



UNC SYSTEM FY 2023 DEBT CAPACITY STUDY

BOG Committee on Budget and Finance

May 22, 2024

Overview of FY 2023 Debt Capacity Study

UNC System Report

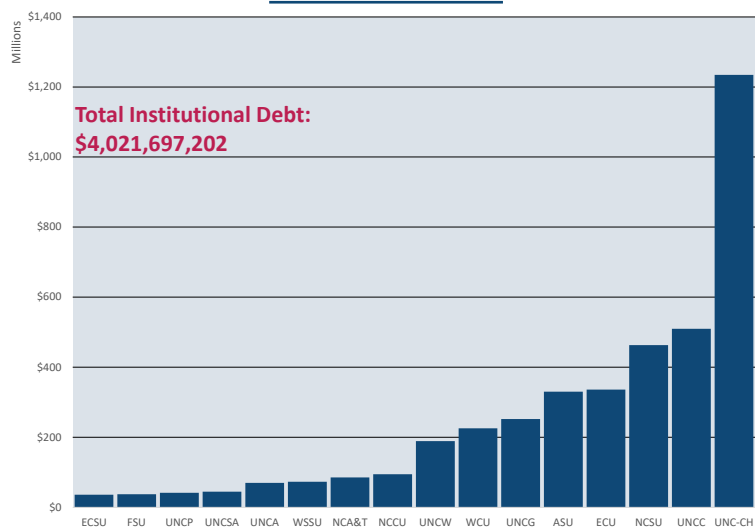
- G.S. 116D-56 requires the Board to advise stakeholders “on the **estimated debt capacity of The University of North Carolina for the upcoming five fiscal years.**”
- The Debt Capacity Study focuses on the following elements:
 - UNC System’s current approach to evaluating debt and the complexity of the credit rating process;
 - Assignment of each institution’s estimated debt capacity over a five-year period; and
 - Recommendations for the use of the Study and suggestions for future improvement.
- Debt capacity increases at 15 institutions over the five-year study period, 9 institutions have increased their debt capacity compared to last year, and all 16 institutions have improved at least one of their primary financial ratios since the 2022 study.

Overview of FY 2023 Debt Capacity Study

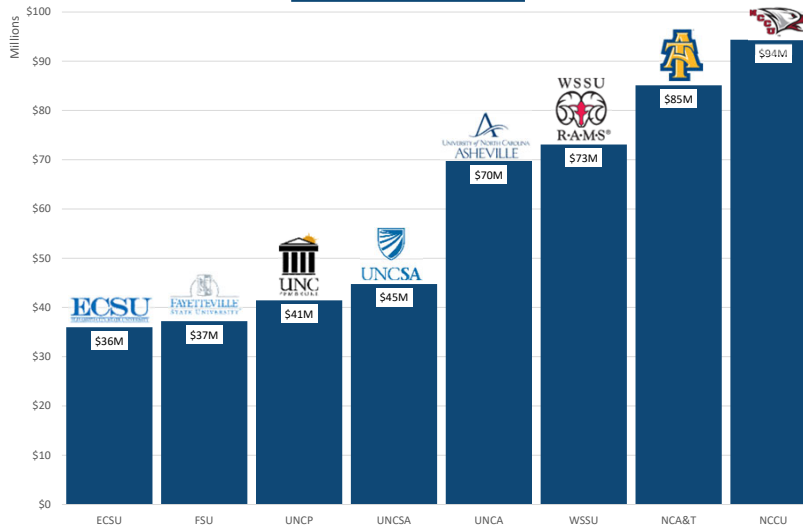
Campus Reports

- Each campus report provides context for the institution's financial model and addresses the legislative requirements.
- Campus reports contain the following components:
 - Overview of recent enrollment trends and other general performance metrics;
 - Explanation of factors considered in setting growth factors;
 - Summary of projected results for the financial model's three financial ratios;
 - Current debt and credit profiles, including details on financed projects, sources of repayment, and recommendations for maintaining or improving the institution's credit rating; and
 - Copy of any existing debt management policy.

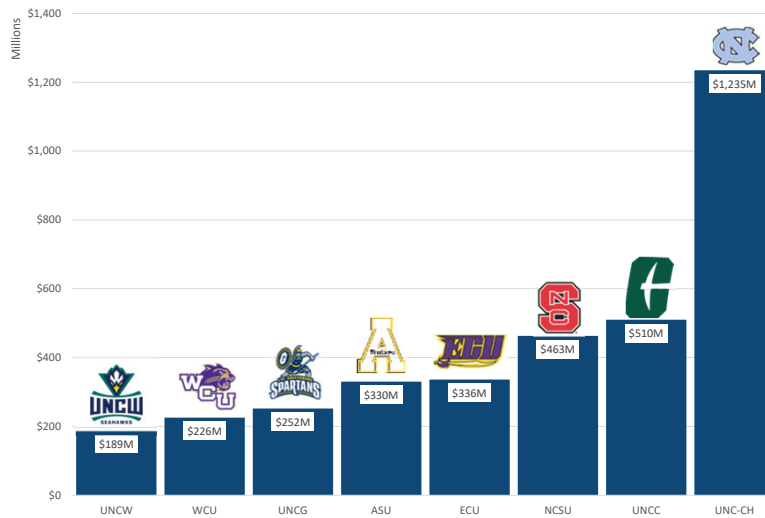
FY 2023 Total Debt by Institution



FY 2023 Total Debt by Institution with < \$100M in Total Debt



FY 2023 Total Debt by Institution with > \$100M in Total Debt



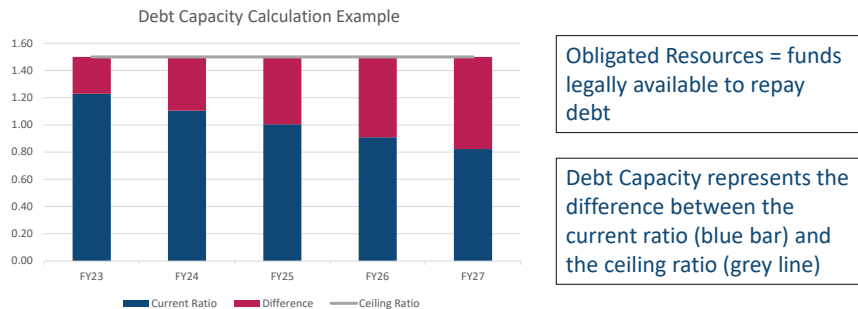
How is Debt Capacity Calculated?

Step 1: Total Debt / Obligated Resources = Current Ratio

ASU Example: $\$330,039,671 / \$268,451,531 = 1.23$

Step 2: (Ceiling Ratio – Current Ratio) * Obligated Resources = Debt Capacity

ASU Example: $(1.50 - 1.23) * \$268,451,531 = \$72,637,626$



What Causes Debt Capacity to Change?

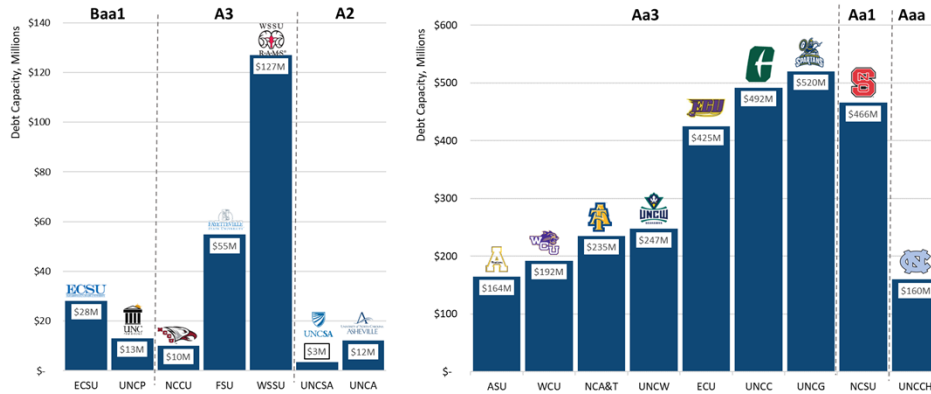
Increase

- Paying down existing debt
- Increase in “obligated resources”
 - Enrollment growth
 - Auxiliary revenue growth
 - Strong fundraising and investment returns
- Increase ceiling ratio
- Credit rating increase
- Refinancing at a lower interest rate

Decrease

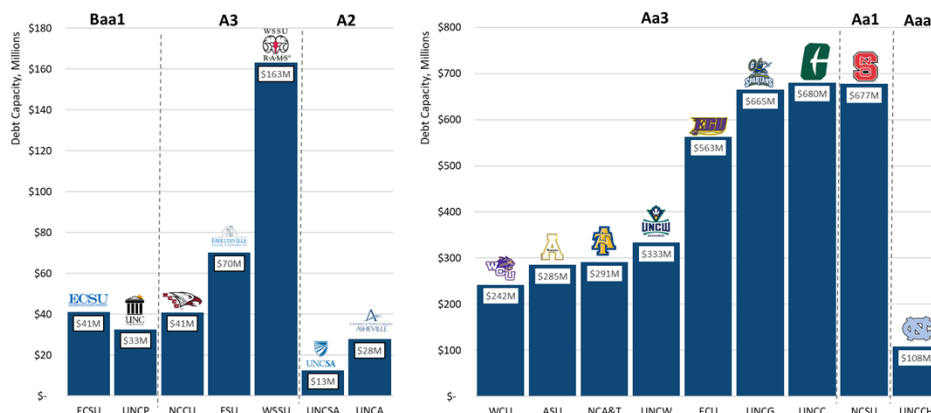
- Issuing new debt
- Decrease in “obligated resources”
 - Enrollment decline
 - Reduced auxiliary revenues
 - Lower investments returns
- Decrease ceiling ratio
- Credit rating decrease
- Higher interest rates

Debt Capacity in FY 2024



FSU is not currently rated by Moody's. FSU has been grouped based on its corresponding rating from Standard and Poor's. Standard and Poor's is no longer assigning a rating for UNCP. UNCP has been grouped based upon previous ratings.

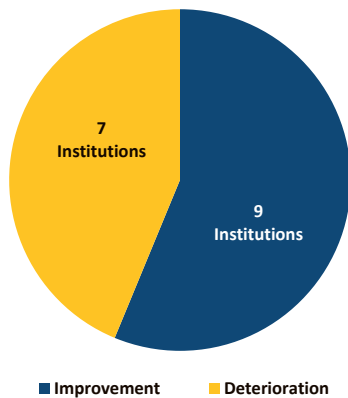
Projected Debt Capacity in FY 2028



FSU is not currently rated by Moody's. FSU has been grouped based on its corresponding rating from Standard and Poor's. Standard and Poor's is no longer assigning a rating for UNCP. UNCP has been grouped based upon previous ratings.

Campus Debt Capacity Trends

Debt Capacity vs. FY 2022 Study



Breakdown of Debt Capacity Decreases

- Debt capacity can change when institutions issue new debt for capital projects, obligated resources decline, or institutions change their policy ratios.
- Several institutions have decreased capacity due to planned debt issuances.
 - N.C. A&T: \$58.5M
 - NCSU: \$142M
 - UNCCH: \$330.5M
 - UNCP: \$7.9M
 - WCU: \$30M

Comparison of Campus Ratios: FY22 to FY23

Institution	Debt to Obligated Resources	5-Year Payout Ratio	Debt Service to Operating Expenses
ASU	0.99	26%	5.02%
ECU	0.54	24%	2.52%
ECSU	1.24	23%	3.00%
FSU	0.83	21%	1.76%
N.C. A&T	0.66	15%	1.42%
NCCU	1.80	29%	3.07%
NCSU	0.69	24%	2.15%
UNCA	1.69	23%	5.19%
UNCCH	0.44	16%	2.04%
UNCC	0.87	22%	5.21%
UNCG	0.78	34%	5.23%
UNCP	1.61	29%	2.28%
UNCW	0.74	29%	4.57%
UNCSA	1.39	12%	3.19%
WCU	1.06	20%	6.38%
WSSU	1.06	29%	3.86%

Improvement from prior year

Decline from prior year

No change from prior year

Observations

- Every institution improved in at least one category.
- 5 institutions improved in all three of the primary ratios.
- Debt Service to Operating Expenses saw the most improvements from FY 2022.

Campus Credit Ratings Used in the Study

Institution	Moody's	S&P	Fitch
ASU	Aa3		
ECSU	Baa1		
ECU	Aa3	AA-	
FSU		A-	A
NC A&T	Aa3		AA-
NCCU	A3		
NC State	Aa1	AA	
UNCA	A2		
UNC-CH	Aaa	AAA	AAA
UNCC	Aa3	A+	
UNCG	Aa3	A+	
UNCP			
UNCSA	A2		
UNCW	Aa3		
WCU	Aa3		
WSSU	A3	A-	

Observations





- Moody's upgraded NC A&T's credit rating in July 2023 from A1 to Aa3 with a stable outlook. Fitch affirmed NC A&T's AA- rating and positive outlook.
- Moody's affirmed ASU's Aa3 rating but revised the outlook from stable to negative.
- Moody's affirmed UNCA's A2 rating but revised the outlook from stable to negative.

Note: S&P is no longer providing a credit rating for UNCP's general revenue bonds. UNCP's most recent A- rating was in 2020 based on the institution's 2006B Pool Bonds that have since been retired.

Plans to Improve Future Debt Capacity Studies

- Moving emphasis towards debt affordability (vs. capacity)
 - What is the impact of an institution's existing debt on its operating budget?
 - What is the impact of proposed projects and the associated debt on an institution's operating budget?
- Looking at metrics over multiple years
 - Year-to-year financial fluctuations can cause single-year volatility.
- Streamlining report materials
 - Current study materials, including individual campus reports, exceeds 400 pages.
- Adjusting the timing of BOG presentation
 - Plan to present study as context for self-liquidating project requests

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QUESTIONS?

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**THE UNIVERSITY OF
NORTH CAROLINA SYSTEM**

FY 2023 UNC System Debt Capacity Study

May 22, 2024

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FY 2022-23 Debt Capacity Study

Purpose of the Study

S.L. 2015-97 added a new Article 5 to Chapter 116D of the General Statutes of North Carolina (the “**Act**”), requiring each constituent institution (collectively, the “**Institutions**”) of The University of North Carolina (the “**University**”) to provide the University of North Carolina Board of Governors (the “**Board**”) with an annual report on its current and anticipated debt levels. The Act requires that the University, in turn, submit to the Office of State Budget and Management, the Joint Legislative Commission on Governmental Operations, the State Treasurer, and The University of North Carolina System (the “**UNC System Office**”) an annual study incorporating each Institution Report.

This report (the “**Study**”) has been developed to address the Act’s mandate to advise stakeholders “on the estimated debt capacity of The University of North Carolina for the upcoming five fiscal years” and establish “guidelines for evaluating the University’s debt burden.”

The Act also requires the Board to submit a uniform report from each institution regarding its debt burden and anticipated debt levels, in addition to other data and information related to each institution’s fiscal management. Those Institution Reports are attached to the Study as **Appendix D**.

Methodology Used

Since the Act defines “debt” for the purposes of the Study to exclude debt serviced with “funds appropriated from the General Fund of the State,” the Study primarily focuses on special obligation bonds issued under Article 3 of Chapter 116D (“**special obligation bonds**” or “**general revenue bonds**”), millennial campus bonds issued under Article 21B of Chapter 116, and other long-term debt issued on behalf of each institution to finance various capital facilities, including housing and other enterprise projects.

N.C. General Statute §116D-26(a) prohibits using the obligated resources of one institution to secure the debt of another institution, meaning the University has no debt capacity independent of its constituent institutions’ individual ability to issue debt. The Study does not, therefore, aggregate each institution’s individual debt levels and obligated resources to derive a Systemwide debt capacity metric. Instead, the Study offers a comprehensive review of each institution’s debt capacity using the guidelines presented in the Act, which the UNC System Office has presented in detail in the Institution Reports included as part of **Appendix D**.

The Act expressly requires the University to establish guidelines for two ratios — **debt to obligated resources** and a **five-year payout ratio**. The Study also includes a ratio that is more widely used to measure a public university’s debt burden — **debt service to operating expenses**. For more details on the ratios, see the information under the caption “Description of Ratios” on the following page.

The Study is based on a financial model that has been developed to measure three ratios on a pro forma basis over the next five years (the “**Study Period**”). Recognizing the wide diversity in enrollment, funding sources, and missions across each institution, the UNC System has worked with each institution to establish tailored and meaningful target policies for its respective ratios.

While an institution’s ultimate debt capacity is affected by numerous quantitative and qualitative factors, for the purposes of the Study, “estimated debt capacity” is defined as the maximum amount of debt each institution could issue without exceeding its ceiling ratio for debt to obligated resources in any single year of the study period.

Description of Ratios

The model considers the following three ratios:

Statutory Ratios

Ratio	Explanation	Commentary
Debt to Obligated Resources	Compares each institution's outstanding debt to the funds legally available to service its debt	<ul style="list-style-type: none"> Provides a general indication of an institution's ability to repay debt from wealth that can be accessed over time Tied to the statutory framework for institution debt, so ratio is not used outside the State
Five-Year Payout	Measures the percentage of each institution's debt to be retired within the subsequent five year period	<ul style="list-style-type: none"> Indicates how rapidly an institution's debt is amortizing and how much additional debt capacity may be created in the near term Five year horizon is not widely used

Supplementary Ratio

Ratio	Explanation	Commentary
Debt Service to Operations	Measures debt service burden as a percentage of each institution's total operating expenses	<ul style="list-style-type: none"> Indicates an institution's operating flexibility to finance existing requirements and new initiatives Uses expenses rather than revenues because expenses tend to be more stable year-over-year Permits comparison to peers outside the State

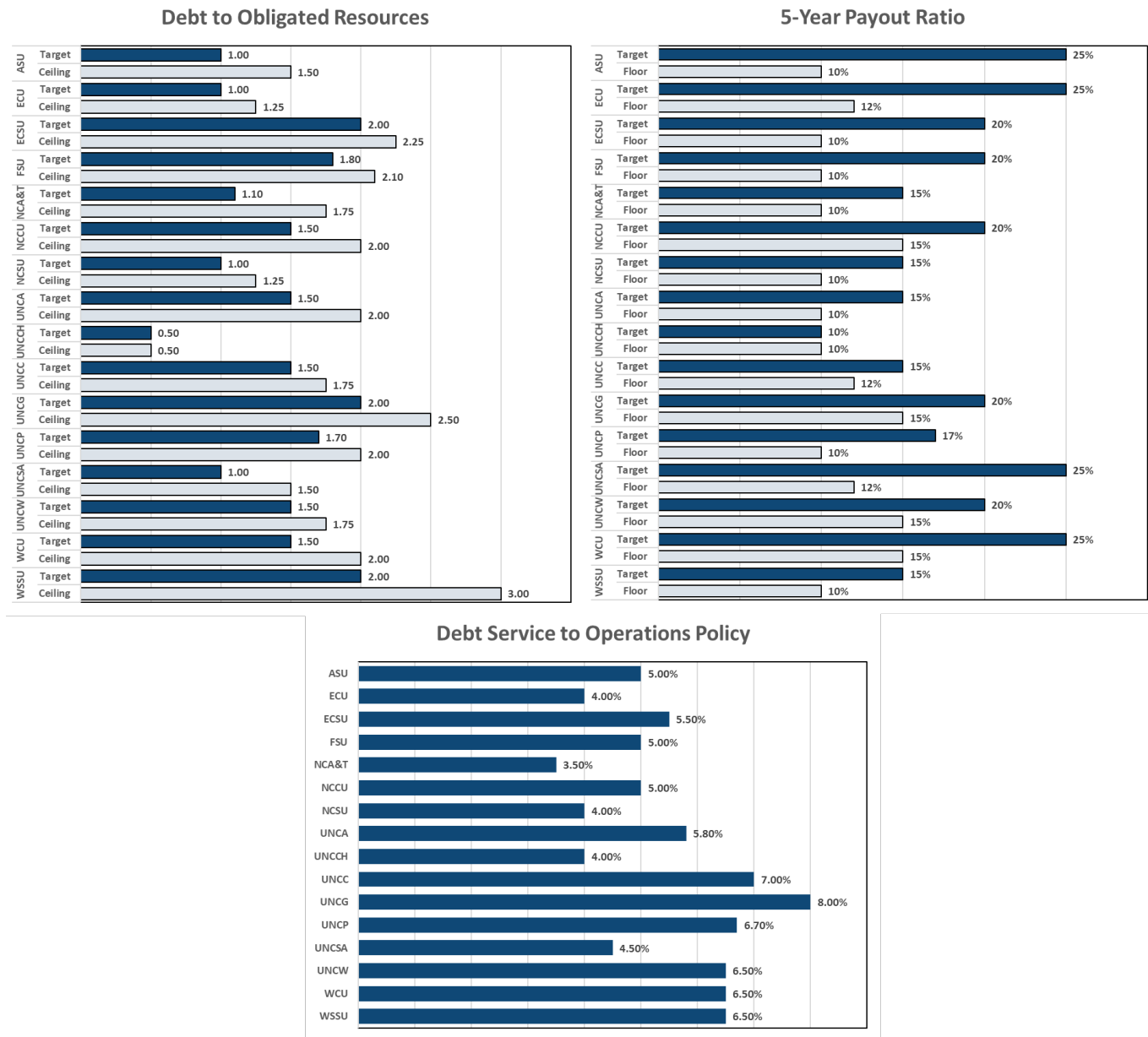
The first two ratios — **debt to obligated resources** and **five-year payout** — are mandated by the Act. While the ratios provide useful snapshots of each institution's debt profile and fiscal condition, the two ratios are not used outside of North Carolina. To provide additional data points and peer comparisons, the Study tracks an additional ratio — **debt service to operations**.

Note that the Study uses each institution's "Available Funds" as a proxy for its obligated resources. "Available Funds" is reported publicly by each institution with outstanding general revenue bond debt and reflects how Article 3's "obligated resources" concept has been translated into the bond documentation governing each institution's general revenue bonds. The two concepts are identical for most institutions, but to the extent there is any discrepancy, "Available Funds" will produce a lower, more conservative figure.

See **Appendix A** for more information on the ratios and the definitions for related terms.

Overview of Target and Policy Ratios

For the two statutorily required ratios — **debt to obligated resources** and the **five-year payout ratio** — each institution has set both a target ratio and a floor or ceiling policy, as applicable. The target and policy ratios are summarized below. See **Appendix C** for more information on the methodology each institution used in setting its target and policy ratios.

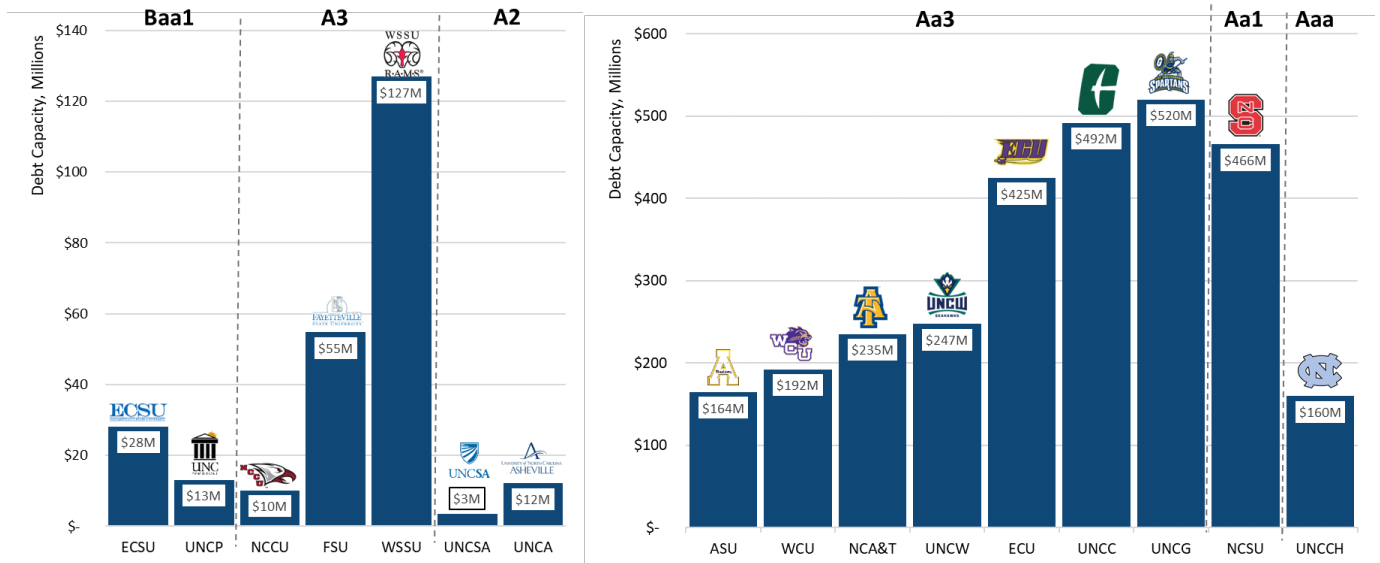


Conclusions

The following table summarizes the **current debt capacity** of each institution as defined for the purposes of the Study. The numbers in the table reflect **the maximum amount of debt each institution could issue in fiscal year 2024** without exceeding its ceiling ratio for **debt to obligated resources** during any year of the Study Period, after taking into account any approved future projects. The approved future projects for each institution, if any, are detailed in its report included as part of **Appendix D**. Fayetteville State University is not currently rated by Moody's.

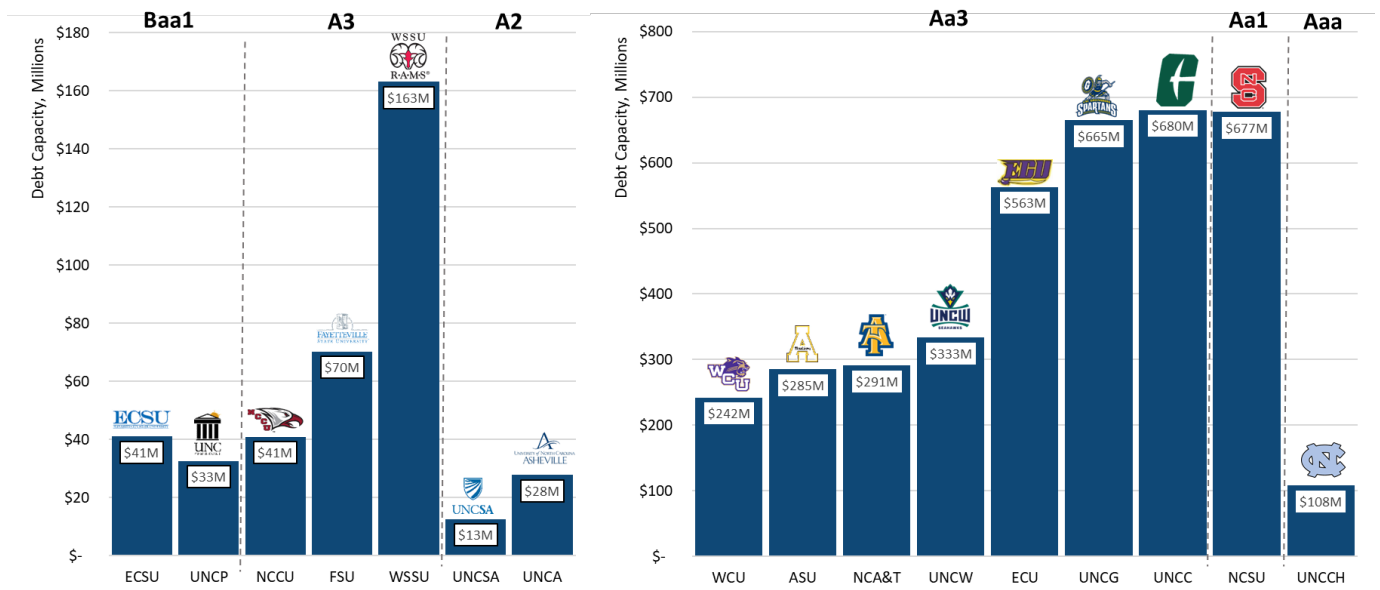
FSU has been grouped based on its corresponding rating from Standard and Poor's. Standard and Poor's is no longer assigning a rating for UNC Pembroke. UNCP has been grouped based upon previous ratings.

Current Debt Capacity Across the System (2024)



Generally, debt capacity for each institution will grow over the course of the Study Period as enrollment and obligated resources increase. The table below summarizes each institution's **projected debt capacity for fiscal year 2028**, assuming it issued no debt (other than debt to finance any approved future projects) until the last year of the Study Period.

Projected Debt Capacity Across the System (2028)



The range of capacities reflects the diversity among the institutions, each with its own strengths, challenges, and mission. The Study reflects the general health and proactive management of each institution's balance sheet, much of which is attributable to the State's history of strong support for the University and its institutions. The general

growth in capacity over the course of the Study Period indicates relatively rapid amortization rates for most institutions.

A small handful of institutions are facing significant headwinds in terms of enrollment and revenue growth. For those institutions, improving debt capacity alone may not be a priority; instead, their debt capacity will improve as they continue to work with the UNC System Office to implement new strategies and policies to meet their unique challenges. Due to the uncertain inflationary environment, the study uses the average Consumer Price Index over the past 12 months (3.4 percent) for the first out year of the study (FY23-24). For the remaining four out years (FY24-28), the study uses 2.5 percent, which is in line with economic forecasts and closer to the historical average inflation. Each institution was given the option, however, to adjust the growth factor for each of the model components based on its reasonable expectations for its performance over the Study Period. Any growth rate adjustment, along with the factors considered in making the adjustment, is described in the individual Institution Reports attached as **Appendix D**.

While the Study provides useful insight into the overall fiscal position and capital needs of each institution, policymakers and other stakeholders identify trends and challenges facing each institution and the University over time, the Study also underscores the unique nature of public higher education debt and the value of the UNC System's centralized support and oversight. **The Study's emphasis on aggregate debt and asset levels is valuable, but the current approval process, which is predicated on a collaborative, project-by-project analysis of tailored cost estimates and project-specific sources of repayment, should continue to drive decision-making with respect to any proposed project.**

Recommendations

Recommended Use of the Study

Since the Study is framed broadly to accommodate the complexity and diversity of each institution's mission, business model, size, and infrastructure needs, the Study should be used as a general assessment of each institution's overall fiscal position and to help institutions, policymakers, and other stakeholders identify trends and challenges facing each institution and the UNC System over time. Like any other management tool, the Study is not intended as a substitute for the considered judgment of institution leadership, the UNC System, the Board, or the General Assembly. An institution may be better served, for example, forgoing a project when it has significant debt capacity or pursuing a financing even if doing so would cause the institution to exceed one of its stated target ratios.

While the Study will help policymakers and stakeholders determine when additional scrutiny for a project may be warranted to ensure institutions are deploying debt prudently and strategically, institution debt policies and the University's debt approval process — which is predicated on a project-by-project analysis of tailored cost estimates and identified sources of repayment — should continue to drive decision-making with respect to any proposed project.

The graphic below summarizes how the Study is intended to be integrated into a comprehensive debt management framework that includes each institution's debt policy and the University's debt approval process.

Annual Debt Capacity Study

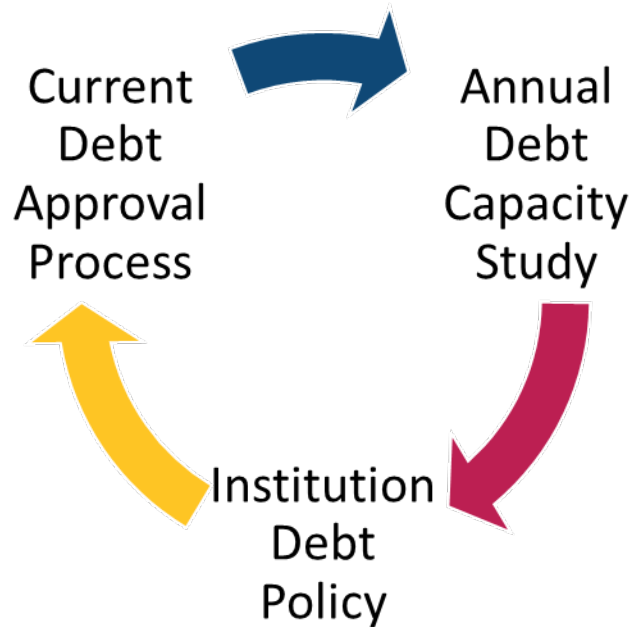
- Provides a snapshot of each institution's current estimated debt capacity
- May indicate when a proposed project requires heightened scrutiny
- Updated annually to reflect newly approved debt and the institution's latest financial results and projects

Institution Debt Policy

- Clarifies each institution's strategic approach to debt and its capital investment needs
- Establishes criteria for evaluating projects and approving debt, including benchmarks to measure prudent debt levels

Current Debt Approval Process

- Evaluates each proposed project's affordability based on identified sources of repayment and projected impact on student cost
- Uses estimated debt capacity results to assess strategic value of proposed projects in light of an institution's overall debt burden, mission, and needs

**Use and Impact of Project-Based Financing Structures**

Project-based financing structures — i.e., debt obligations payable solely or primarily from the financed project's revenues (collectively, "**Project Financings**") — have been used effectively throughout the State for many years. Institutions have structured their Project Financings using both their affiliate support organizations (collectively, "**Foundation Financings**") and unaffiliated, tax-exempt organizations (collectively, "**Privatized Financings**"). Many Project Financings have been structured with the support of master lease arrangements with the institutions (collectively, "**University-Supported Project Financings**"), while others have been structured so that the institutions have no obligation to repay any associated debt (collectively, "**Nonrecourse Project Financings**").

Since project revenues in Nonrecourse Project Financings accrue to the project owner and not the institution, Nonrecourse Project Financings are not payable from the obligated resources of an institution and have therefore been **excluded** from the Study's debt capacity calculations. Ratings agencies do consider these financings in their credit assessments, which can lead to a disconnect between the numbers in the Study and those published by the ratings agencies. By contrast, State-Supported Project Financings, which are supported by the institution's obligated resources, **are included** in the Study's debt capacity calculations.

Over the past couple years, several institutions have entered into (or have obtained approval to enter into) large-scale Project Financings for new, on-campus housing facilities. Each of those transactions has been structured as Nonrecourse Project Financings, so those debt instruments are **not** included in the Study's debt capacity calculations. The rating agencies have made it clear, however, that they will be more likely to include Nonrecourse Project Financings in their institution leverage metrics for on-campus housing, even if the institution has no legal

obligation to repay the debt. Thus, the use of Nonrecourse Project Financing structures may reduce the debt capacity of an institution in the eyes of the rating agencies.

The UNC System Office has developed guidelines for the prudent use of Project Financing structures and will continue to work with the institutions and other stakeholders in State government to ensure Project Financing structures are used strategically and in keeping with the UNC System's mandate to provide access to the benefits of the University at the lowest practicable cost.

2024 Moody's Outlook for Higher Education

Moody's revised its outlook for the higher education sector from negative to stable in its December 2023 report. The sector outlook "reflects (Moody's) view of credit fundamentals in the US higher education sector over the next 12 months." Moody's cites revenue gains due to the easing pandemic and moderation of expense growth as inflation cools as reasons for the outlook improvement.

Since January 1, 2023, Moody's upgraded N.C. A&T's general revenue bonds from A1 to Aa3 with a stable outlook. Fitch affirmed N.C. A&T's AA- rating and positive outlook. Moody's affirmed App State's Aa3 rating and UNCA's A2 rating but revised both institutions' outlook to negative from stable. Moody's, S&P, and/or Fitch affirmed ratings or outlooks for ECU, NCCU, NCSU, UNC-CH, UNCG, UNCSA, WCU, and WSSU.

Appendix A: Key Definitions

Debt: Debt incurred under Chapter 116D or Article 21B of Chapter 116 of the North Carolina General Statutes or any other debt that will be serviced with funds available to the institutions from gifts, grants, receipts, Medicare reimbursements for education costs, hospital receipts from patient care, or other funds, or any combination of these funds, but not including debt that will be serviced with funds from the General Fund of the State. "Debt" does not include project-based financing structures that are nonrecourse to the institutions.

Obligated Resources: Any sources of income or receipts of the Board of Governors or the institution at which a special obligation bond project is or will be located that are designated by the Board as the security and source of payment for bonds issued under this Article to finance a special obligation bond project, including, without limitation, any of the following:

- a. Rents, charges, or fees to be derived by the Board of Governors or the institution from any activities conducted at the institution.
- b. Earnings on the investment of the endowment fund of the institution at which a special obligation project will be located, to the extent that the use of the earnings will not violate any lawful condition placed by the donor upon the part of the endowment fund that generates the investment earnings.
- c. Funds to be received under a contract or a grant agreement, including "overhead costs reimbursement" under a grant agreement, entered into by the Board of Governors or the institution to the extent the use of the funds is not restricted by the terms of the contract or grant agreement, or the use of the funds as provided in this Article does not violate the restriction.
- d. Funds appropriated from the General Fund to the Board of Governors on behalf of a constituent institution for utilities of the institution that constitute energy savings as that term is defined in G.S. 143-64.17.

Generally, obligated resources do not include funds appropriated to the Board of Governors or the institution from the General Fund by the General Assembly from funds derived from general tax and other revenues of the State, and obligated resources do not include tuition payment by students.

5-Year Payout Ratio: Percentage of each institution's long-term debt scheduled to be retired during the succeeding five-year period.

Debt Service to Operations: Ratio that measures an institution's debt service burden as a percentage of its total expenses. Ratio uses aggregate operating expenses as opposed to operating revenues since expenses are generally more stable. Operating expenses also include an adjustment for any non-cash charge relating to the implementation of GASB 68 and 75.

Debt Service to Operations = (Annual Debt Service) / (Total Operating Expenses)

Appendix B: Overview of UNC System Debt

Most debt within the scope of the Study is comprised of special obligation bonds issued by the Board on behalf of each institution in accordance with Article 3 of Chapter 116D of the General Statutes of North Carolina, as amended (“**Article 3**”). Institutions may use special obligation bonds (or “**general revenue bonds**,” as they are commonly called) to finance any capital facility located at the campus that supports the institution’s mission, but only if the Board has specifically designated the project as a “special obligation bond project” in accordance with Article 3.

Article 3 contains procedural safeguards to ensure the thoughtful use of special obligation bonds. For example, before any general revenue bonds are issued, Article 3 requires the approval of the institution’s Board of Trustees, the Board of Governors, the General Assembly, and the Director of the Budget (in consultation, if necessary, with the Joint Legislative Commission on Governmental Operations).

As part of its approval, the Board of Governors must (1) designate the proposed project as a “special obligation bond project” and the obligated resources that will serve as the source of repayment for the proposed bonds and (2) establish that sufficient obligated resources are reasonably expected to be available to service the proposed bonds. In its report to the General Assembly seeking approval for a proposed Article 3 project, the Board must provide details regarding the project need, expected project costs, expected increases in operating costs following completion (including any contemplated impact on student costs), estimated debt service, and the sources and amounts of obligated resources to be used to repay the debt.

Although Article 3 focuses on an institution’s obligated resources in the aggregate, as a practical matter, the plan of finance for each proposed project is evaluated on a standalone basis. **If an institution is unable to demonstrate that existing or future revenues associated with a project are sufficient to service the proposed debt, then the financing will generally not move forward unless the project is redesigned to a sustainable and appropriate scale.** Those project-specific revenues may take the form of enterprise system revenues (such as dormitory or dining system revenues) or other dedicated revenue sources (such as capital campaign donations or student fees). Institution debt issued under other legislative authority, including student housing revenue bonds under Article 19 of Chapter 116D, is also subject to procedural safeguards and is evaluated on a project-by-project basis.

This slight disconnect between the statutory framework for evaluating debt capacity — **with its focus on affordability relative to each institution’s aggregate obligated resources** — and the practical manner in which projects are evaluated and approved — **with its focus on an individual project’s affordability based on a specific source of repayment** — means that the Study presents an inherently conservative picture of each institution’s debt capacity. While the model’s inherent conservatism encourages prudent planning, the Study’s limitations in evaluating the affordability of any single campus project should be noted.

Unlike the State of North Carolina’s debt capacity study, for example, where future debt service is paid out of well-defined and relatively predictable revenue streams, campus projects may be financed through a variety of revenue sources, none of which is easily modeled on a pro forma basis at the aggregate obligated resources level. In addition, the Act establishes a target ratio that compares aggregate debt (which will increase immediately by the full amount of the debt once issued) to obligated resources (which will increase incrementally over time). This means that any new financing will generally reduce the institution’s debt capacity as reflected in the Study, even if the new project would be entirely supported by new revenues that would not exist but for the project.

None of the institution debt included in the Study affects the State of North Carolina’s debt capacity or credit rating. Such obligations are payable only from the applicable institution’s obligated resources (or other pledged revenues) and do not constitute a debt or liability of the State or a pledge of the State’s full faith and credit.

Appendix C: Study Methodology and Background

Overview of Strategic Debt Management and Credit Assessment

The prudent use of debt, in service of each institution's mission, provides several strategic benefits:

- **Achieving intergenerational equity** – Most capital projects will benefit students for decades. Financing a portion of each institution's planned capital investments enables each institution to better align the benefits and financial burdens across multiple generations.
- **Enhancing effectiveness** – An institution may use debt to invest in transformative projects on an accelerated schedule, permitting the institution to leverage its resources to better scale its programs, serve its stakeholders, and meet its mandated mission.
- **Imposing discipline** – Debt can be used to clarify priorities and reduce other spending that may crowd out investments necessary for the institution's long-term health.

Burdensome debt levels, however, can undermine an institution's effectiveness and viability. Debt may diminish the future operational flexibility of an institution and may limit its ability to adapt to developments and trends in the marketplace. In the worst instances, debt levels may hasten the decline of an institution, creating a downward spiral that exerts ever-increasing pressure on its balance sheet.

Each institution's credit rating (for those with rated debt) serves as a general barometer of how the rating agencies view the institution's financial strength and its debt management practices, which, in turn, informs the institution's reputation in the capital markets. In assessing a public university's creditworthiness, rating agencies generally consider broad categories of factors. In August 2021, Moody's Investors Service ("**Moody's**") updated its rating methodology and approach to assess credit risks of public and private universities. The table below summarizes the updated factors that Moody's considers as part of its "scorecard," which guides its credit profile analysis in the higher education sector:

Primary Factors					
Scale	Market Profile	Operating Performance	Financial Resources and Liquidity	Leverage and Coverage	Financial Policy
15%	20%	10%	25%	20%	10%
Sub-factors					
<i>Adjusted Operating Revenue</i> 15%	<i>Brand and Strategic Positioning</i> 10% <i>Operating Environment</i> 10%	<i>Earnings Before Interest, Depreciation, and Amortization (EBIDA) Margin</i> 10%	<i>Total Cash and Investments</i> 10% <i>Total Cash and Investments / Operating Expenses</i> 15%	<i>Total Cash and Investments / Total Adjusted Debt</i> 10% <i>Annual Debt Service Coverage</i> 10%	N/A
+					
Other Considerations		Instrument Considerations		Cross-Sector Methodologies	
=					
Assigned Ratings					

The Study focuses on Moody's methodology, as it rates nearly all of the institutions.

As part of their criteria, the rating agencies give significant weight to various qualitative factors, such as the strength of the institution's leadership, the quality and responsiveness of its long-range planning, and the role of any centralized oversight. In a rating report issued in February 2016 in connection with an institution bond offering, for example, Moody's noted that the institution **"benefits from being part of the UNC System, which has a demonstrated history of strong oversight of member institutions"** and listed the institution's **"generous operating and capital support from the State of North Carolina"** as a primary credit strength.

For several reasons, the Study has not attempted to tie "debt capacity" to the predicted impact any new debt may have on an institution's credit rating. First, each institution's mission and strategic planning should drive its debt management decisions, not the rating agencies' outside assessment of the institution's credit profile. Managing an institution's operations solely to achieve a certain credit rating may distort strategic objectives and lead to unintended consequences. As Moody's states in its current Rating Methodology for Global Higher Education (dated November 23, 2015):

"Strategic positioning depends on effective short- and long-range planning, consistent self-assessment and benchmarking, and ongoing monitoring and accountability. ... Determining the appropriate level of investment is a significant challenge, as too little investment can result in a gradual loss of student demand, research funding, or philanthropy if donors feel that the university is in decline. Overinvesting can saddle a college with an unsustainable business model, with revenue unable to support high fixed costs, including debt service."

Second, projecting the exact amount of debt an institution could issue during the Study Period without negatively impacting its credit rating is difficult. Any single financial ratio makes up only a fraction of the overall credit analysis, and weak ratios may be ignored or deemphasized in a particular situation based on multiyear trends, projections, and other qualitative factors. Further, while the financial performance of its institutions has no impact on the State's credit rating, each institution's credit rating has historically benefited from the State's strong support and overall financial health. As a result, many institutions "underperform" relative to the national median ratios for their rating category, making comparisons to median ratios challenging. Finally, because median ratios are not perfectly correlated to rating outcomes, a model that attempts to draw a linear relationship between any single ratio and a projected rating outcome would have limited predictive value.

In this context, **it is important to distinguish "debt capacity" from "debt affordability."** Debt capacity provides a general indication of each institution's ability to absorb debt on its balance sheet during the Study Period. Debt affordability, on the other hand, evaluates the merits of a specific financing (or a specific amount of debt), taking into account a number of quantitative and qualitative factors related to the projects under consideration, including project revenues and expenses, cost of funds, competing strategic priorities, and the "hidden" costs of forgoing the projects entirely.

Development of the Financial Model

To support the Study, a financial model has been developed to analyze four financial ratios for each institution on a pro forma basis over the course of the Study Period. Since Article 3 does not permit the institutions to pool their obligated resources to form a common source of funds to support all institution project financings, the Study focuses on the individual institution data and does not attempt to aggregate each institution's capacity to derive a University-wide measure of "debt capacity." The other components of the model are designed to assist each institution in establishing guidelines for maintaining prudent debt levels and for evaluating capital investment priorities in light of fiscal constraints.

Each institution's debt capacity reflects the amount of debt each institution could issue during the Study Period without exceeding its ceiling ratio for **debt to obligated resources**. Each institution has developed its own target policy for each ratio in consultation with the UNC System Office to ensure the ratio is tailored and meaningful for that institution's size, mission, resources, and average age of plant.

Methodology for Setting Target Ratios

Since there are differences in each institution's mission, enrollment, resources, and capital needs, imposing a single set of target policies across all institutions would distort the information produced by the Study — either by generating too much capacity for the larger institutions or by holding smaller institutions to unrealistic benchmarks relative to their size and scale. To produce a more meaningful model for each institution, the institutions, in consultation with the UNC System, have set their own target policies for the model ratios.

In setting its target policies, each institution considered many quantitative and qualitative factors, including comparisons to its designated peer institutions, its strategic initiatives, its historical results, its average age of plant, its recent and projected growth, and any existing debt policies. As discussed above, the credit ratings of the institutions are bolstered by several favorable qualitative factors, including, most importantly, the State's long history of support. Since the institutions benefit from those qualitative factors, it follows that many quantitative measures are weaker than the median ratios for their assigned rating category. Institutions were not forced, therefore, to set their target ratios directly in line with those median ratios, as that approach would invite quantitative comparisons to larger, wealthier peers. Institutions used median ratios as an important benchmark in setting their policy ratios.

Other Assumptions and Factors Affecting the Model

The financial model is based on each institution's financial results as of **June 30, 2023** — the most recent period for which audited financials are available. The model includes debt issued to finance new projects since June 30, 2023, but the model excludes any refinancing, redemption or other debt payments that have occurred during the current fiscal year, building an additional element of conservatism into the model.

The financial model also takes into account any legislatively approved project that an institution plans to finance during the Study Period. Interest rate assumptions for any pro forma debt are based on conservative, fixed rate projections and are adjusted to account for each institution's credit rating and the expected term of the financing.

The financial model adds back to each institution's unrestricted and restricted expendable net assets any noncash charge taken in connection with the implementation of GASB 68 and GASB 75 and will make similar adjustments for the implementation of related accounting policies in the future. While GASB 68 impacts an institution's unrestricted net assets and not restricted expendable net assets, GASB 75 impacts both figures. This is relevant as the calculation of Available Funds incorporates unrestricted net assets but not restricted expendable net assets, while the calculation of Expendable Financial Resources includes both figures. Therefore, the GASB 75 adjustment made to Available Funds and Expendable Financial Resources will not match. The Debt Capacity Study focuses on special obligation bonds and excludes liabilities or leases pursuant to GASB 87.

Appendix D: Reports from Constituent Institutions