

STATE OF NORTH CAROLINA

PERFORMANCE AUDIT

UNIVERSITY OF NORTH CAROLINA SYSTEM

REPAIR AND RENOVATION PROCESS

JANUARY 2005

OFFICE OF THE STATE AUDITOR
RALPH CAMPBELL, JR.
State Auditor

Performance Review

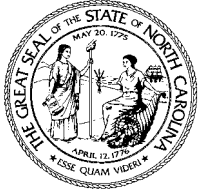
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January 6, 2005

The Honorable Michael F. Easley, Governor
Members of the North Carolina General Assembly
President Molly C. Broad
The University of North Carolina System

Ladies and Gentlemen:

We are pleased to submit this performance review of the *University of North Carolina System: Repair and Renovation Process*.

This report consists of an executive summary and conclusions, findings and recommendations as applicable. The objectives of the review were to: 1) review and summarize prior reports on University Repair and Renovation needs, 2) identify the process used by individual universities and UNC-General Administration to establish repair and renovation needs, and 3) determine whether the established process was meeting critical needs. President Broad has reviewed a draft copy of this report. Her written comments are included as Appendix B, page 37.

We wish to express our appreciation to President Broad, her staff, as well as to the Chancellors at the member universities and their respective staffs, for the courtesy, cooperation, and assistance provided us during this effort.

Respectfully submitted,

A handwritten signature in black ink that reads "Ralph Campbell, Jr." in a cursive script.

Ralph Campbell, Jr.
State Auditor

TABLE OF CONTENTS

	<u>Page</u>
EXECUTIVE SUMMARY	1
OBJECTIVES, SCOPE, AND METHODOLOGY	5
PROGRAM OVERVIEW	7
□ Background	7
□ Funding	8
□ Process	10
FINDINGS AND RECOMMENDATIONS	11
□ OBJECTIVE 1: Reviewing Prior Reports	11
□ OBJECTIVE 2: Identification Process	14
□ OBJECTIVE 3: Assessing the Process	23
TABLES:	
1 Annual Repair and Renovation Funding by University: FY93 - FY04	9
2 Individual University Repairs and Renovation Priority List Process: Factors Included in the Process	16
EXHIBITS:	
1 Repair and Renovation Funding: FY93 – FY04	8
2 Examples of Variety of Repair and Renovation Needs	17
3 Allocation of University Improvement General Obligation Bonds and Facility Condition Assessment Program Data	25
APPENDICES:	
A Summary Responses for University Questionnaires	31
B Response from the Office of the President, University of North Carolina	37
DISTRIBUTION OF AUDIT REPORT	39

TABLE OF CONTENTS

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EXECUTIVE SUMMARY

Program Description

The State of North Carolina owns and operates over 98 million square feet of building space valued at more than \$12 billion. Historically, each state agency or university was individually responsible for requesting funds to maintain these buildings. In the 1970's and 1980's, the General Assembly began to periodically provide funds to be allocated to agencies and universities for repairs and renovations. In 1989, a special provision designated funds to the University of North Carolina System specifically for repairs and renovations of university buildings.

The repair and renovation funds for the University System are sent to the UNC Board of Governors. The funds are then distributed to each campus using an allocation model. The formula includes factors for size, mission, and condition. The formula also sets a floor to ensure that each campus receives a minimal amount of repair and renovation funding. At present, each institution must receive at least 2.25% of the total funding available in any year.

This performance review of the **University of North Carolina System-Repair and Renovation Process** was undertaken at the discretion of the State Auditor to review the process of identifying and prioritizing repair and renovation needs for the System. Since this topic had been studied previously, the major work of this review was to examine those studies and determine whether any new information should be considered in assessing the effectiveness of the repair and renovation process.

Audit Scope and Methodology

The scope of the review included the procedures used at all universities within the UNC System as well as the procedures used by UNC-General Administration. Review efforts focused on the 16 university campuses. Since many aspects of the University System repair and renovation process had already been examined in detail, this review was limited to the implementation of the procedures used by UNC-General Administration and the individual universities and their perceptions of the current process.

EXECUTIVE SUMMARY

Conclusions in Brief

Objective 1: Prior Reports

The university repair and renovation process has been extensively studied to identify needs, establish funding criteria, and document management capabilities. The most recent studies have concluded the process is adequate with only slight changes necessary in the funding allocation formulas. Overall, these studies have covered the major issues surrounding the repair and renovation process. Our review of the reports and discussions with university personnel at each campus confirmed the findings in the reports. We have no issues with the reports or their conclusions.

Objective 2: Identification Process

The processes used by the University System and the individual campuses are reasonable and take into account those factors that directly affect needs. While each university has its own procedures for identifying needs, the process at all 16 campuses is very similar and adheres to the general policies and procedures promulgated by UNC-General Administration. Multiple stakeholders are involved. All the universities utilize the Facility Condition Assessment Program report deficiencies identified by the Office of State Construction. In addition, many universities use an on-going deferred maintenance list in identifying needs. Needs are typically prioritized based on several factors such as health and safety needs, structural repairs, and program/functionality needs. After the allotment from the UNC Board of Governors, each university funds projects based on its needs list and the level of funding received.

Objective 3: Process Assessment

The existing process utilized by the universities for identifying and prioritizing repair and renovation needs is generally effective in meeting the most critical needs for the individual universities. However, there are some areas of the process that could be changed to enhance the effectiveness of the overall process. Specifically, the level, consistency, and timing of funding for the Repairs and Renovation Reserve Fund are not reviewed on a set schedule. The replacement value of buildings reported by the Department of Insurance may or may not reflect any new construction or major renovations. Lastly, as addressed by the August 2004 report on repair and renovation funding¹, there are some factors that UNC-General Administration may need to address in the current distribution formula.

¹ *The University of North Carolina Repair and Renovation Funding Program Review: 1993 to 2003*, Eva Klein & Associates, Ltd., August 2004.

EXECUTIVE SUMMARY

Specific Findings

Page

Objective 1: Prior Reports

- No specific findings 11

Objective 2: Identification Process

- No specific findings..... 14

Objective 3: Process Assessment

- The level, consistency, and timing of funding for repairs and renovations have not been re-evaluated in several years..... 24
- Information to update replacement value of state buildings is not consistently provided..... 26
- The repair and renovation fund distribution formula used by UNC General Administration may not consider certain factors. 26

OBJECTIVES, SCOPE AND METHODOLOGY

North Carolina General Statute 147-64.6 empowers the State Auditor with authority to conduct performance audits or reviews of any state agency or program. Performance audits are examinations of activities and operations to determine whether resources are being used economically, efficiently, and effectively and/or whether program goals are being met. Performance reviews are conducted to re-assess a program or function that has previously been reviewed to determine whether any new information has emerged that would change the findings from the previous studies.

This performance review of the **University of North Carolina System - Repair and Renovation Process** was undertaken at the discretion of the State Auditor. Concerns raised by the mold infestation found at North Carolina Central University during 2003 resulted in questions about the effectiveness of the repair and renovation process used by the University of North Carolina (UNC) System. Thus, the State Auditor chose to review the process of identifying and prioritizing repair and renovation needs for the System. Since this topic had been studied previously, the major work of this review was to examine those studies and determine whether any new information should be considered in assessing the effectiveness of the repair and renovation process.

Objectives: Staff identified the following questions in developing objectives:

1. What reports and studies have been performed by or for the UNC System to identify repair and renovation needs and what were their recommendations?
2. What process is used to identify and prioritize repair and renovation needs at each university?
3. What process is used by UNC-General Administration to review, prioritize, approve, and report repair and renovation needs for the University System as a whole?
4. Are the identification process and reporting process capturing the actual repair and renovation needs of the universities and addressing the most critical needs?

The specific objectives developed from these questions were:

- **Objective 1—Prior Reports:** To review and summarize prior or on-going reports on University repair and renovation needs and projected costs.
- **Objective 2—Identification Process:** To identify the process used by each university to establish repair and renovation needs, determine how UNC-General Administration prepares the final University System request for repairs and renovations for submission to the UNC Board of Governors, the Office of State Budget and Management, and the NC General Assembly.
- **Objective 3—Assessment of R&R Process:** To determine whether the established repair and renovation process is meeting the most critical needs at the individual universities.

Scope: The scope of the review included the procedures used at all universities within the UNC System as well as the procedures used by UNC-General Administration. While limited funding is provided through the Repairs and Renovation Fund Reserve Account to UNC affiliated institutions, such as the NC School for Science and Mathematics, the Center for Public Television, and the NC Arboretum, review efforts

OBJECTIVES, SCOPE AND METHODOLOGY

focused on the 16 university campuses. Since many aspects of the University System repair and renovation process had already been examined in detail, this review was limited to the implementation of the procedures used by UNC-General Administration and the individual universities and their perceptions of the current process.

Methodology: We conducted the fieldwork during the period February 2004 through August 2004. To achieve the review objectives, we employed various techniques that adhere to the auditing standards generally accepted in the United States as promulgated in *Government Auditing Standards* issued by the Comptroller General of the United States. These techniques included:

- Review of *North Carolina General Statutes*, *North Carolina Administrative Code*, and North Carolina Biennial Budgets.
- Review of policies and procedures at each university and at UNC-General Administration.
- Review of internal and external reports on university facility needs and funding.
- Review and compilation of responses to questionnaires sent to all 16 universities regarding the repairs and renovations needs identification and prioritization process.
- Interviews with chancellors, finance officers, and facilities operations managers at all 16 universities.
- Site visits and tours of each campus to identify existing repairs and renovations needs and to document previous use of repair and renovation funds.
- Compilation of funding provided through the University Repairs and Renovation Fund Reserve Account.
- Review of a database regarding building costs and repair history maintained by the State Construction Office and property valuation information from the State Property Office and the Department of Insurance.

This report contains the results of the review as well as specific recommendations aimed at improving the repair and renovation identification and prioritization process within the UNC System in terms of economy, efficiency, and effectiveness. Because of the test nature and other inherent limitations of an audit, together with the limitations of any system of internal and management controls, this review will not necessarily disclose all weaknesses in the systems or lack of compliance. Also, projection of any of the results contained in this report to future periods is subject to the risk that procedures may become inadequate due to changes in conditions or personnel, or that the effectiveness of the design and operation of policies and procedures may deteriorate.

PROGRAM OVERVIEW

Background: The State of North Carolina owns and operates over 98 million square feet of building space valued at more than \$12 billion². Historically, each state agency or university was individually responsible for requesting funds to maintain these buildings. In the 1970's and 1980's, the General Assembly recognized the need to fund repairs and renovations of these facilities. As a result, the General Assembly began to periodically provide funds to be allocated to agencies and universities for repairs and renovations. In 1989, a special provision designated funds to the University of North Carolina System specifically for repairs and renovations of university buildings.

Based on recommendations from the Government Performance Audit Committee, the North Carolina General Assembly created the ***Repairs and Renovation Reserve Fund Account*** in 1993. (General Statute 143-15.3A) Established within the General Fund, the purpose of the reserve account was to provide on-going funding for repairs and renovations to state-owned facilities. The original legislation established the annual funding level at the lesser of one quarter of the General Fund unreserved credit balance or one-and-a-half percent of the current replacement value of the total state-owned buildings. Further, the legislation outlined 12 categories for which use of Reserve funds were permitted³:

1. Roof repairs and replacements
2. Structural repairs
3. Repairs and renovations to meet federal and state standards
4. Repairs to electrical, plumbing, heating, ventilating, and air-conditioning systems
5. Improvements to meet the requirements of the Americans with Disabilities Act
6. Improvements to meet fire safety needs
7. Improvements to existing facilities for energy efficiency
8. Improvements to remove asbestos, lead paint, and other contaminants including the removal and replacement of underground storage tanks
9. Improvements and renovations to improve use of existing space
10. Historical restoration
11. Improvements to roads, walks, drives and utilities infrastructure
12. Drainage and landscape improvements.

In 1995 the legislation was changed to increase the allocation to the greater of one-fourth of the unreserved General Fund credit balance or three percent of the current replacement value for all General Fund-supported facilities. Currently, legislation requires the State Controller at the end of each fiscal year to set aside three percent of the replacement value of all State buildings supported by the General Fund.⁴ Requirements within the legislation prevent using these funds for new construction or expansion of existing facilities unless needed to comply with required federal or state codes or standards.

House Bill 397 of the 2003 Session of the General Assembly divided the Repairs and Renovation Reserve Fund among state agencies and universities. The bill designated that the Office of State Budget and Management should allocate fifty-four percent of total

² North Carolina Department of Insurance

³ *General Statutes* 143-15.3A(b)

⁴ *General Statutes* 143-15.3A(a)

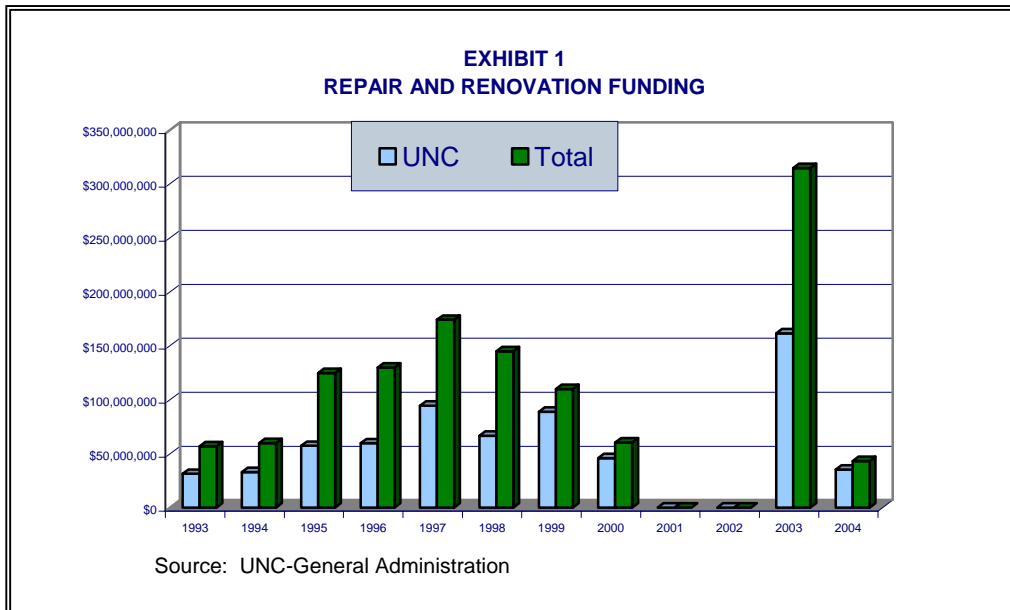
PROGRAM OVERVIEW

Reserve funds for repairs to state-owned facilities used by state agencies and forty-six percent to the UNC Board of Governors for state-owned facilities at universities.

FUNDING: As outlined in legislation, the funding for the Repairs and Renovation Reserve Fund fluctuates annually based upon the remaining balance in the General Fund. Funding reached a high of \$89 million in fiscal year 1999, while no funds were allocated in fiscal years 2001 and 2002 due to the state's budget shortfalls. The UNC System has received several special allocations since the creation of the Reserve in 1993. Specifically,

- 1998—The UNC Board of Governors was allowed to allocate up to \$10 million for improvements to technology infrastructure.
- 1999—An additional \$20 million appropriation was made for additional capital improvements at certain institutions under the “Focused Growth” program.
- 2003-- \$157 million was appropriated through the Certificate of Participation debt program to provide capital financing for repairs and renovations in addition to the issuance of general obligation bonds.

Through 2003, the General Assembly has appropriated over \$675 million to the UNC institutions since establishment of the Repairs and Renovation Reserve Fund. Exhibit 1 shows the annual total funding for the repair and renovation account and the portion allocated to the University System. Table 1, page 9 shows the total allocation to each UNC member institution throughout the history of the fund.



PROGRAM OVERVIEW

TABLE 1
Annual Repair and Renovation Funding by University

UNIVERSITIES:	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2003 COPS	2004	TOTAL
Appalachian State University	\$ 1,618,196	\$1,747,600	\$ 3,488,000	\$ 3,237,300	\$ 3,188,300	\$ 2,946,800	\$ 3,666,600	\$ 2,406,600			\$ 246,200	\$ 7,663,400	\$ 1,497,400	\$ 31,706,396
East Carolina University	2,308,185	2,788,500	4,826,700	4,968,000	6,725,700	5,277,700	5,874,800	3,679,100			387,500	12,062,500	2,391,700	51,290,385
Elizabeth City State University	2,040,219	858,600	1,090,100	1,290,900	1,351,700	1,209,900	4,242,600	1,087,200			106,400	3,313,200	619,500	17,210,319
Fayetteville State University	523,904	623,900	1,090,100	1,290,900	1,351,700	1,209,900	3,847,600	1,105,000			102,700	3,197,800	604,200	14,947,704
North Carolina A&T State University	1,080,138	1,728,500	3,596,500	3,250,900	3,390,600	2,843,200	9,475,105	2,335,800			247,900	7,716,400	1,482,500	37,147,543
North Carolina Central University	5,003,657	1,088,700	1,693,000	2,411,000	2,313,600	2,042,600	7,466,295	1,798,600			181,500	5,648,300	1,078,000	30,725,252
North Carolina School of the Arts	160,875	573,000	1,090,100	1,290,900	1,351,700	1,209,900	1,514,600	968,600			95,900	2,985,900	564,400	11,805,875
North Carolina State University	3,718,301	6,401,400	9,827,500	11,112,000	11,156,400	10,032,500	11,233,000	7,867,900			778,000	24,214,800	4,426,022	100,767,823
UNC-Asheville	4,139,890	843,200	1,090,100	1,290,900	1,351,700	1,209,900	1,951,000	1,244,200			119,200	3,710,200	742,100	17,692,390
UNC-Chapel Hill	4,076,994	8,648,800	14,165,200	14,754,500	14,884,800	13,227,400	14,149,700	9,259,100			897,387	27,934,500	5,165,922	127,164,303
UNC-Charlotte	2,010,477	1,731,700	2,318,100	2,353,400	2,581,800	2,306,500	3,012,200	1,976,400			226,900	7,061,400	1,408,200	26,987,077
UNC-Greensboro	1,721,770	1,941,800	3,431,000	3,237,000	3,519,800	3,972,700	5,435,700	3,672,100			337,700	10,510,100	1,930,800	39,710,470
UNC-Pembroke	397,821	558,600	1,090,100	1,290,900	1,351,700	1,209,900	4,349,600	1,164,400			113,400	3,529,700	687,700	15,743,821
UNC-Wilmington	1,030,000	884,900	1,624,600	1,586,700	1,779,000	1,566,600	2,209,400	1,457,900			149,100	4,641,500	876,700	17,806,400
Western Carolina University	903,006	1,610,300	2,946,800	2,717,700	2,427,100	2,295,900	2,918,200	1,868,300			165,300	5,144,000	966,900	23,963,506
Winston-Salem State University	431,567	600,300	1,135,600	1,290,900	1,351,700	1,209,900	4,262,300	1,159,600			108,400	3,373,300	643,100	15,566,667
Sub-total	\$ 31,165,000	\$ 32,629,800	\$ 54,503,500	\$ 57,373,900	\$60,077,300	\$ 53,771,300	\$ 85,608,700	\$43,050,800	\$ 0	\$ 0	\$ 4,263,487	\$ 132,707,000	\$ 25,085,144	\$ 580,235,931
Affiliates*	185,000	370,200	2,896,500	2,426,100	2,022,700	12,928,700	3,391,300	2,949,200	0	0	331,700	5,293,000	1,335,000	34,129,400
ECSU Water System			100,000											100,000
NCCU Mold, UNCC Library, NCCAT-Ocracoke												19,097,305	8,906,642	28,003,947
Additional Appropriation to UNC Institutions--no breakdown					32,670,330									32,670,330
TOTAL	\$ 31,350,000	\$ 33,000,000	\$ 57,500,000	\$ 59,800,000	\$ 94,770,330	\$ 66,700,000	\$ 89,000,000	\$ 46,000,000	\$ 0	\$ 0	\$ 4,595,187	\$ 157,097,305	\$ 35,326,786	\$ 675,133,506

* UNC-General Administration, NC School of Science and Mathematics, NC Arboretum, North Carolina Public Television, etc.

Source: UNC-General Administration

PROGRAM OVERVIEW

PROCESS: Once the Repairs and Renovation Reserve Fund balance for a given year is established, the funds are sent to the UNC Board of Governors. Using an allocation model⁵ adopted by the Board of Governors in 1994, the funds are then distributed to each campus. The formula utilized for this allocation includes factors for size (net assignable square feet of campus space, gross square feet of campus space, and campus population—students and employees), mission (net assignable square feet of laboratory space and number of degree programs), and condition (current replacement value, Facility Condition Assessment Program deficiencies identified by the North Carolina Office of State Construction, and Facility Condition and Quality Index⁶). The formula also set a floor to ensure that each campus received a minimal amount of repair and renovation funding. At present, each institution must receive at least 2.25% of the total funding available in any year.

Each campus is responsible for identifying needs, prioritizing its needs, and requesting funds for repairs and renovations. The process at each campus is slightly different; however, there are many common practices. Usually, an institution will seek input from facilities operations and maintenance staff, academic faculty, and other administrative personnel. Most universities also use the Office of State Construction Facility Condition Assessment Program deficiency information in addition to any campus-supported inspections and repair and renovation lists. Various approvals throughout the process typically lead up to final approval by the university chancellor. Once the chancellor approves the prioritized list, the university sends its request to UNC-General Administration for approval.

UNC-General Administration approves and forwards⁷ the combined list from all 16 universities to the Joint Legislative Commission on Governmental Operations and the Fiscal Research Division of the Legislative Services Office for their review. Once the funds are sent to UNC-General Administration, the formula is used to allot the funds to each university. Each university then selects projects based on its prioritized list and the amount of funds received.

⁵ *The University of North Carolina Funding Allocation Model for Reserve for Repairs and Renovations*, Eva Klein & Associates, November 1994

⁶ Facility Condition and Quality Index (FCQI) is calculated by taking the cost requirements to bring a building to a state of good repair and fully meet current standards divided by the current replacement value of equivalent buildings.

⁷ The UNC Board of Governors has delegated the review and approval of the repair and renovation lists to the UNC Office of the President.

FINDINGS AND RECOMMENDATIONS

This section of the report describes the conclusions or, if applicable, the findings and recommendations for each objective. The purpose of this performance review was to examine the process used by the University System to identify and prioritize repair and renovation projects across the system, specifically looking for any new information that might warrant changing the current process. By their nature, performance reviews are designed to identify areas where improvements could be made to the economy or efficiency of the process under audit. Therefore, the identification of findings does not mean that the System has not provided the services needed to the best of its ability given resource constraints. The findings and recommendations contained in this report should be viewed in this light.

Objective 1—Prior Reports: To review and summarize prior or on-going reports on University repair and renovation needs and projected costs.

Overview: During the fall of 2003, a major mold infestation was discovered in two dormitories at North Carolina Central University. The resulting investigation into the cause of this problem raised numerous questions about the effectiveness of the University System’s procedures for identifying and prioritizing repair and renovation needs on each campus. Over the last few years, the System had commissioned a number of outside consultant reports relating to different aspects of the repair and renovation process.

Methodology: We obtained and reviewed prior reports on the University System’s repair and renovation needs and projected costs. These reports included analysis of needs for the System as a whole, determination of potential repair and renovation funding allocation methods, the ability of the individual universities to manage projects, inspection of buildings for mold problems, and how campuses handle preventive maintenance issues. Our purpose in this segment of the review was to summarize the recommendations from each study and to identify those aspects of the process that had already been examined in detail.

Conclusion: The university repair and renovation process has been extensively studied to identify needs, establish funding criteria, and document management capabilities. The most recent studies have concluded the process is adequate with only slight changes necessary in the funding allocation formulas. Our review of the reports and discussions with university personnel at each campus confirmed the findings in the reports. Overall, these studies have covered the major issues surrounding the repair and renovation process. Therefore, this review of the process will not re-examine the same areas. Rather, our scope will be limited to a review of the individual universities’ processes and their perceptions of the current procedures.

FINDINGS AND RECOMMENDATIONS

Objective 1: Summary of Prior Reports: Each of the reports directly relating to the repair and renovation process commissioned by the University System since 1994 is summarized below.

- *The University of North Carolina Funding Allocation Model for Reserve for Repairs and Renovations*, Eva Klein & Associates, November 1994.
 - Hired to develop funding allocation model for reserve for repairs and renovation.
 - Model developed included factors for university mission, campus size, and condition of facilities.
 - Specifically, the model consisted of variables for each campus' proportion of total system factors of:
 - Net assignable square footage of laboratory space
 - Number of degree programs
 - Number of students and employees
 - Total net assignable square footage
 - Total gross square footage
 - Cost to correct deficiencies
 - Current replacement values
 - Model included floor so that each campus would be assured of minimum proportion of allocation.
- *Building for the New Millennium: Capital Equity and Adequacy Study and Preliminary 10-Year Capital Needs*, Eva Klein & Associates, Ltd., April 1999.
 - Facility Condition Assessment Program deficiencies continuing to increase (\$883 million at time of report).
 - UNC System allocated \$67 million in 1998.
 - UNC System also spent \$49 million in operating funds on repair and renovation needs in 1998.
 - Estimated total needs of \$3 billion for renovations, modernization, and upgrades.
 - Total funding needs of \$6.9 billion.
 - Study was impetus for Bond referendum--\$2.5 billion. (\$970,670,814 for major repair and renovation and \$1,529,329,186 for new construction).
- *Capital Construction Management Assessment*, Heery International, March 2001 through July 2001.
 - Consultant hired to assess management capabilities of universities.
 - Conclusion that campus-staffing levels should be supplemented with additional resources to manage the bond projects.

FINDINGS AND RECOMMENDATIONS

- *Mold Assessment at North Carolina Central University*, Clark Nexsen Architecture & Engineering, October 2003.
 - ❑ After mold discovery in two buildings, contractor was hired to inspect other NCCU buildings.
 - ❑ Mold problems were blamed on flawed designs, poor construction, aging buildings, and maintenance deficiencies.
 - ❑ Estimated costs to cleanup mold at \$13 million with \$58 million total cost of repairs needs in 11 NCCU buildings.

- *Operational Assessment of the 16 University of North Carolina Campuses*, Jacobs Facilities, Inc. and Chanen Construction Company, Inc., April 2004.
 - ❑ Consultant hired to review how the campuses handle preventative maintenance schedules.
 - ❑ Universities ranked according to their abilities to oversee maintenance.
 - ❑ Three of the 16 universities received “excellent” ratings; 10 received “good” ratings; three received “failing” ratings.

- *The University of North Carolina Repair and Renovation Funding Program Review: 1993 to 2003*, Eva Klein & Associates, Ltd., August 2004.
 - ❑ Program review of progress over ten years.
 - ❑ Conclusions that universities should receive larger percentage of repair and renovation allocation than state agencies; Facility Condition Assessment Program deficiencies are declining due to bond program; internal repair and renovation allocation is reasonable; and fund use and project priorities at universities are appropriate.

FINDINGS AND RECOMMENDATIONS

Objective 2—Identification Process: To identify the process used by each university to establish repair and renovation needs, determine how UNC-General Administration prepares the final University System request for repairs and renovations for submission to the UNC Board of Governors, the Office of State Budget and Management, and the NC General Assembly.

Overview: The University of North Carolina System is composed of 16 individual universities located throughout the state. Administrative functions for the System are the responsibility of the UNC-General Administration office. General Administration develops and oversees implementation of numerous System-wide policies and procedures. The repair and renovation process is one area where General Administration has developed specific procedures. However, each campus within the System has leeway in the implementation of these procedures.

Methodology: To accomplish this objective, we first interviewed appropriate individuals at UNC-General Administration relative to the repair and renovation process. We obtained and reviewed the general System policies and procedures for identification and prioritization of repair and renovation needs for the System. Next, we developed and circulated a questionnaire to all 16 campuses within the University System relative to the repair and renovation process at each campus as well as the overall process. After compiling responses, we visited each campus and interviewed the chancellor, appropriate vice chancellors, finance officers, and facility operations and maintenance staff. We also toured the campuses to observe ongoing repairs and renovation projects as well as to view existing needs. University staff provided facilities policies and procedures and other condition reports that were also reviewed.

Conclusion: The processes used by the University System and the individual campuses are reasonable and take into account those factors that directly affect needs. While each university has its own procedures for identifying needs, the process at all 16 campuses is very similar and adheres to the general policies and procedures promulgated by UNC-General Administration. Multiple stakeholders are involved at each campus, which usually includes input and decision-making from the chancellor, business/finance staff, facilities management staff, and faculty. All the universities utilize the Facility Condition Assessment Program report deficiencies identified by the Office of State Construction in identification of their individual needs. In addition, many universities use an on-going deferred maintenance list in identifying needs. Needs are typically prioritized based on several factors such as health and safety needs, structural repairs, and program/functionality needs. Chancellors usually have final approval of the

FINDINGS AND RECOMMENDATIONS

funding request before forwarding the requests to UNC-General Administration for approval from the UNC Board of Governors. After the allotment from the UNC Board of Governors, each university funds projects based on its needs list and the level of funding received.

Objective 2: Identification Process: Review of the processes used by UNC-General Administration and each of the 16 campuses revealed no major flaws in the system. Table 2, page 16 summarizes each university's repair and renovation procedures. This information is summarized from the questionnaires completed by the universities and the information obtained during the on-site visits with university personnel. (See Appendix A, page 31 for questionnaire summary data.) Exhibit 2, page 17-22 depicts examples of the variety of repair and renovation needs at the universities.

Preserving the priority order of the projects for each university, UNC-General Administration compiles, approves, and forwards the unified list of projects to the Joint Legislative Commission on Governmental Operations and the Fiscal Research Division of the Legislative Services Office for their review.

Using this information along with repair and renovation requests from state agencies, the General Assembly determines the amount of repair and renovation funding that will be appropriated to the Repairs and Renovation Reserve Fund for a given fiscal year. The Office of State Budget and Management then allocates the set percentages to state agencies (54%) and the UNC Board of Governors (46%). The UNC Board of Governors allocates the University System's total repair and renovation funds to each university using the current formula.

FINDINGS AND RECOMMENDATIONS

**TABLE 2
INDIVIDUAL UNIVERSITY REPAIRS AND RENOVATION PRIORITY LIST PROCESS
Factors Included in the Process**




	State Construction Office FCAP Deficiency Report	Facilities Mgmt/ Physical Plant Operations staff input	Academic Dept Faculty/ Other Dept staff input	Business/ Finance staff input	Engineering/ Architectural/ Design/ Construction staff input	Student, visitor input	On-going/ Deferred Maintenance needs list	Multi-year capital plan	Periodic life-cycle repairs	Vice Chancellor/ Senior mgmt team approval	Chancellor approval
Appalachian State University	X	X	X	X	X		X			X	X
East Carolina University	X	X			X		X	X		X	X
Elizabeth City State University	X	X		X	X		X			X	X
Fayetteville State University	X	X	X	X			X	X		X	X
North Carolina A&T State University	X	X	X				X			X	X
North Carolina Central University	X	X	X	X	X		X			X	X
North Carolina School of the Arts	X	X	X				X			X	X
North Carolina State University	X	X	X	X			X			X	X
UNC-Asheville	X	X	X	X	X	X	X			X	X
UNC-Chapel Hill	X	X	X	X			X	X		X	X
UNC-Charlotte	X	X	X	X	X		X	X		X	X
UNC-Greensboro	X	X		X	X		X	X	X	X	X
UNC-Pembroke	X	X			X		X			X	X
UNC-Wilmington	X	X	X	X			X			X	X
Western Carolina University	X	X	X	X			X			X	X
Winston-Salem State University	X	X		X			X			X	X

Source: Surveys, interviews, policies and procedures manuals




FINDINGS AND RECOMMENDATIONS

Exhibit 2 Examples of the Variety of Repair and Renovation Needs	
<p>Western Carolina Moore Hall—uneven floor in hallway</p>	
<p>UNC-Charlotte Main campus entrance—steam pipe and condensation line replacement</p>	
<p>Appalachian State Sidewalk cracks and erosion from weather conditions</p>	

FINDINGS AND RECOMMENDATIONS

Exhibit 2 (continued)	
<p>UNC-Asheville Lipinsky Hall—separation of walls from outside flooring and foundation</p>	
<p>UNC-Asheville Ramsey Library—HVAC unit out of operation</p>	
<p>UNC-Chapel Hill Campus Y—stairwell paint peeling and moisture damage</p>	

FINDINGS AND RECOMMENDATIONS

Exhibit 2 (continued)	
<p>UNC-Greensboro Jackson Library—lower floor roofing needs marked with chalk</p>	
<p>East Carolina Erwin Hall—structural damage crack in stairwell wall</p>	
<p>East Carolina Steam manhole renovation to correct water intrusion</p>	

FINDINGS AND RECOMMENDATIONS

Exhibit 2 (continued)

Elizabeth City State University
Moore Hall roof replacement




Fayetteville State University
Cook Hall emergency generator



North Carolina A&T University
Hodgin Hall window replacements



FINDINGS AND RECOMMENDATIONS

Exhibit 2 (continued)	
<p>North Carolina Central University Shepard Hall code and elevator improvements</p>	 A white pickup truck with a sign that reads "CONSTRUCTION SITE" and "NO PARKING EXCEPT FOR HARD HAT AREA" is parked in front of a brick building under renovation. A chain-link fence is in the foreground, and a crane is visible in the background.
<p>North Carolina School of the Arts Old High School Dormitory Renovations</p>	 A brick building under renovation with a sign in the foreground that reads "NCSA Residential Connector" and "CAMPUS". There are stacks of construction materials and a portable toilet in the foreground.
<p>UNC-Pembroke Dial Building- Completion of the mold remediation in ceiling, walls and windows</p>	 Interior view of a classroom with a green chalkboard, a white ceiling, and a window. The room appears clean and well-maintained.

FINDINGS AND RECOMMENDATIONS

Exhibit 2 (continued)

UNC-Wilmington
Dobo Hall Mold Remediation in
ceiling



Winston Salem State University
Pegram Hall Leaking Basement
Repairs



FINDINGS AND RECOMMENDATIONS

Objective 3—Assessment of R&R Process: To determine whether the established repair and renovation process is meeting the most critical needs at the individual universities.

Overview: UNC-General Administration has established policies and procedures relating to the identification and prioritization of repair and renovation needs at the universities. Each university, however, has leeway in how it applies those policies and procedures and how it determines its priorities. Each university must adhere to budgetary restrictions on how the repair and renovation funds can be used.

Methodology: To determine whether the established procedures were effective in meeting the most critical needs at the individual universities, we first compiled and analyzed the questionnaire responses from the universities. (Appendix A, page 31) We also conducted on-site interviews with responsible personnel from each university. Additionally, we participated in site visits and tours of each campus to identify existing repair and renovation needs and to document previous use of repairs and renovations funds. Lastly, we reviewed a database regarding building costs and repair history maintained by the State Construction Office, as well as information maintained by the State Property Office on historical costs.

Conclusion: The existing process utilized by the universities for identifying and prioritizing repair and renovation needs is generally effective in meeting the most critical needs for the individual universities. However, there are some areas of the process that could be changed to enhance the effectiveness of the overall process. Specifically, the level, consistency, and timing of funding for the Repairs and Renovation Reserve Fund are not reviewed on a set schedule. The replacement value of buildings reported by the Department of Insurance may or may not reflect any new construction or major renovations. Lastly, as addressed by the August 2004 report on repair and renovation funding⁸, there are some factors that the current distribution formula used by UNC-General Administration may need to address.

⁸ *The University of North Carolina Repair and Renovation Funding Program Review: 1993 to 2003*, Eva Klein & Associates, Ltd., August 2004.

FINDINGS AND RECOMMENDATIONS

Objective 3: Findings and Recommendations:

THE LEVEL, CONSISTENCY, AND TIMING OF FUNDING FOR REPAIRS AND RENOVATIONS HAVE NOT BEEN RE-EVALUATED IN SEVERAL YEARS.

The North Carolina General Assembly created the Repairs and Renovation Reserve Fund Account in 1993.⁹ In 1995 the legislation was changed to increase the allocation to three percent of the current replacement value (see discussion on page 26) of all state buildings supported by the General Fund.¹⁰ As of 2003, the Reserve Fund allocation was set at fifty-four percent of that total for state agencies and forty-six percent for state-owned facilities at universities.¹¹ Examination of the data used to establish these allocation factors and discussion with state and university personnel show that infrastructure components were not included in the three percent value. Additionally, the allocation split between state agencies and universities may not fully represent the actual value split of buildings between state agencies and the University System.¹²

Further, the consistency of repair and renovation funding has varied greatly over the life of the program, especially the past four fiscal years. While the state has dealt with budget shortfalls during this four-year period, funding for universities has gone from \$40 million in fiscal year 2000 to \$0 in fiscal years 2001 and 2002, with only \$4.5 million appropriated for fiscal year 2003. The fiscal year 2004 appropriation was \$35 million for universities. The result has been an increase in deferred maintenance at individual universities. In addition, there exists a public misconception that the 2000 bond referendum was enacted to remedy all repair and renovation needs. Table 3, page 25, shows that while the universities received almost \$1 billion for **major**¹³ repair and renovation projects, the Facilities Condition Assessment Program which examines other deficiencies at the universities shows approximately \$760 million in continuing need. Thus, the current funding level is inadequate to address all the repair and renovation needs in the University System.

Lastly, the timing of repair and renovation fund availability has an impact on the universities' abilities to address critical needs. In some instances, the funds have not been available in time to allow the universities to complete the bid process in time to be able to accomplish work during summer months when fewer students are on campus.

⁹ G.S. 143-15.3A

¹⁰ G.S. 143-15.3A(a)

¹¹ House Bill 397 of the 2003 Session of the North Carolina General Assembly

¹² *The University of North Carolina Repair and Renovation Funding Program Review: 1993 to 2003*, Eva Klein & Associates, Ltd., August 2004.

¹³ Major repairs and renovations are defined as building or infrastructure improvements that are normally expected to do one or more of the following: extend the useful live of the building or system, improve operating efficiency, eliminate health and safety hazards, correct structural, mechanical, electrical, or other major system defects, upgrade the quality of existing facilities, or convert these assets to more useful functions.

FINDINGS AND RECOMMENDATIONS

Table 3				
Allocation of University Improvement General Obligation Bonds And Facility Condition Assessment Program Data				
	General Obligation Bonds			FCAP
	Total	New	Major R&R	
Appalachian State University	\$ 87,406,200	\$ 53,255,000	\$ 34,151,200	\$ 61,349,400
East Carolina University	190,609,500	128,544,800	62,064,700	115,690,300
Elizabeth City State University	46,296,800	19,535,200	26,761,600	10,066,000
Fayetteville State University	46,021,400	8,009,900	38,011,500	6,869,000
NC A&T University	161,800,091	110,168,375	51,631,716	41,199,150
NC Arboretum in Asheville	9,331,700	0	9,331,700	0
NC Central University	121,246,203	59,589,700	61,656,503	22,698,300
NC School of Science and Math	5,163,000	0	5,163,000	6,486,500
NC School of the Arts	42,547,500	31,725,100	10,822,400	10,150,300
NC State University	465,205,455	272,543,955	192,661,500	111,799,740
UNC-Asheville	50,464,200	29,825,100	20,639,100	12,183,000
UNC-Chapel Hill	510,539,075	292,073,475	218,465,600	167,979,880
UNC-Charlotte	190,033,501	179,467,801	10,565,700	41,055,985
UNC-General Administration	28,237,795	3,051,200	25,186,595	0
UNC-Greensboro	166,008,255	85,717,955	80,290,300	84,992,400
UNC-Pembroke	56,873,600	25,807,400	31,066,200	12,060,500
UNC Television	65,890,600	65,890,600	0	0
UNC-Wilmington	109,201,800	79,774,400	29,427,400	21,990,550
Western Carolina	100,336,744	52,725,444	47,611,300	27,269,585
Winston Salem State University	46,786,581	31,623,781	15,162,800	12,309,500
Total	\$2,500,000,000	\$1,529,329,186	\$970,670,814	\$766,150,090
		61%	39%	
<p>Note: Per the UNC Bond Report to the Higher Education Bond Oversight Committee dated June 2004, 92.8% of the bond projects are under design, in construction or completed. Total contract commitments are \$1.352 billion or 54.1% of the bond program. As of April 30, 2004, \$892 million of the \$1.352 billion had been spent; \$354 million of unallotted funds remain available.</p> <p>Source: Bond information from NC General Statutes; FCAP data from State Construction Office, latest assessments through 2004.</p>				

RECOMMENDATION

The General Assembly should consider reviewing the level of funding to the Repairs and Renovation Reserve Fund every five years. Consideration should be given to providing a minimum designated amount each year to allow the universities to address the backlog of repair and renovation needs. To the extent possible, funds should be released in time to permit universities to obtain contractors and accomplish work during periods when fewer students are on campus.

FINDINGS AND RECOMMENDATIONS

INFORMATION TO UPDATE REPLACEMENT VALUE OF STATE BUILDINGS IS NOT CONSISTENTLY PROVIDED.

The State Property Office within the Department of Administration has responsibility for overseeing the management of all state-owned property. Property is added to the list at the time of acquisition for the purchase price, construction completion costs, or market value at the time of donation. Thus, for most state-owned property, the State Property Office maintains historic cost data only.

The Department of Insurance has responsibility for setting a replacement value on state property in order to insure it. The last evaluations completed by the Department of Insurance were dated June 2004. However, the Department based the latest valuations on the information it had for the various properties, which may not include all additions or renovations. Many times agencies and universities fail to notify the Department of Insurance or State Property Office of additions or renovations that would change the value of the property. Since the amount of the repair and renovation allocation is based on the current replacement value of state-owned buildings, an accurate and updated valuation is essential.

RECOMMENDATION

The General Assembly should direct all state agencies and universities to immediately notify the State Property Office and the Department of Insurance of any additions or renovations that would change the value of state-owned property.

THE REPAIR AND RENOVATION FUND DISTRIBUTION FORMULA USED BY UNC GENERAL ADMINISTRATION MAY NOT CONSIDER CERTAIN FACTORS.

An August 2004 report¹⁴ commissioned by UNC-General Administration examined the funding and distribution formula in detail. That report concluded that, while the current distribution formula is working well for the System, the UNC Board of Governors may want to consider additional factors in its distribution formula. The report recommendations included consideration of the effect of the bond construction projects on campus size.

Our discussions with personnel involved with the repair and renovation decisions at all 16 campuses also indicated that the allocation formula is working well in general. These discussions identified similar factors that the System may want to consider for inclusion in the formula as well as a few additional factors. Factors for consideration from the August 2004 report and from our discussions with university personnel included the following:

¹⁴*The University of North Carolina Repair and Renovation Funding Program Review: 1993 to 2003*, Eva Klein & Associates, Ltd., August 2004.

FINDINGS AND RECOMMENDATIONS

- Inclusion of the building age
- Inclusion of underground infrastructure
- Factor for historical characteristics
- Individual facility use considerations
- Building modernization needs
- Weather and climate factors
- Only using square footage
- Exclusion of the number of degree programs variable

RECOMMENDATION

The UNC Board of Governors should consider the factors identified above as adjustments to the current allocation formula.

FINDINGS AND RECOMMENDATIONS

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APPENDICES

APPENDIX	DESCRIPTION	PAGE
A	Summary Responses from University Questionnaires	31
B	Response From the Office of the President, University of North Carolina	37

APPENDICES

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APPENDICES

APPENDIX A SUMMARY RESPONSES FROM UNIVERSITY QUESTIONNAIRES

PURPOSE: The Office of the State Auditor is conducting a performance audit of the University System Repair and Renovation program. As part of the audit procedures, we are gathering information to assist in the identification of the strengths and weaknesses of program operations. Since the facility management function is an important aspect of each university's overall maintenance program, we are surveying facility management personnel for input on program operations. **Individual responses will remain strictly confidential. COMPLETED RESPONSES SHOULD BE RETURNED TO: Spencer Phillips, Performance Audit Supervisor, by e-mail: Spencer_Phillips@ncauditor.net, fax: 919-807-7647, or regular mail: NC State Auditor, MSC20601, 2 South Salisbury Street, Raleigh, NC 27699-0601 by Tuesday, March 30, 2004.**

NUMBER MAILED: 16 NUMBER RESPONSES: 16 % RESPONSES: 100%

Responses are shown in blue.

Identifying Needs: (A STUDY OF UNIVERSITY SYSTEM MAJOR CONSTRUCTION, REPAIR AND RENOVATION NEEDS WAS CONDUCTED IN 1999 (CAPITAL EQUITY AND ADEQUACY STUDY AND PRELIMINARY 10-YEAR CAPITAL NEEDS) THAT RESULTED IN THE 2000 HIGHER EDUCATION BOND REFERENDUM. THESE QUESTIONS RELATE TO PROCEDURES SINCE THAT TIME FOR OTHER REPAIR AND RENOVATION PROJECTS.)

1. Does your University have policies and procedures to manage its capital asset program? (buildings, infrastructure, major fixed equipment)

16	a. Yes (ATTACH COPY)	0	b. No	0	c. Don't know
100%					

2. Does your University utilize an inventory system for capital assets and infrastructure systems? (database listing all structures, etc.)

16	a. Yes	0	b. No	0	c. Don't know
100%					

3. Would this inventory system track past maintenance performed and problems identified?

13	a. Yes	3	b. No	0	c. Don't know
81.25%		18.75%			

4. Has your University updated its facilities profile since the 1999 Eva Klein & Associates "Capital Equity and Adequacy Study" on repair and renovation needs?

12	a. Yes	4	b. No	0	c. Don't know
75%		25%			

5. Is a facility condition assessment of capital assets and infrastructure systems performed annually?

12	a. Yes	4	b. No	0	c. Don't know
75%		25%			

6. When was the last facility condition assessment performed?

12	a. 2003	2	b. 2002	0	c. 2001	2	d. 2000	0	e. 1999	0	f. Don't know
75.0%		12.5%				12.5%					

7. Who performs the facility condition assessments?

1	a. Facilities Management Staff	0	b. Contractor	11	c. Combination	4	d. State Construction Office-FCAP
6.25%				68.75%		25.0%	

APPENDICES

8. Does the facility condition assessment performed by your University provide an accurate depiction of your repair and renovation needs?

15	a. Yes	1	b. No (PLEASE EXPLAIN)	0	c. Don't know
93.75%		6.25%			

- The assessment is accurate but not complete. Major equipment and building systems are included, but campus infrastructure, building finishes and functional deficiencies are not included in the assessment report.
- It is not possible to have truly accurate depictions without detailed engineering assessments, which require extensive time and funding.

9. Does the facility condition assessment utilize any type of measurement scale?

10	a. Yes (specify)	6	b. No	0	c. Don't know
62.5%		37.5%			

Prioritizing Needs: (THIS SECTION DEALS WITH HOW YOUR UNIVERSITY PRIORITIZES REPAIR AND RENOVATION PROJECTS BOTH BEFORE AND AFTER RECEIVING FUNDING.)

10. Your University submits its repair and renovation requests to UNC-General Administration. Is the facility condition assessment(s) used to prioritize those requests?

16	a. Yes (BRIEFLY EXPLAIN)	0	b. No (EXPLAIN PRIORITIZATION)	0	c. Don't know
100%					

11. Who actually prioritizes your University's repair and renovation request?

2	a. Chancellor	5	b. Facility Management	2	c. Finance Officer	7	d. Other (PLEASE EXPLAIN)
12.5%		31.25%		12.5%		43.75%	

12. Are repair and renovation projects normally completed in the priority order submitted to General Administration in your budget request?

13	a. Yes	3	b. No (EXPLAIN PRIORITIZATION)	0	c. Don't know
81.25%		18.75%			

- Some projects, while not always the highest priority, are completed sooner either because they are more time sensitive (must be done during certain time periods), require less design effort, size and scope, project received advanced planning or are attached to an academic need that increases their sense of urgency.
- Emergency repairs and emerging issues related health and safety would cause the priorities to change.
- The exception was the recent Certificate of Participation (COP's) funding which did not use the formula model.

13. Once repair and renovation funding is received by your University, do you have an opportunity to provide input into decisions on which projects are funded?

16	a. Yes	0	b. No	0	c. Don't know
100.0%					

14. Do you believe your input is taken into consideration for decision-making on major projects?
On minor projects?

MAJOR PROJECTS					MINOR PROJECTS						
16	a. Yes	0	b. No	0	c. Don't know	15*	a. Yes	0	b. No	0	c. Don't know
100.0%					93.75%						

*1 school did not answer this question.

APPENDICES

Funding Needs: (BASED ON A 1994 KLEIN & ASSOCIATES STUDY, GENERAL ADMINISTRATION USES AN ALLOCATION FORMULA TO DETERMINE THE AMOUNT OF REPAIR AND RENOVATION FUNDING THAT EACH UNIVERSITY RECEIVES. FACTORS CONSIDERED ARE: NET ASSIGNABLE SQUARE FOOTAGE FOR LAB SPACE, # OF DEGREE PROGRAMS, NET ASSIGNABLE SQUARE FOOTAGE, GROSS SQUARE FOOTAGE, CAMPUS POPULATION, CURRENT REPLACEMENT VALUE, FACILITY CONDITION AND QUALITY INDEX, AND FACILITY CONDITION ASSESSMENT DEFICIENCIES.)

15. How would you rate the current funding allocation process used by General Administration for repairs and renovations?

1	2	3	4	5
Poor	Fair	Good	Very Good	Excellent
0	4	5	6	1
	25.0%	31.25%	37.5%	6.25%

- The total funding level provided for R&R has been inadequate statewide.
- Providing block funding to the campuses allows the University to exercise flexibility in assembling projects to address the highest priority needs.
- It seems the larger universities receive a disproportionate share of the funds.

16. How would you rate the repair and renovation prioritization process for your University?

1	2	3	4	5
Poor	Fair	Good	Very Good	Excellent
0	0	0	9	7
			56.25%	43.75%

17. Are there other institutional characteristics that should be used as the basis for allocation of repair and renovation funding for your University?

13	a. Yes (BRIEFLY EXPLAIN)	3	b. No	0	c. Don't know
81.25%		18.75%			

- The extreme weather should be taken into account in the University R & R allocations.
- Long-term allocation of R&R is best driven by gross square feet.
- At smaller universities, there are occasionally some very large projects that would eat up an entire years' R&R funding. The system should allow for a block of funding, taken off the top of the university-wide total (before the regular allocation process), that could be used for a one-time boost to a campus for those occasional projects. Economics of scale should be considered.
- More emphasis should be placed on age, type of construction, and institutional growth projections (utilization), and renovation needs should play a much more prominent role. The current funds-distribution model places heavy emphasis on FCAP in determining distribution of funds, and there is an adjustment for graduate studies and doctoral and research facilities. While it is understood that these factors impact repairs and renovations, they seem to be overemphasized. If an institution does not or cannot address FCAP-identified deficiencies, it will be rewarded by additional funding in future years because the overall FCAP score for the institution is higher. While doctoral and research facilities are more expensive to maintain, they are also money (grant funds) generators. Institutions that have these facilities are rewarded by the current R&R distribution model, penalizing smaller institutions since the R&R allocation is a fixed amount to be distributed among all UNC campuses.
- Historic facilities should be given more consideration due to their maintenance needs. Historic structures typically aren't able to take advantage of maintenance reducing construction materials as a non-historic structure. Renovation cost associated with historic facilities is also typically greater due to the fabrication of building components to maintain the original construction and architectural finishes.
- 24 hour usage of several buildings; atypical classroom floors, acoustics, and lighting; 300+ on campus performances each school year; and on campus high school students.
- Mean building age of campus and relative age of each physical asset as compared to the mean.
- The nature of a research campus indicates that higher rates of obsolescence and shortened equipment life needs to receive additional weight in the formula. Building complexity, age, and functionality are also characteristics that need more emphasis.
- The level of overhead receipts at the institutions should be considered.

APPENDICES

Backlog of Needs: (THE 2000 HIGHER EDUCATION BOND REFERENDUM WAS INTENDED TO ADDRESS MAJOR REPAIR AND RENOVATION NEEDS AS IDENTIFIED IN THE 1999 STUDY. HOWEVER, OTHER REPAIR AND RENOVATION NEEDS MAY STILL EXIST. THIS SECTION RELATES TO THOSE REPAIR AND RENOVATION NEEDS.)

18. Has the 2000 Higher Education Bond Referendum helped to alleviate some of the major repair needs at your University?

15	a. Yes	1	b. No (PLEASE EXPLAIN)	0	c. Don't know
	93.75%		6.25%		

- A significant number of major repair requirements were left un-addressed.
- The lack of/inadequacy of R&R funding since the bond was passed has offset some of the impact (diminished) the Bond program should have had.
- The primary benefit is concentrated in major buildings being renovated. Deferred maintenance (DM) backlog for those facilities will be eliminated or at least reduced on the partial renovations. Some major infrastructure systems will have deficiencies reduced, like steam and chilled water systems. This leaves a significant deferred maintenance backlog that still must be addressed through R&R funding.
- The Bond program funded only the first five years of the 10-year plan. Condition deficiencies in the projects that were not funded continue to deteriorate.

19. Is the deferred maintenance backlog for minor needs improving at your University? If no, why not?

5	a. Yes	11	b. No	0	c. Don't know
	31.25%		68.75%		

- There is a lack of R&R funding and no inflation relief for operation and maintenance (O&M) funds.
- Bond Funded renovation projects help some but reduced R&R funding (2/3 normal in 2000-2001, none in 2001-02 & 2002-03) coupled with operational and maintenance budget reductions and reversions of the past two years have caused the deferred maintenance backlog to grow.
- The bond program was not intended to nor defined in such a way to eliminate the need for R&R funding. The dearth of R&R funds for the past few years has caused delay of repairs and renovations which are in turn negatively impacting bond projects – i.e., the scope of bond projects is having to cover the backlog in the facilities maintenance, thus limiting funds for improvements and repurposing of facilities. Even more critical is the impact of further deferral of repairs and renovations on those buildings that are not included in the bond program.
- Very large strides in clearing deferred maintenance were clearly visible during the years when R&R funding was received. The most recently approved (2004) COPS R&R will get us back on track for decreasing deferred maintenance.
- The level of State funding for the ongoing routine maintenance has not kept up with the campus needs. Moreover, in the past five years, while there has been a ten percent increase in the University's appropriated building square footage, Facilities Services has sustained budget cuts totaling some \$6.5 million. This figure is equivalent to 25% of the Facilities Services base budget from both appropriation and other funds. Obviously this funding reduction and lack of full R&R funding has impacted the accumulation of the backlog and routine maintenance. Finally, absence of adequate routine maintenance funding has accelerated rate of deterioration in presence of an inventory of older physical assets including historical buildings.
- In some facilities, the Bond program will reduce DM backlog. COP's funding will not make up the previous funding levels of \$10-12 million per year. Additional annual R&R funding will be required to reverse the increase in DM backlog.

20. Does your University have an annual maintenance work plan and budget that outlines how minor repair and renovation needs will be handled? IF YES, PLEASE ATTACH A BRIEF DESCRIPTION OF ACTIVITIES INCLUDED IN THE PLAN.

14	a. Yes	2	b. No	0	c. Don't know
	87.5%		12.5%		

21. Is the annual maintenance work plan and budget adjusted to conform to actual appropriations received?

15	a. Yes	1	b. No	0	c. Don't know
	93.75%		6.25%		

APPENDICES

22. Does your annual plan prioritize minor repair and renovation needs?

14 87.5%	a. Yes	2 12.5%	b. No	0	c. Don't know
-------------	--------	------------	-------	---	---------------

23. Does your University have a multi-year maintenance plan that includes future service costs, service quality and deferred maintenance for all repair and renovation projects?

9 56.25%	a. Yes	7 43.75%	b. No	0	c. Don't know
-------------	--------	-------------	-------	---	---------------

24. Please discuss any other issues or concerns you have regarding the overall process in establishing your repair and renovation needs and the funding process.

- Need to be able to design in year prior to actual repair funding. Need to be able to re-designate funds for emergency repairs.
- Our foremost concern is the level and certainty of R&R funding availability. While the UNC distribution model is a part of the concern and certainly needs extensive study and revision, the lack of support by the state for allocation of consistently adequate levels of Repair and Renovation funds is causing grave concern at the university. However, the end result will always be deferral of needed work that results in increased operating cost and potential facility downtime.
- The allocation formula needs changing. Funding should not be based on factors such as the number of degree programs since this has nothing to do with the conditions of a structure of system. Additionally, it does not take into account underground utilities. Advanced planning funds need to be identified and allotted to obtain design resources prior to the year of the repairs/renovations allocation.
- Budget cuts, old buildings, and staff shortages have combined to put Facility Services into a reactive posture. Building reserve funded staff additions, installation of Mainsaver software and an emphasis on preventive maintenance will move us from reactive to managed maintenance.
- Erratic funding levels prevent meaningful strategic planning for addressing the DM backlog. Fluctuations make it impossible to maintain qualified staff to administer the projects and maintain continuity of the program. The decline in maintenance services will continue to drive the DM backlog up.
- Funding continuity and adequacy are paramount. The funding model should be revised to include the effect of overhead receipts received by the institutions.

APPENDICES

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APPENDICES

APPENDIX B RESPONSE FROM THE OFFICE OF THE PRESIDENT, UNIVERSITY OF NORTH CAROLINA



The University of North Carolina

OFFICE OF THE PRESIDENT

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Appalachian State
University

December 14, 2004

East Carolina
University

The Honorable Ralph Campbell, Jr.

Elizabeth City
State University

North Carolina State Auditor

Fayetteville State
University

Office of the State Auditor

North Carolina
Agricultural and
Technical State
University

2 South Salisbury Street

North Carolina
Central University

Raleigh, North Carolina 27699-0601

North Carolina
School of
the Arts

Dear Mr. Campbell:

North Carolina
State University
at Raleigh

We deeply appreciate your confirmation, as set forth in the recent performance audit review of our repair and renovations processes, that the campuses of the University of North Carolina have effectively used the funds made available for this purpose by the N.C. General Assembly. It is clear that your office conducted a comprehensive and thoughtful assessment, and we will carefully consider your recommendations for process improvements.

University of
North Carolina
at Asheville

The University is always mindful of our responsibility to be good stewards of the state's sizeable investment in our physical resources, and the repair and renovation funding provided by the General Assembly is essential to our ability to fulfill that responsibility. We concur that a consistent stream of funding is imperative for planning and executing an effective maintenance program, including addressing the current backlog of deferred maintenance items. During the upcoming 2005 legislative session, we will advance proposals recommending that infrastructure be included in the calculation of repair and renovation funding and that an appropriate portion of the overall funding be made available by the state to the University.

University of
North Carolina
at Chapel Hill

We are grateful for this important performance review and will carefully consider its recommendations.

University of
North Carolina
at Charlotte

Sincerely,

University of
North Carolina
at Greensboro

University of
North Carolina
at Pembroke

Molly Corbett Broad

University of
North Carolina
at Wilmington

Western Carolina
University

cc: Manager Janet Hayes
Deputy State Auditor Wesley Ray
Vice President Jeffrey Davies

Winston-Salem
State University

APPENDICES

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Mr. Robert L. Powell	State Controller
Ms. Molly Corbett Broad	President, UNC General Administration

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January 6, 2005

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