North Carolina

Debt Affordability Study

February 1, 2007

Debt Affordability Advisory Committee

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STATE OF NORTH CAROLINA
DEBT AFFORDABILITY ADVISORY COMMITTEE

February 1, 2007

To: Governor Michael Easley
Lieutenant Governor Beverly Perdue, President of the North Carolina Senate
Senator Marc Basnight, President Pro Tempore of the North Carolina Senate
Representative Joseph Hackney, Speaker of the North Carolina House of Representatives
Members of the 2007 General Assembly through the Fiscal Research Division

Attached is the February 1, 2007 report of the Debt Affordability Advisory Committee submitted to you pursuant to North Carolina General Statute §142-101. The report was created to serve as a tool for sound debt management practices by the State of North Carolina.

The report provides the Governor and the General Assembly with a basis for assessing the impact of future debt issuance on the State's fiscal position and enables informed decision-making regarding both financing proposals and capital spending priorities. A secondary purpose of the report is to provide a methodology for measuring, monitoring and managing the State's debt levels, thereby protecting North Carolina's bond ratings of AAA/Aaa/AAA.

The Committee is particularly proud to report that on January 12, 2007, Moody's Investors Service upgraded the State's General Obligation bond rating to Aaa with a stable outlook. North Carolina takes its place once again in the select group of only seven states awarded top ratings by all three of the bond rating agencies.

The methodology used by the Committee to analyze the State's debt position incorporates historical and future trends in debt levels, peer group comparisons and provides recommendations within adopted guidelines. The Committee has also provided recommendations regarding other debt and financial management related policies considered desirable and consistent with the sound management of the State's debt. Such recommendations were developed incorporating management practices consistent with those utilized by the most highly-rated states.

Respectfully submitted,

Richard H. Moore, State Treasurer
Chair, Debt Affordability Advisory Committee

Members of the Debt Affordability Advisory Committee:

Mr. Richard H. Moore, State Treasurer

Mr. E. Norris Tolson, Secretary of Revenue

Mr. David McCoy, State Budget Officer

Mr. Leslie W. Merritt, Jr., State Auditor

Mr. Robert Powell, State Controller

Mr. Christopher Henson, Senate Appointee

Mr. James V. Porto, House Appointee

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Executive Summary

Studies of debt affordability are an essential management tool that help to provide a comprehensive assessment of a government's ability to issue debt for its capital needs. Standard & Poor's, one of the three major bond rating agencies, stated in a 2005 report that "Most of the 'AAA' states have a clearly articulated debt management policy. Evaluating the impact of new or authorized but un-issued bond programs on future operating budgets is an important element of debt management and assessing debt affordability."

Control of tax-supported debt is a key factor affecting credit quality. North Carolina currently maintains a reasonable level of debt when compared with a peer group composed of the most highly-rated states.

The 2004 General Assembly adopted legislation creating a Debt Affordability Advisory Committee (the "Committee") to annually advise the Governor and the General Assembly of the estimated debt capacity of the State for the upcoming ten fiscal years. The legislation also directs the Committee to recommend other debt management policies it considers desirable and consistent with the sound management of the State's debt. The Committee hereby presents its Study for 2007.

Recommended Guidelines and Amounts of Debt

The Committee has adopted the following targets and outside guidelines to measure the recommended amount of debt that the State could prudently authorize and issue over the next 10 years:

- Net Tax-Supported Debt Service as a percentage of General Tax Revenues should be targeted at no more than 4% and not exceed 4.75%;
- Net Tax-Supported Debt as a percentage of Personal Income should be targeted at no more than 2.5% and not exceed 3.0%; and
- The amount of debt to be retired over the next ten years should be targeted at no less than 55% and not decline below 50%.

The Committee adopts the ratio of net tax-supported debt service as a percentage of revenues as the preferred ratio for the base calculations. It further determines that a measure of annual debt capacity over a given time period provides a more useful management tool for policymakers than a measure that assumes that available debt capacity is utilized as soon as it is available.

A combination of strong revenue growth, the retirement of existing debt and continued low interest rates enables the State to project a moderate amount of available debt capacity for the immediate future. Specifically, the Committee finds that the State could annually authorize $384 million of new tax-supported debt over the model horizon and remain within its targeted ratio. However, as more debt is issued the State has less budget flexibility to address any declines in revenue that might occur.

Table 1

Net Tax-Supported Debt Capacity using 4.0% debt service/revenues target ratio
(In Millions of dollars)

Fiscal Year	2007	2008	2009	2010	2011
*Total Additional Debt Capacity per Year **	$1,032.1	$149.1	$50.4	$56.3	$520.2
Debt Capacity Available Each and Every Year	384.0	384.0	384.0	384.0	384.0

* In addition to that already Authorized but Unissued. Assumes additional debt capacity is authorized and issued in stated fiscal year.

Other Recommendations

As directed by statute, the Committee submits the following additional recommendations that it finds desirable and consistent with the sound management of the State's debt:

General Fund Balance

The Committee confirms its view that achieving structural budgetary balance and rebuilding the State's reserve funds are strong evidence of financial stability and flexibility. The progress the State has made in rebuilding its reserves coupled with legislative action raising the targeted level of the State's Savings Reserve Fund ("Rainy Day Fund") is encouraging. At FY 2006 year-end, the Unreserved General Fund Balance (GAAP basis) totaled $1.770 billion, or 10.4% of recurring General Fund tax revenues. This marked improvement is the result of both strong operational results and a change in accounting methodology. Without the accounting change, estimates put the Unreserved General Fund Balance at $417 million.

The Committee recognizes that legislative action has targeted an 8% level of reserves in the State's Rainy Day Fund and believes this targeted level is consistent with previous Committee recommendations.

Capital Project Costs and the use of Pay-Go Funding

A consideration that affects project costs and future debt service capacity is the use of "pay-as-you-go" ("PAYGO") funding of capital projects. By using current revenues to fund a portion of the capital improvements plan, the State can reduce future debt service and retain debt capacity. For example, if the State funded a capital project with $50 million as PAYGO rather than financing it through a $50 million, 20-year bond issue, the State would save approximately $20.9 million in total interest payments over the life of the issue assuming current market conditions.

General Obligation Bonds versus Special Indebtedness

The Committee recognizes the State's exclusive reliance in recent years on the authorization of Special Indebtedness (for example, Certificates of Participation and lease revenue bonds) to provide debt financing for capital projects. Such indebtedness is not subject to a vote of the people and its repayment is based on the State's annual debt appropriation. For these reasons, Special Indebtedness is rated lower than the State's General Obligation bonds and typically carries a higher interest rate, which increases the cost of projects so financed. It is recommended that the State balance its approach and consider the authorization of General Obligation debt as the preferred, if no longer exclusive, method to finance capital projects. Further discussion is found in Section II, Review of State Debt.

Conclusions

Currently, all of the State's debt ratios are below median levels for all fifty states, as well as the ratios for the State's peer group composed primarily of states rated "triple A" by all three rating agencies. North Carolina's debt is considered manageable at current levels.

As the State continues to issue debt that has already been authorized, the absolute level of tax-supported debt is projected to increase and will stand at approximately $6.173 billion by the end of Fiscal Year 2007. On an absolute basis, debt service will increase through Fiscal Years 2010 and 2011, declining thereafter. As a percentage of general tax revenues, debt service peaks in Fiscal Year 2008 at 3.6%, below its 4.0% target. The ratio of debt to personal income is projected to remain steady to 2.1% in Fiscal Year 2007. The ten-year payout ratio, which stood at 52% at June 30, 2006, is projected to improve substantially over the near term, reaching its targeted goal in FY 2008. Finally, due to a combination of strong operational results and accounting changes, the State has succeeded in eliminating the deficit in the Unreserved General Fund Balance.

The State has enjoyed a period of strong revenue growth and has been able to significantly replenish its reserves. The debt model now projects availability to support $384 million in new debt authorizations annually over the model horizon.

Introduction and Background

In 2003, the North Carolina Department of State Treasurer prepared the first Debt Affordability Study to provide a methodology for measuring, monitoring and managing the State's debt capacity. In 2004, the General Assembly adopted legislation creating a Debt Affordability Advisory Committee to annually advise the Governor and the General Assembly on the estimated debt capacity of the State for the upcoming ten fiscal years.

Debt capacity is a limited and scarce resource. It should be used only after evaluating the expected results and foregone opportunities. The Study enables the State to structure its future debt issuances within existing and future resource constraints by providing a comparison of its current debt position to relevant industry standards, and by evaluating the impact of new debt issuances as well as changes in the economic climate on the State's debt position. The Study can thus be used to help develop and implement the State's capital budget. The Study is premised on the concept that resources as well as needs should guide the State's debt issuance program.

Although the State's level of authorized and unissued debt is manageable, establishing guidelines for future debt issuance and financial performance is a critical part of prudent debt management and can keep the debt burden from becoming excessive. The Committee recognizes that such guidelines must strike a balance between providing sufficient debt capacity to allow for the funding of essential capital projects and imposing sufficient discipline so that the State does not create a situation that results in a loss of future budgetary flexibility and could lead to a deteriorating credit position. Control of debt burden is one of the four key factors used by rating agencies' analysts in assessing credit quality. The other three are economic vitality and diversity, fiscal performance and flexibility and the administrative capabilities of government.

The Debt Affordability Committee has recommended both target and maximum (ceilings) debt ratios to use as guidelines to measure and control the State's debt burden. The adoption of such guidelines demonstrates that the State is committed to decreasing capital spending or finding new sources of revenue rather than imposing an excessive debt burden on future budgets.

Section I -The North Carolina Debt Affordability Model

The Debt Affordability Committee has adopted the measure of annual debt service arising from net tax-supported debt as a percentage of general tax revenues as its basis to evaluate the State's existing and projected debt burden. The Committee notes that policymakers control both variables that determine this ratio. By measuring what portion of the State's resources is committed to debt-related fixed costs, this ratio reflects the State's budgetary flexibility and ability to respond to economic downturns.

The results of the debt model are presented both as a total aggregate and as an annual amount which smoothes the solution over time. The result is the amount of new debt that the State can afford to authorize and issue each and every year while staying within its targeted ratios. Section IV and Appendix B contain the detailed presentation of the model solutions.

Debt Used in the Model Calculation

The model uses a definition of net tax-supported debt that includes General Obligation Bonds, Special Indebtedness, Capital Lease Obligations, Installment/Equipment Leasing Obligations and any other such obligations that are owed to a third party over a predetermined schedule from General Fund Revenues. Obligations of Component Units, Highway Fund debt paid from Highway Fund revenues, non tax-supported special indebtedness paid from non-general fund supported trust funds and other self-supporting or non-tax supported debt such as revenue bonds and short term tax anticipation notes are excluded from the definition of net tax-supported debt. Also excluded are obligations termed Other Post Employment Benefits ("OPEB") currently estimated to total $23.9 billion. See Appendix A for more discussion of OPEB and its exclusion from the model.

Model Assumptions regarding Revenue Growth and Sensitivity Analysis

The Committee recognizes that it cannot predict the future level of interest rates or the pace of revenue growth and recognizes the sensitivity of the model results to such factors. Changes in revenue estimates have a particularly significant impact on the calculation of available debt capacity because of the multiplier effect of compounding growth over the ten-year period. Such projections are especially important when they reflect changing or different economic outlooks. The Committee has adopted a revenue growth assumption that applies a growth rate of 3.0% to base revenues but has reviewed sensitivity analysis based on differing revenue assumptions.

Debt Structuring Assumptions

The following assumptions were used in this year's debt affordability model calculations:

- The rate on existing Variable Rate Debt will average 4%.
- The interest costs on all authorized but unissued General Obligation ("GO") and non-GO issues will be 5.50% and 6.00%, respectively.

- GO debt will be structured with a 20-year maturity with an overall level principal payment profile after the first year.
- Non-GO debt will be structured with a 20-year maturity with an overall level debt service or principal payment profile after the first year.
- Incremental model debt will be structured with a fixed rate 20-year maturity, a 6% interest rate, and an overall level debt service payment profile after the initial years.

Section II – Review of State Debt

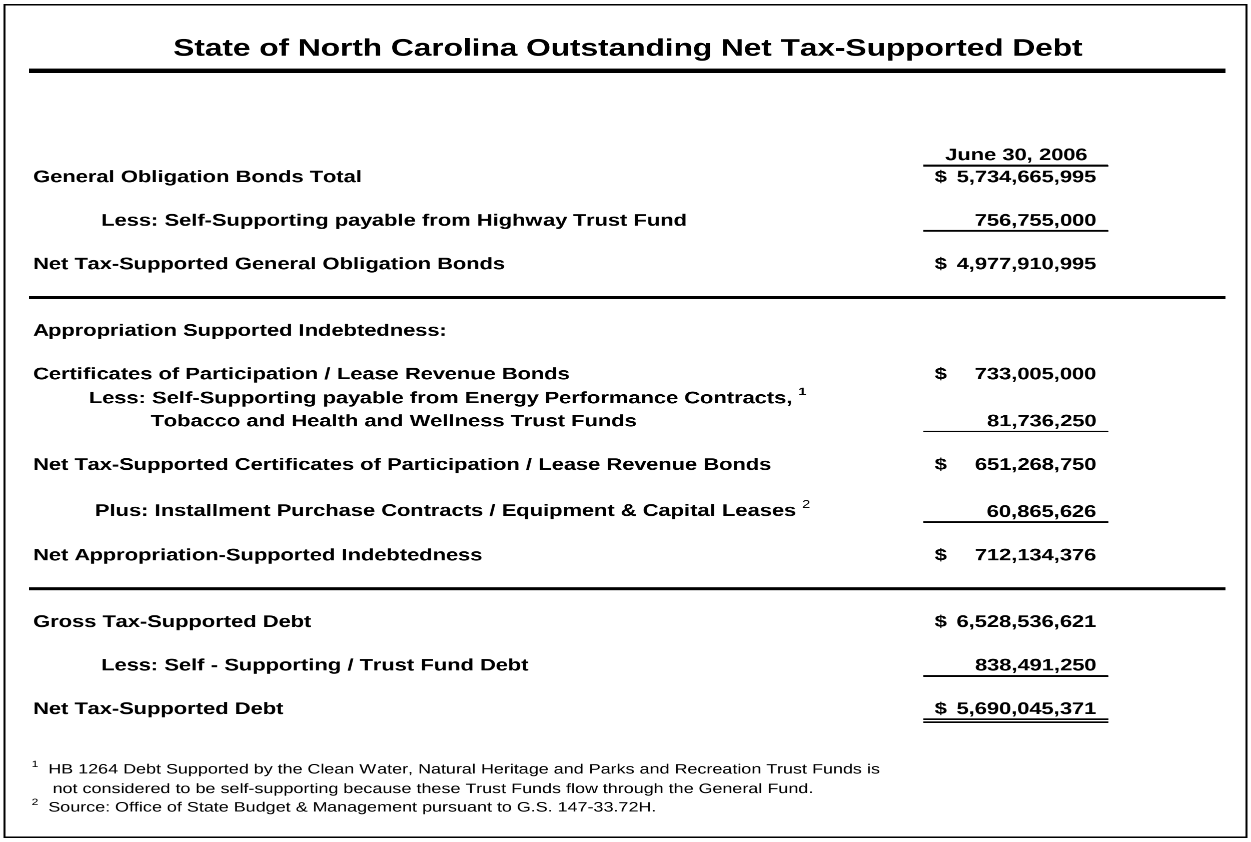
Outstanding Debt

The State issues two kinds of tax-supported debt: General Obligation Bonds and various kinds of "Special Indebtedness", which are also known as Appropriation-Supported Debt. General obligation bonds are secured by the full faith, credit and taxing power of the State. The payments on all other kinds of long-term debt, including Certificates of Participation ("COPs"), lease-purchase revenue bonds, capital lease obligations and equipment installment purchase contracts are subject to appropriation by the General Assembly. Some appropriation-supported debt is also secured by a lien on facilities or equipment.

Debt that is determined to be self-supporting or supported by non-general fund tax revenues does not constitute net tax-supported debt but is included in the definition of "gross" tax-supported debt used by some analysts.

The State's outstanding gross and net tax-supported debt positions as of June 30, 2006 are shown below.

Chart 1



State of North Carolina Outstanding Net Tax-Supported Debt

	June 30, 2006
General Obligation Bonds Total	$ 5,734,665,995
Less: Self-Supporting payable from Highway Trust Fund	756,755,000
Net Tax-Supported General Obligation Bonds	$ 4,977,910,995
Appropriation Supported Indebtedness:	
Certificates of Participation / Lease Revenue Bonds	$ 733,005,000
Less: Self-Supporting payable from Energy Performance Contracts, [1] Tobacco and Health and Wellness Trust Funds	81,736,250
Net Tax-Supported Certificates of Participation / Lease Revenue Bonds	$ 651,268,750
Plus: Installment Purchase Contracts / Equipment & Capital Leases [2]	60,865,626
Net Appropriation-Supported Indebtedness	$ 712,134,376
Gross Tax-Supported Debt	$ 6,528,536,621
Less: Self - Supporting / Trust Fund Debt	838,491,250
Net Tax-Supported Debt	$ 5,690,045,371

[1] HB 1264 Debt Supported by the Clean Water, Natural Heritage and Parks and Recreation Trust Funds is not considered to be self-supporting because these Trust Funds flow through the General Fund.
[2] Source: Office of State Budget & Management pursuant to G.S. 147-33.72H.

General Obligation Bonds versus Special Indebtedness

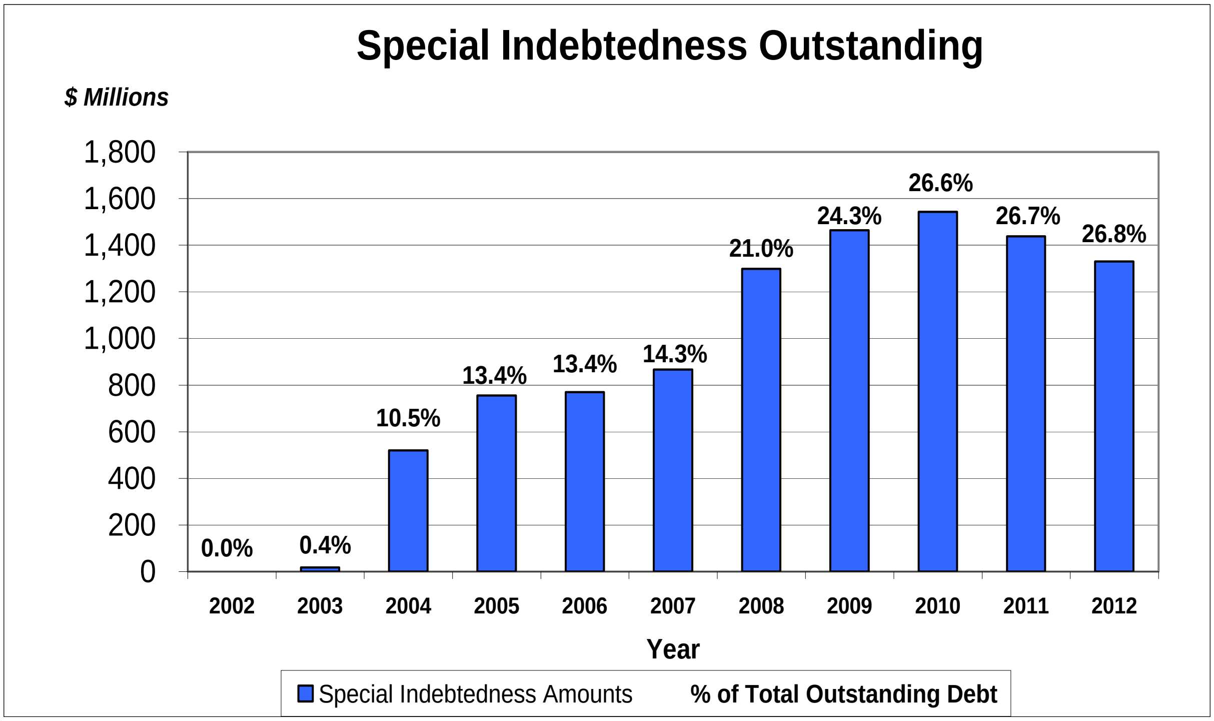
Prior to 2001, the State issued only General Obligation ("GO") debt. Such debt is usually considered to be the highest quality of all the various types of debt or debt-like instruments and usually carries the highest credit rating. Several factors contribute to the high rating including the legal protections inherent in constitutionally permitted debt, investor confidence in the pledge of the full faith and credit of the State and the presumption of the availability of the government's full resources. GO bonds are generally the most transparent of the various types of State debt obligations and typically carry the lowest interest cost.

Special Indebtedness, also termed appropriation-supported debt, is a relatively recent financing vehicle employed by the State. Secured by a specific stream of revenues or by a lease payment or financing agreement (and sometimes by a security interest in the project being financed), such obligations are typically paid from annual budgeted appropriated amounts for debt service. Depending upon the credit and structure, appropriation-supported debt is usually assessed an interest rate penalty ranging from 5 to 20 basis points when compared with the State's GO bonds. Although modest, the interest rate penalty does increase the cost of the projects being financed.

Most states have diversified their debt portfolios and utilize these non-GO structures, which include Certificates of Participation and lease revenue bonds. However, the State of North Carolina has exclusively authorized this type of financing since 2000, when the last GO bond package was authorized.

The amount of the State's outstanding appropriation-supported debt is shown below, with the percentage of appropriation-supported debt to total debt on a percentage basis noted. Also shown is a projection of the amount and percentage of appropriation-supported debt through FY 2012, assuming issuance of all existing debt authorizations.

Chart 2



Note: Total Outstanding Debt does not include debt funded by the Highway Trust Fund

In December 2006, FitchRatings published a report analyzing the amount of non-GO debt currently carried by all 50 states. They found that the higher-rated states tend to have the highest amount of GO debt relative to their total debt positions. For example, for "triple A" states, the median ratio of GO debt to total tax-supported debt was 74%, while the ratio for all "double A" states (without modifiers) was 70%. The State of North Carolina is in the range of the medians reported for the "triple A" states but without a more balanced approach to authorizing debt, will move closer to the levels evidenced by lower-rated entities.

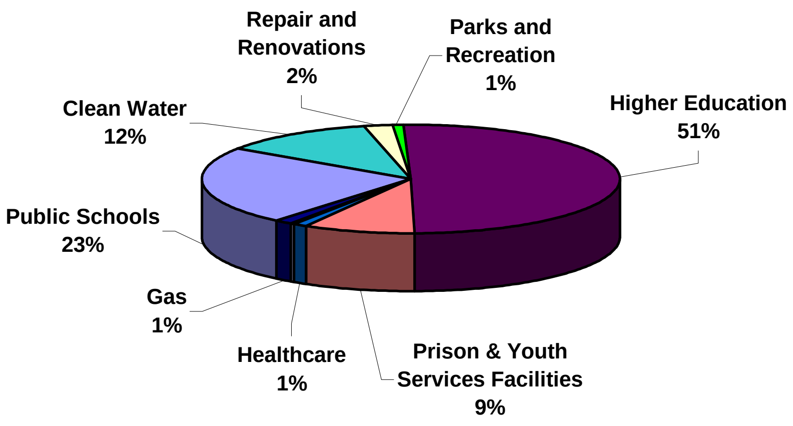
The Committee therefore recommends that the State move away from exclusively authorizing Special Indebtedness for its capital financing needs and consider the authorization of General Obligation debt as the preferred method to provide debt financing.

Uses of Outstanding Tax-Supported Debt

The following chart illustrates the uses for which the State has issued net tax-supported debt calculated on the amount outstanding. The State has used the proceeds of its debt programs for many purposes with the two largest being to provide facilities and infrastructure for higher education (51%) and public schools (23%).

Chart 3

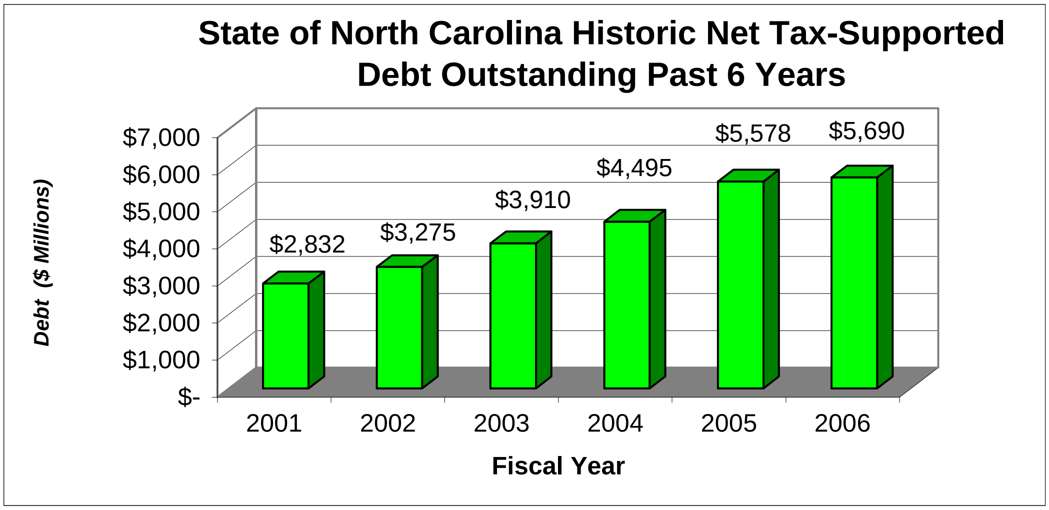
North Carolina Outstanding Net Tax-Supported Debt by Program as of June 30, 2006



Growth in State Debt

Net tax-supported debt has shown significant growth over the last six years as the State has used debt financing to address the requirements of a growing population for education and other capital needs. Tax-supported debt increased from $2.8 billion at June 30, 2001 to approximately $5.7 billion at June 30, 2006. Chart 4 below illustrates the growth in total State net tax-supported debt outstanding over the last six years.

Chart 4

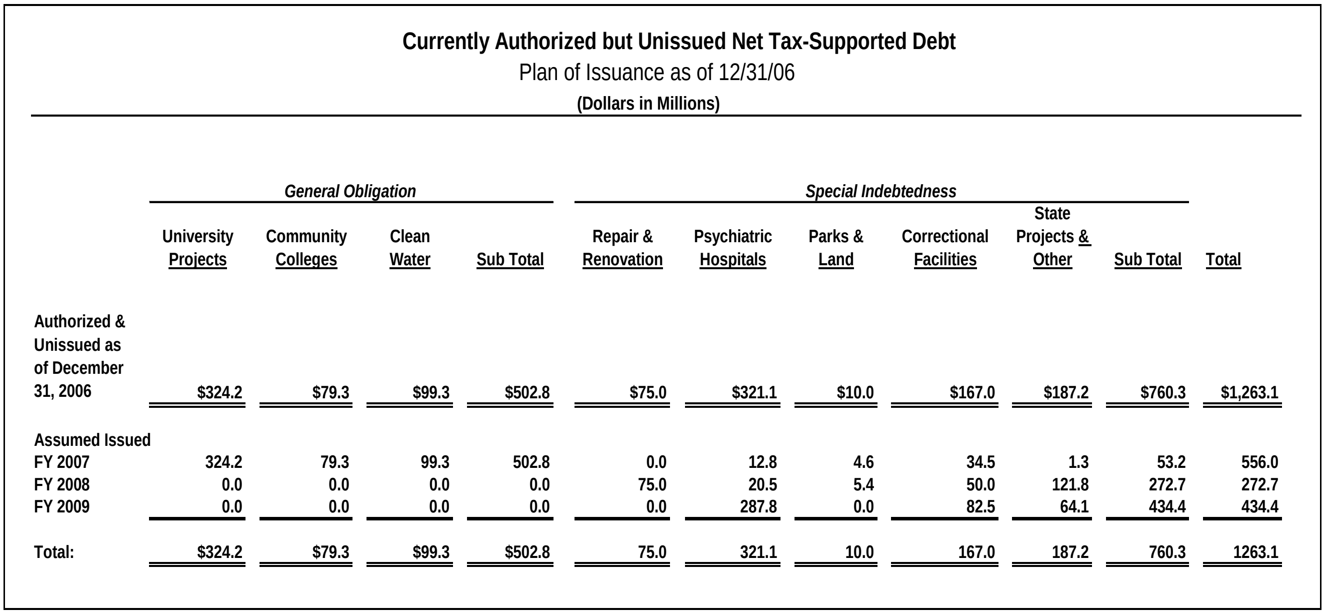


Authorized but Unissued Debt

The State issues debt on a cash flow basis. Bond issues are timed to provide funds as they are actually needed. Therefore there is typically a lag between when debt is authorized and when it is actually issued. As of the end of December 2006, the amount of such authorized but unissued net tax-supported debt totaled approximately $1.26 billion, including $403 million Higher Education Bonds, $99 million Clean Water Bonds, and $760 million of Certificates of Participation to fund various other projects. For planning purposes, the State anticipates issuance of all currently authorized but unissued debt through Fiscal Year 2010.

Chart 5 below shows the projected pace of net tax-supported debt issuance over the next three years. As discussed previously, Highway debt and other special indebtedness payable from non-tax supported revenue is excluded.

Chart 5



Currently Authorized but Unissued Net Tax-Supported Debt
Plan of Issuance as of 12/31/06
(Dollars in Millions)

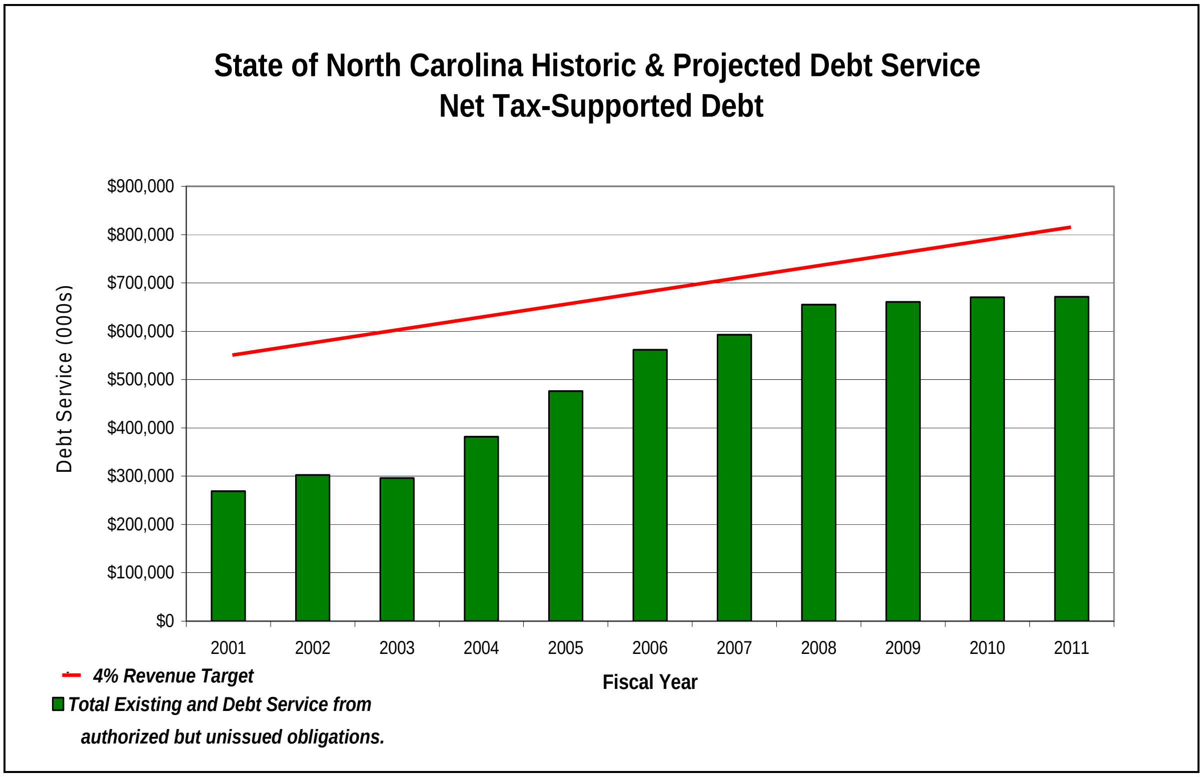
	General Obligation				*Special Indebtedness*						
	University Projects	Community Colleges	Clean Water	Sub Total	Repair & Renovation	Psychiatric Hospitals	Parks & Land	Correctional Facilities	State Projects & Other	Sub Total	Total
Authorized & Unissued as of December 31, 2006	$324.2	$79.3	$99.3	$502.8	$75.0	$321.1	$10.0	$167.0	$187.2	$760.3	$1,263.1
Assumed Issued											
FY 2007	324.2	79.3	99.3	502.8	0.0	12.8	4.6	34.5	1.3	53.2	556.0
FY 2008	0.0	0.0	0.0	0.0	75.0	20.5	5.4	50.0	121.8	272.7	272.7
FY 2009	0.0	0.0	0.0	0.0	0.0	287.8	0.0	82.5	64.1	434.4	434.4
Total:	$324.2	$79.3	$99.3	$502.8	75.0	321.1	10.0	167.0	187.2	760.3	1263.1

Debt Service

The amount the State spends on debt service each year has risen, both on an absolute basis and as a percentage of general tax revenues. This trend is expected to continue for the near future, as the absolute amount of outstanding debt also increases. Both the State's historic and projected debt service, incorporating the debt service on all authorized but unissued amounts, is illustrated below in Chart 6.

The scheduled retirement of debt is an important source of future debt capacity and its impact is incorporated into the affordability analysis presented in Section IV and Appendix B.

Chart 6



Section III - Review of State Credit Ratings and Comparative Ratios

Credit ratings are the rating agencies' assessment of a governmental entity's ability and willingness to repay debt on a timely basis. Credit ratings are an important factor in the public credit markets and can influence interest rates a borrower must pay.

Chart 7

North Carolina Credit Rating Matrix

State of North Carolina

General Obligation Bond Credit Ratings as of January 12, 2007

Rating Agency	*Rating*	*Outlook*
Fitch Ratings	AAA	Stable
Moody's Investors Service	Aaa	Stable
Standard & Poor's Rating Services	AAA	Stable

The State's general obligation bonds are rated AAA with a "stable" outlook by FitchRatings ("Fitch"), and AAA with a "stable" outlook by Standard & Poor's Ratings Services ("S&P") and Aaa by Moody's Investors Service ("Moody's") with a "stable" outlook, the highest ratings attainable. On January 12, 2007, Moody's reinstated North Carolina's Aaa rating, citing the State's strong financial performance, relatively moderate debt burden, effective management, healthy financial outlook, replenishment of reserves and recent economic gains surpassing the national averages. The action by Moody's underscores the benefits of the State's conservative approach to its financial operations.

Comparison of Debt Ratios to Selected Medians

A comparison to national and peer group medians is helpful because absolute values are more useful with a basis for comparison. The primary source for this information is Standard & Poor's 2006 Public Finance Scorecard.

How North Carolina compares with its peers for the three debt ratios evaluated is presented below. The peer group is composed of states rated "triple A" by all three credit rating agencies (Delaware, Georgia, Maryland, Missouri, North Carolina, Utah and Virginia) and South Carolina which is rated "triple A" by two of the three agencies. As shown in Chart 8, the State's debt ratios are below the median levels for its peer group.

Chart 8

North Carolina Debt Ratios

versus Actual Ratios for Other Highly Rated States *

State	Ratings (Fitch/S&P/Moody's)	2005 Debt to Personal Income	2005 Debt per Capita	2005 Total Debt Service as % of General Fund Expenditures
Delaware	AAA/AAA/Aaa	5.9%	$2,170	4.9%
Georgia	AAA/AAA/Aaa	2.5%	759	3.1%
Maryland	AAA/AAA/Aaa	2.5%	1,052	5.5%
Missouri	AAA/AAA/Aaa	1.4%	454	1.2%
South Carolina	AAA/AA+/Aaa	2.2%	618	3.4%
North Carolina	AAA/AAA/Aaa	2.4%	742	2.0%
Utah	AAA/AAA/Aaa	2.7%	754	4.2%
Virginia	AAA/AAA/Aaa	2.0%	760	3.2%
	Peer Group Median	2.5%	$757	3.3%
	NC Ratio to Median	98.0%	98.1%	60.6%

Tax-Supported Debt Ratios

North Carolina			Tax-Supported Debt Service as a % of DAAC Revenues
2006 (Actual)	2.1%	$649	3.2%
2007	2.1%	$692	3.4%
2008	2.0%	$670	3.6%
2009	1.8%	$645	3.5%

* Source: Standard & Poor's 2006 Public Finance Scorecard and selected calculated information.
North Carolina projections are based on February 1, 2007 DAAC Report.

SECTION IV – Guidelines and Model Results

Net Tax-Supported Debt Service as a Percentage of General Tax Revenues

The Committee adopted the following target and ceiling guidelines as the preferred measure used to determine the amount of net tax-supported debt that can be prudently authorized by the State:

- Net Tax-Supported Debt Service as a percentage of General Tax Revenues should be targeted at no more than 4% and not exceed 4.75%.

The Committee adopted a revision in the manner that the amount of debt affordability is presented for the 2006 report, recognizing that a measure of affordability that assumes that all additional debt that the State has the capacity to authorize is issued in the year it is available is not consistent with current practice. There is often a time lag, sometimes of multiple years, between when debt is authorized and when it is issued. The adopted annual measure smoothes the amount of debt the State can afford to prudently authorize each and every year for the model horizon without exceeding its target ratios. In practice, the limit imposed by the years of the least capacity over the model horizon (2011 and 2012) drives the smoothing.

4.0% Target Ratio/Debt Service Impact

Illustrated below the first line is the actual amount of new tax-supported debt that could be authorized and issued by year staying within the 4.0% target ratio. The second line shows this new debt amount smoothed over every year of the planning horizon.

One important source of capacity is the retirement of existing debt. As the State retires debt, the amount becomes a resource of future capacity. The amount of debt to be retired totals nearly $1.86 billion through 2011 and is netted from Total Debt Capacity per year to illustrate the impact versus that of revenue growth.

Finally, the debt service arising from the presumed issuance of $384 million of new debt annually is illustrated.

Table 2

Net Tax-Supported Debt Capacity using 4.0% debt service/revenues target ratio
(In Millions of dollars)

Fiscal Year	2007	2008	2009	2010	2011
*Total Additional Debt Capacity per Year **	$1,032.1	$149.1	$50.4	$56.3	$520.2
Debt Capacity Available Each and Every Year	384.0	384.0	384.0	384.0	384.0

* In addition to that already Authorized but Unissued. Assumes additional debt capacity is authorized and issued in stated fiscal year.

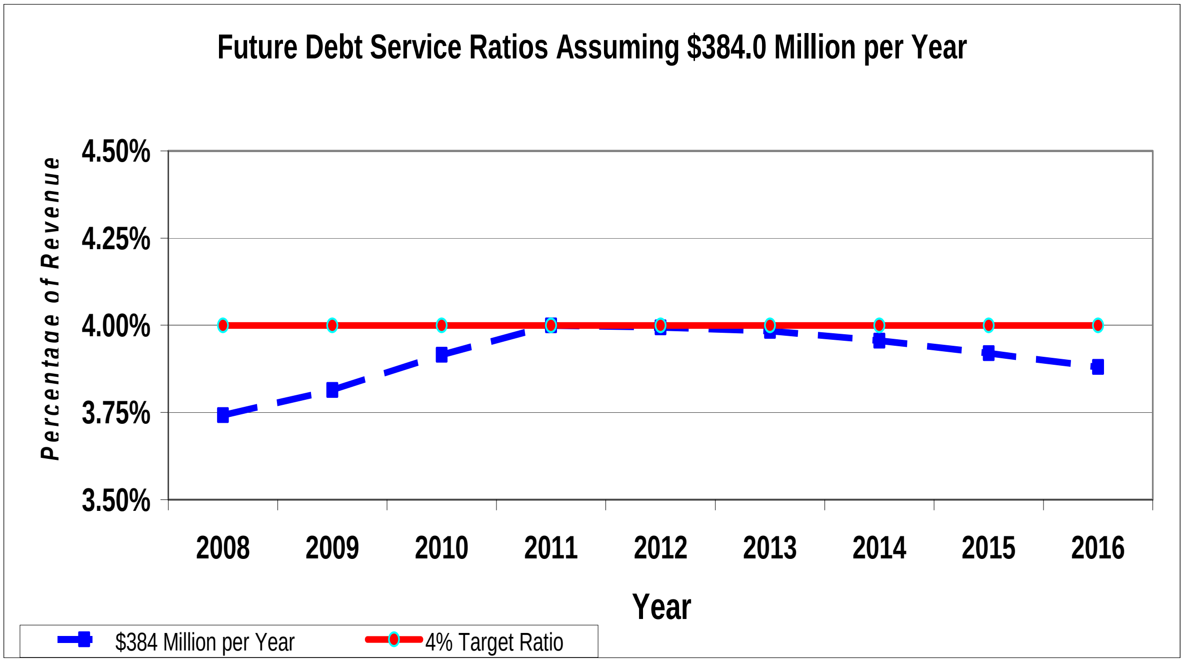
Table 3

Retirement of Outstanding Debt Compared to the $384.0 Million Annual Debt Capacity
(In Millions of Dollars)

Fiscal Year	2007	2008	2009	2010	2011
Retirement of Outstanding Debt	333.2	367.5	374.9	386.8	395.1
Debt Capacity in Excess of Retirement of Debt	50.8	16.5	9.1	(2.8)	(11.1)
Additional Debt Service on Debt Capacity ($384.0 million / year)	0.0	28.3	59.7	94.1	134.4

A chart showing the ratio of debt service to revenues that is the result assuming the annual $384 million is issued as shown below in Chart 9.

Chart 9



Sensitivity Analysis on 4% Target Solution

The model results are highly sensitive to changes in revenue assumptions. Specifically, a one percent change, either up or down, in general tax revenues in each and every year of the model solution horizon will change the amount of annual debt capacity each and every year by approximately $22 million. The effect of a variation in revenues of $100 million per year will impact the amount of new debt that may be prudently issued each and every year by approximately $12 million per year.

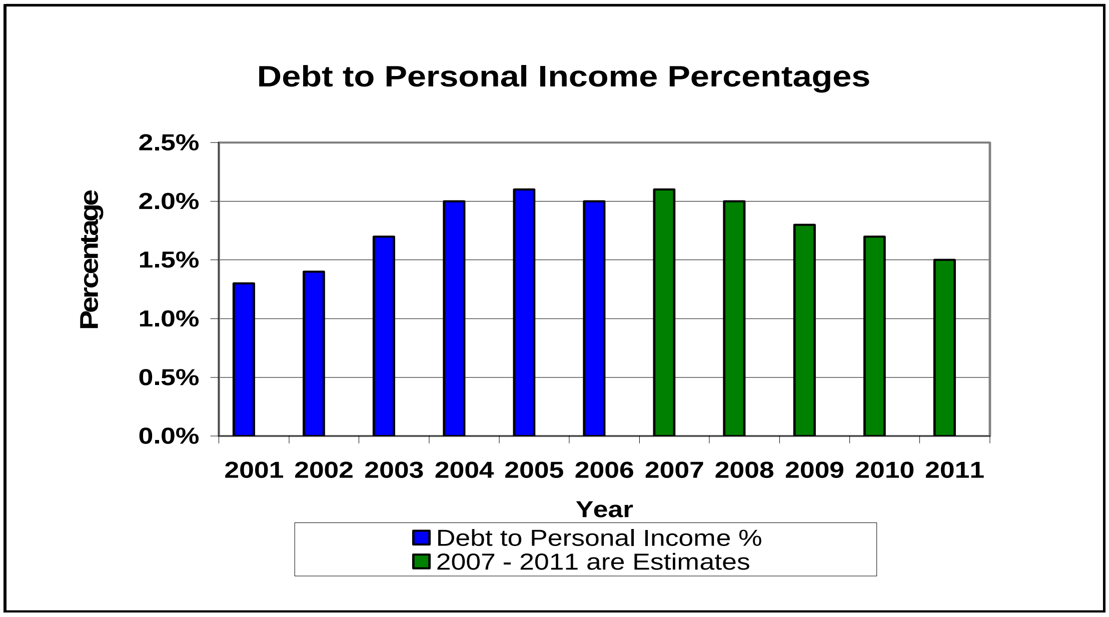
Net Tax-Supported Debt to Personal Income

The Committee has also established guidelines for evaluating the State's debt burden as a measure of personal income, as follows:

- Net Tax-supported Debt as a percentage of Personal Income should be targeted at no more than 2.5% and not exceed 3.0%.

Chart 10 below, shows that the amount of tax-supported debt as a percentage of personal income has been rising and will peak in Fiscal Year 2007 incorporating all currently authorized but unissued debt.

Chart 10



Source: Population and Personal Income statistics provided by "Moody's Economy.com" courtesy of the North Carolina General Assembly Fiscal Research Division.

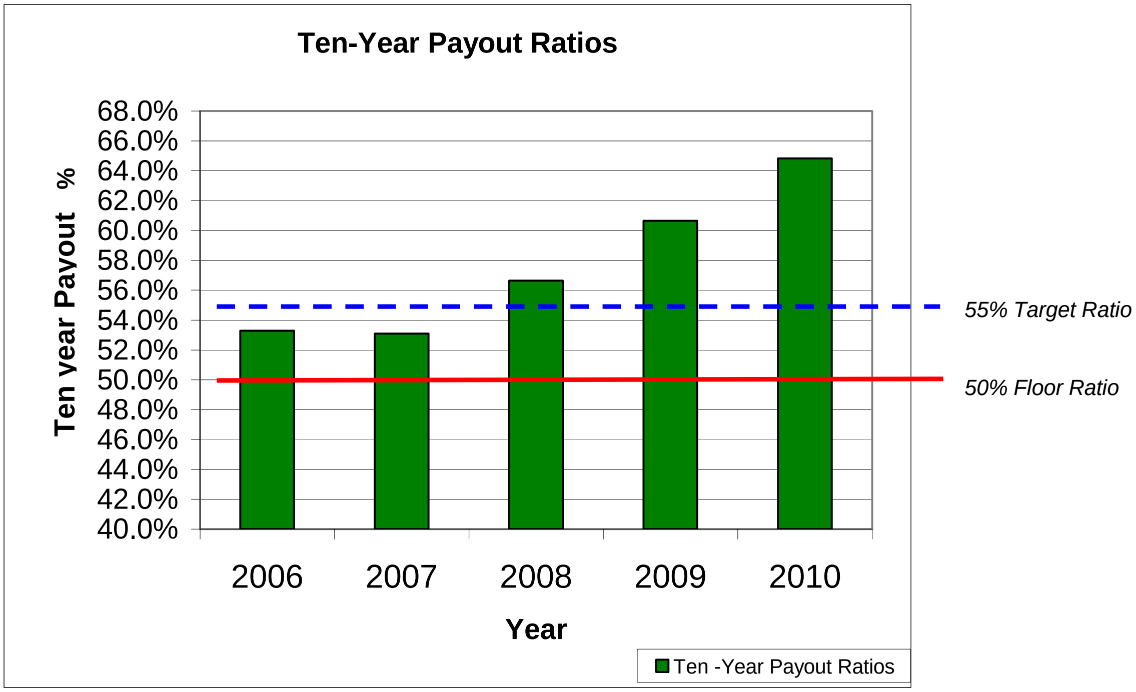
Ten-Year Payout Ratio

A short period of time within which a State retires outstanding debt obligations is considered a positive credit attribute. The Committee has adopted the following guideline regarding the payment structure of the State's debt:

- The amount of debt to be retired over the next ten years should be targeted at no less than 55% and should not decline below 50%.

Chart 11 below illustrates that the State's payout ratio will reach its targeted levels in Fiscal Year 2008 and beyond.

Chart 11



Level of Unreserved Fund Balance

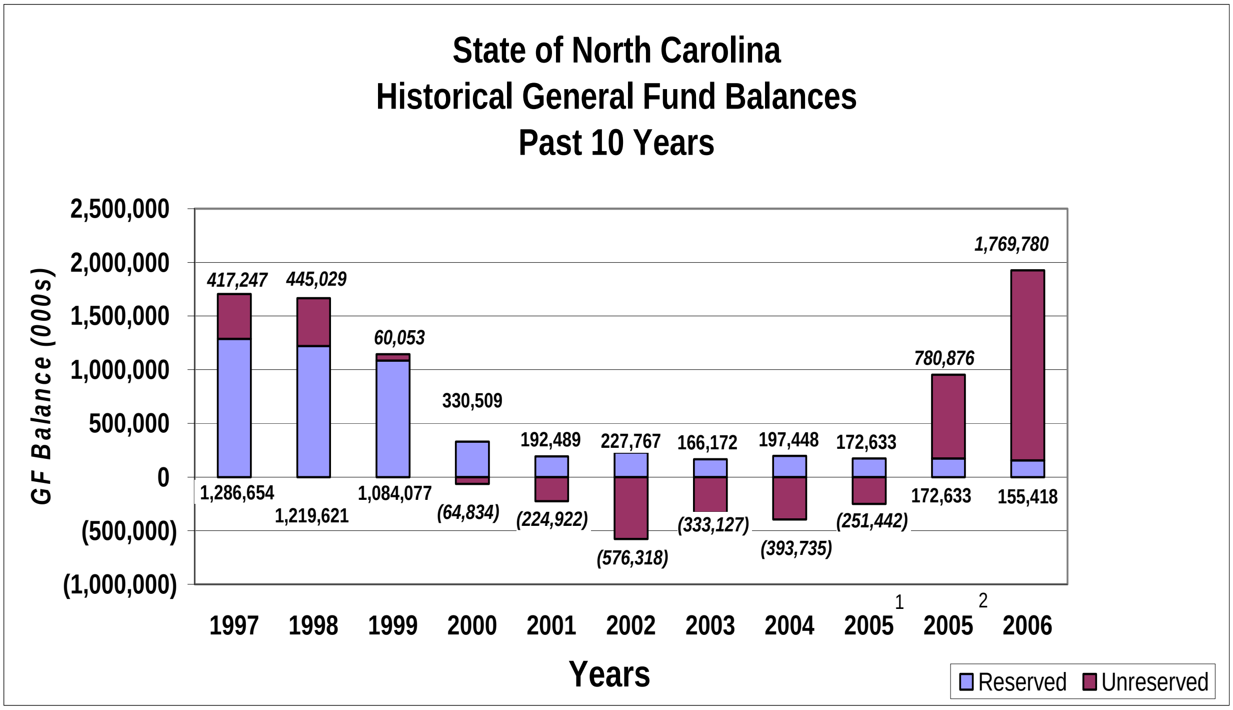
As discussed previously, the rating agencies place emphasis on budgetary reserves. In a report dated December 22, 2005, Standard & Poor's stated that "…reserves are critical to managing economic cycles and providing substantial flexibility to manage the budget and capital requirements of a government."

During 2006, through a combination of strong operational results and a change in accounting methodology that achieves a better match between accrual of tax revenues and refunds, the State succeeded in eliminating the negative Unreserved General Fund Balance on a GAAP basis. That negative balance had been a legacy of the budget challenges and natural disasters beginning in Fiscal Year 1999-2000. At FY 2006 year-end, the Unreserved General Fund Balance totaled $1.770 billion, or 10.4% of recurring tax revenues. Without the accounting change, estimates put the Unreserved General Fund Balance at $417 million.

Legislation adopted in 2006 (SL 2006-203) increases the targeted Savings Reserve Fund ("Rainy Day Fund") balance to 8% (from 5%) of the prior year's General Fund operating budget. Based on Fiscal Year 2005-2006 results, the resulting targeted Rainy Day Fund balance at 8% is $1.371 billion. The Committee recognizes that the legislation specifically sets a level of reserves for the State that is consistent with the recommendations made by the Committee in previous years.

Chart 12 depicts the State's historic General Fund Balance over the last ten years.

Chart 12



[1] As originally reported in 2005 Comprehensive Annual Financial Report.

[2] As restated per the Office of State Controller.

Section V - Capital Project Costs and Pay-Go Funding

A consideration that affects capital project costs and future debt service capacity is the use of "pay-as-you-go" ("PAYGO") funding of capital projects. By using current revenues to fund a portion of the capital improvements plan, the State can reduce future debt service and retain debt capacity. For example, if the State funded a capital project with $50 million as PAYGO rather than financing it through a $50 million, 20-year bond issue, the State would save approximately $20.9 million in total interest payments over the life of the issue assuming current market conditions.

Appendix A

Revenues and Liabilities in the North Carolina Debt Affordability Model

Revenues

The model uses general tax revenues adjusted for one-time or non-recurring items plus certain other revenue items deemed available to service debt from the most recently available *Comprehensive Annual Financial Report.* The following items are included:

General Fund Tax Revenues

- Individual Income Tax
- Corporate Income Tax
- Sales & Use Tax
- Franchise Tax
- Insurance Tax
- Beverage Tax
- Inheritance Tax
- Other Taxes

Other General Fund Revenue Items

- Investment Income
- Miscellaneous Revenues

Revenue Growth and other Assumptions

Changes to revenue estimates have a significant impact on the calculation of available debt capacity because of the multiplier effect of compounding growth over the ten-year period. And such projections are especially important when they reflect changing or differing economic outlooks.

Base revenues are assumed to grow at a rate of 3% annually through the forecast period (2016). The Committee believes this assumption to be prudent. Sensitivity analysis has been provided for those who believe that these assumptions are either overly conservative or aggressive.
The revenue estimates incorporate the effect of any changes dictated in current law.

Liabilities

To calculate net tax-supported debt, credit analysts take into account all debt supported by general tax revenues. This debt position shows the amount of indebtedness serviced from an issuer's General Fund; that is, it reflects the debt service payments made directly from tax revenues and is known as net tax-supported debt. Although a consensus appears to exist among credit analysts as to the appropriateness of using net tax-supported debt as the standard for determining an issuer's debt position, there is less unanimity about the precise calculation. The Committee has determined to follow the approach of Moody's Investor Service and exclude self-supporting debt from its calculations.

The model uses a definition of net tax-supported debt that includes General Obligation Bonds, Special Indebtedness, Capital Lease Obligations, and any other such obligations that are owed to a third party over a predetermined schedule from General Fund Revenues. Obligations of Component Units, Highway Fund debt that is paid from Highway Fund revenues, non tax-supported special indebtedness that is paid from trust funds and other self-supporting debt is excluded. Short-term Tax Anticipation Notes and Energy Performance Contract Financing Liabilities are also excluded.

Other Post Employment Benefits ("OPEB")
In order to comply with Governmental Accounting Standards Board (GASB) Statements No. 43 and 45, the State Health Plan had an actuarial study completed that estimates the size of the State's unfunded liability for Other Post Employment Benefits. The bond rating agencies have been clear that OPEB liabilities do not represent a hard liability in the same way that debt service does and should not be considered tax-supported debt unless bonds are actually issued to fund part or all of the liability. They have also consistently assured the State that these liabilities do not represent a threat to the State's credit rating in the short-term. Over the longer term, the State will need to develop a realistic plan to meet these obligations.

The model includes the actual debt service from all outstanding net tax-supported debt and for all authorized, but currently unissued tax-supported debt if such issuance does not require further action on the part of the General Assembly. The following is a list of those liabilities that are included in the model (outstanding amounts as of June 30, 2006):

- General Obligation Bonds supported by General Fund Tax Revenue - $4,977,910,995.
- Appropriation-Supported Indebtedness (collectively "Special Indebtedness")
    - Certificates of Participation supported by General Funds $396,223,750. Also including
        - Chapter 1264 projects supported by the Clean Water, Natural Heritage and Parks and Recreation Trust Funds where funds flow through the General Fund - $22,006,875.
    - Capital Leases, Installment Purchase Contracts and Equipment lease obligations determined pursuant to G.S. 147-33.72H - $60,865,626.
    - Lease Revenue or Lease-Purchase Revenue Bonds - $255,045,000.

Liabilities not included in the model (outstanding amounts as of June 30, 2006):

- Highway Construction General Obligation Debt supported by separate taxes - $756,755,000.
- Appropriation-Supported Indebtedness (collectively "Special Indebtedness")
    - Certificates of Participation supported by non-General Funds including
        - Chapter 1264 projects supported by the Health and Wellness/Tobacco Trust Funds - $57,836,250 (issued), $359,126,036 (authorized but unissued).
- Specifically authorized Revenue Bonds (Butner Water and Sewer Revenue Bonds) - $8,800,000.

- Short Term Tax Anticipation Notes (not supported by General Tax Revenue) - $0.

- Obligations of the University of North Carolina System, the North Carolina Housing Finance Agency or other Component Units - $6,638,320,000.

- Energy Performance Contract obligations where such obligations are guaranteed and approved pursuant to G.S. 142-64 and not supported by separate appropriations - $23,900,000.

- Other Post Employment Benefits (“OPEB”)

Note: Although these liabilities do not constitute tax-supported debt, they are obligations of The State of North Carolina or various component units, and The State’s General Fund, although not legally obligated to, could be called upon to service these obligations if necessary.

Debt Structuring Assumptions

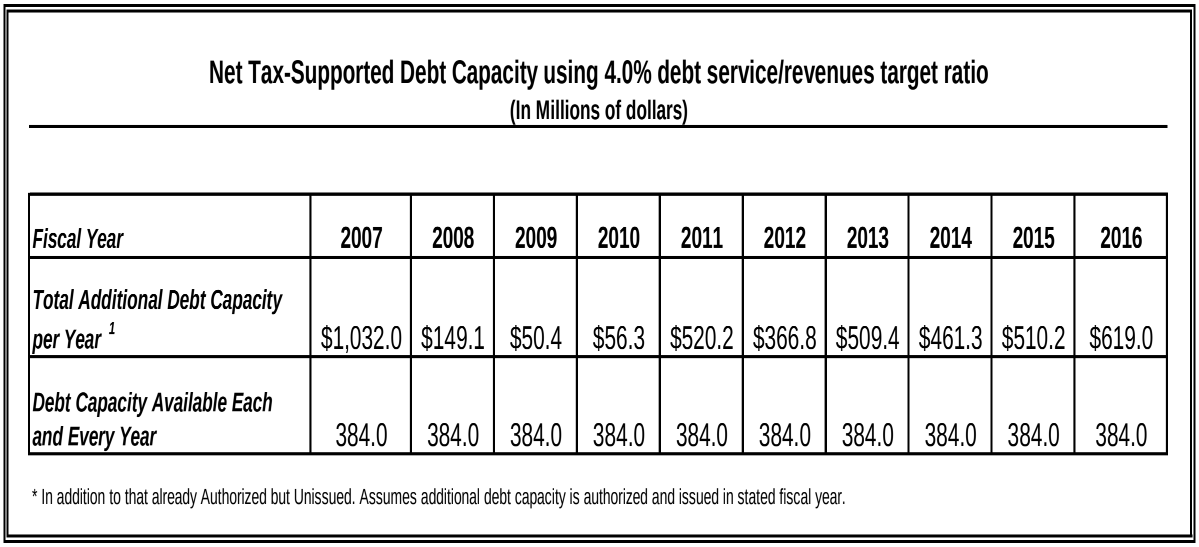
The following assumptions were used in this year’s debt affordability model calculations:

- The rate on existing Variable Rate Debt will average 4%
- The interest costs on all authorized but unissued GO and non-GO issues will be 5.50% and 6.0%, respectively.
- GO debt will be structured with a 20-year maturity with an overall level principal payment profile after the first year.
- Non-GO debt will be structured with a 20-year maturity with an overall level debt service or principal payment profile after the first year.
- The incremental model debt is assumed to be fixed-rate, 20-year maturity debt with an average interest cost of 6% and a level principal payment profile after the initial years.

Appendix B
10-Year Model Solution

4% Debt Service/Revenue Target

Table 4



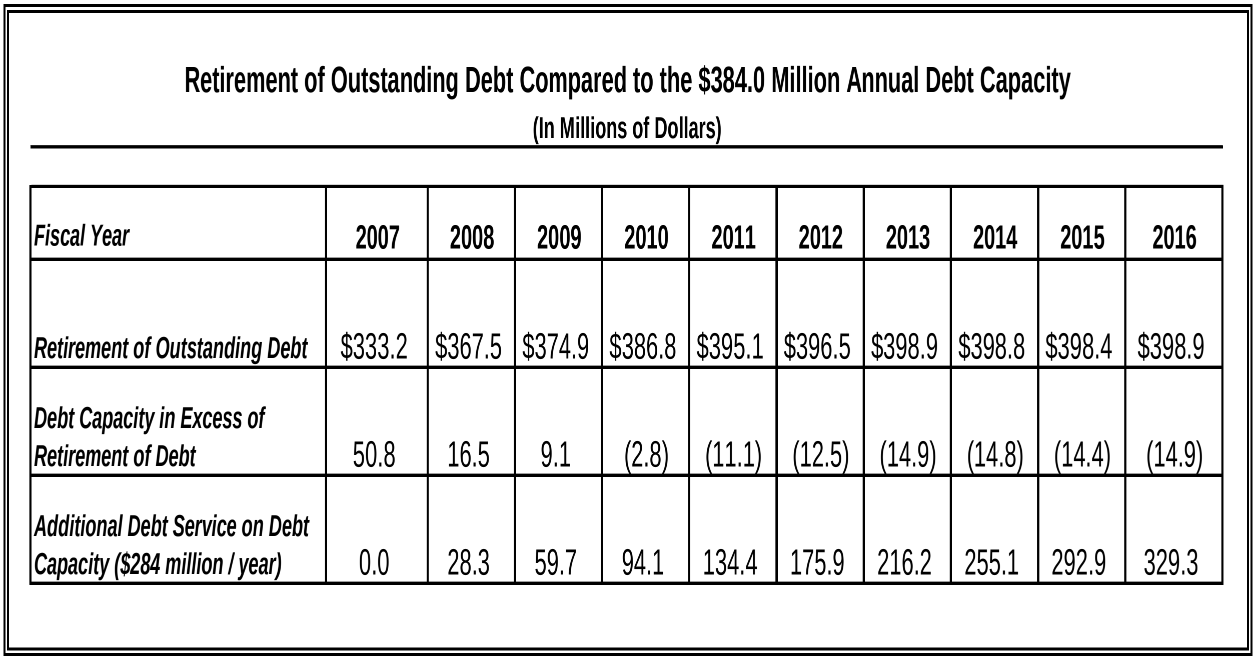
Net Tax-Supported Debt Capacity using 4.0% debt service/revenues target ratio

(In Millions of dollars)

Fiscal Year	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
Total Additional Debt Capacity per Year [1]	$1,032.0	$149.1	$50.4	$56.3	$520.2	$366.8	$509.4	$461.3	$510.2	$619.0
Debt Capacity Available Each and Every Year	384.0	384.0	384.0	384.0	384.0	384.0	384.0	384.0	384.0	384.0

* In addition to that already Authorized but Unissued. Assumes additional debt capacity is authorized and issued in stated fiscal year.

Table 5



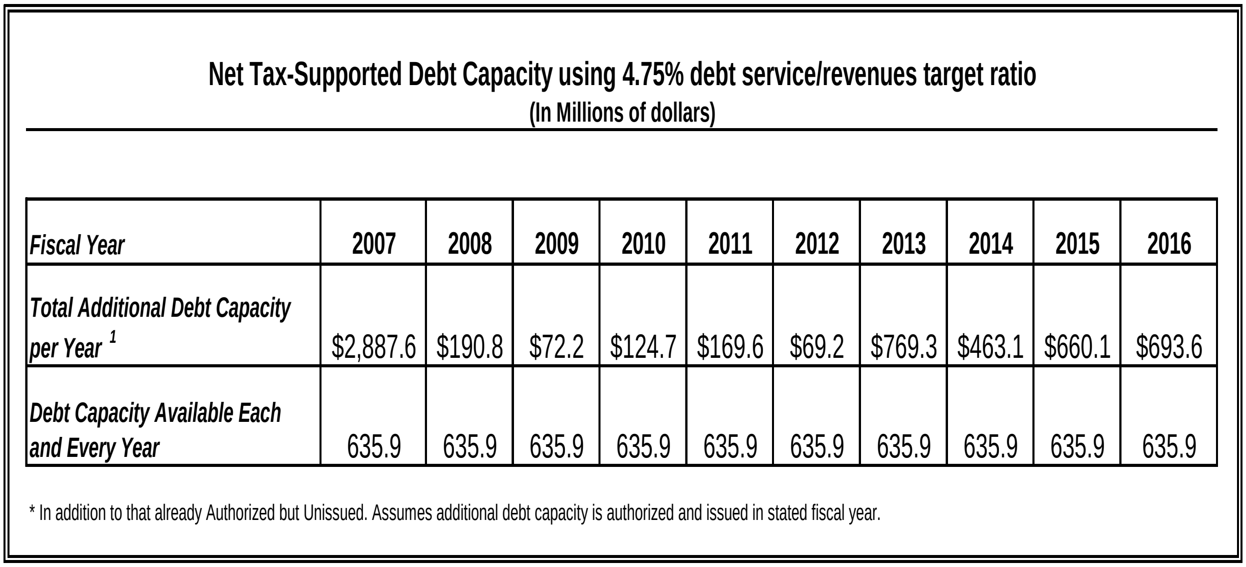
Retirement of Outstanding Debt Compared to the $384.0 Million Annual Debt Capacity

(In Millions of Dollars)

Fiscal Year	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
Retirement of Outstanding Debt	$333.2	$367.5	$374.9	$386.8	$395.1	$396.5	$398.9	$398.8	$398.4	$398.9
Debt Capacity in Excess of Retirement of Debt	50.8	16.5	9.1	(2.8)	(11.1)	(12.5)	(14.9)	(14.8)	(14.4)	(14.9)
Additional Debt Service on Debt Capacity ($284 million / year)	0.0	28.3	59.7	94.1	134.4	175.9	216.2	255.1	292.9	329.3

4.75% Debt Service/Revenue Target

Table 6



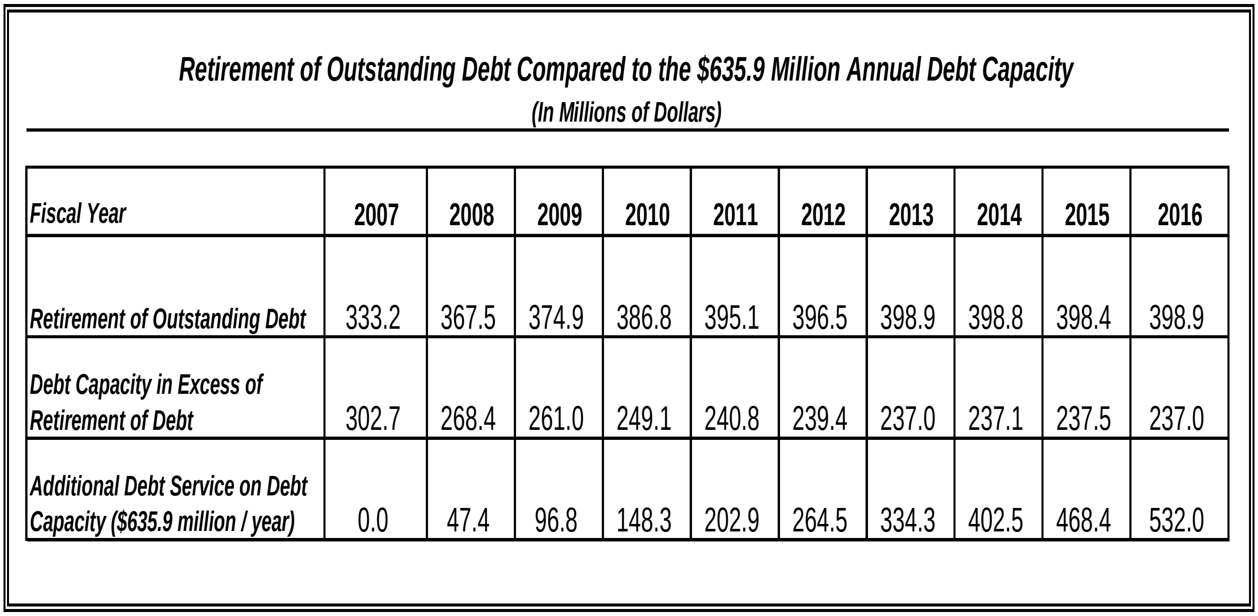
Net Tax-Supported Debt Capacity using 4.75% debt service/revenues target ratio

(In Millions of dollars)

Fiscal Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Total Additional Debt Capacity per Year [1]	$2,887.6	$190.8	$72.2	$124.7	$169.6	$69.2	$769.3	$463.1	$660.1	$693.6
Debt Capacity Available Each and Every Year	635.9	635.9	635.9	635.9	635.9	635.9	635.9	635.9	635.9	635.9

* In addition to that already Authorized but Unissued. Assumes additional debt capacity is authorized and issued in stated fiscal year.

Table 7



Retirement of Outstanding Debt Compared to the $635.9 Million Annual Debt Capacity

(In Millions of Dollars)

Fiscal Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Retirement of Outstanding Debt	333.2	367.5	374.9	386.8	395.1	396.5	398.9	398.8	398.4	398.9
Debt Capacity in Excess of Retirement of Debt	302.7	268.4	261.0	249.1	240.8	239.4	237.0	237.1	237.5	237.0
Additional Debt Service on Debt Capacity ($635.9 million / year)	0.0	47.4	96.8	148.3	202.9	264.5	334.3	402.5	468.4	532.0