STATE OF NORTH CAROLINA
OFFICE OF THE STATE AUDITOR
BETH A. WOOD, CPA

UNIVERSITY OF NORTH CAROLINA GENERAL ADMINISTRATION

INFORMATION TECHNOLOGY GENERAL CONTROLS

INFORMATION SYSTEMS AUDIT
MARCH 2017

NC OSA
The Taxpayers' Watchdog

EXECUTIVE SUMMARY

<u>PURPOSE</u>

The objective of this information systems audit at the University of North Carolina General Administration (UNC-GA) was to assess the information technology general controls that UNC-GA maintained as an organization providing hosting services to participating University of North Carolina (UNC) campuses.

<u>BACKGROUND</u>

UNC-GA offers Banner hosting services to participating campuses of the UNC system. Banner is an enterprise resource planning software that processes and contains student information, financial information, and human resource information for each campus. By hosting Banner, UNC-GA takes on certain computing and security responsibilities for the campuses and provides support for their Banner environment. As of the date of this report, UNC-GA hosts the Banner system for nine campuses.

<u>KEY FINDINGS</u>

The results of the audit disclosed security deficiencies considered reportable under generally accepted government auditing standards. These deficiencies are reported to UNC-GA by separate letter in accordance with these standards. These items should be kept confidential as provided by *North Carolina General Statute 132-6.1(c)*.

The key findings and recommendations in this summary may not be inclusive of all the findings and recommendations in this report.

Beth A. Wood, CPA
State Auditor

AUDITOR'S TRANSMITTAL

The Honorable Roy Cooper, Governor
Members of the North Carolina General Assembly
Ms. Margaret Spellings, President, University of North Carolina
Mr. W. Louis Bissette, Jr., Chairman, UNC Board of Governors
Mr. Walter C. Davenport, Chair, Audit, Risk Management and Compliance Committee

Ladies and Gentlemen:

We are pleased to submit this information system audit report titled University of North Carolina General Administration (UNC-GA) Information Technology General Controls. The audit objective was to assess the information technology general controls that UNC-GA maintained as an organization providing hosting services to participating University of North Carolina campuses.

University of North Carolina President Margaret Spellings reviewed a draft copy of this report and a draft sensitive letter. Her written comments are included in the sensitive letter. The letter is considered sensitive and confidential since it contains information impacting security and will not be released to the public as provided by *North Carolina General Statute 132-6.1(c)*.

The Office of the State Auditor initiated this audit to support the annual financial statement audits of campuses participating in UNC-GA hosting services.

The Office of the State Auditor performed this audit by authority of Article 5A of Chapter 147 of the *North Carolina General Statutes* and conducted it in accordance with generally accepted government auditing standards issued by the Comptroller General of the United States.

We appreciate the cooperation received from management and the employees of UNC-GA during our audit.

Respectfully submitted,

Beth A. Wood

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BACKGROUND

University of North Carolina General Administration (UNC-GA) consists of core administrative staff that executes the policies of the Board of Governors and provides University-wide leadership to member campuses of the University of North Carolina (UNC) system.

One of the areas UNC-GA provides leadership in is information technology (IT). UNC-GA offers Banner[1] hosting services to member campuses of the UNC system. By participating in UNC-GA hosting services, campuses delegate the responsibility for implementing, maintaining, and securing the infrastructure necessary to support their Banner system. Additionally, UNC-GA provides system administration, database support, and hardware capacity to each participating campus.

As of the date of this report, UNC-GA provides Banner hosting services to nine campuses: Elizabeth City State University, Fayetteville State University, North Carolina Agricultural & Technical State University, North Carolina Central University, UNC Asheville, UNC Pembroke, UNC School of the Arts, Western Carolina University, and Winston-Salem State University.

These nine campuses rely on UNC-GA hosting to ensure that their data is available, to prevent unauthorized modification and use of student information and financial data, and to protect the confidentiality of student and employee personal information. Applications hosted by UNC-GA processed student records for almost 49,000 full-time students and $1.2 billion in operating expenses during fiscal 2015.

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[1]   Banner is a enterprise resource planning software system for higher education. It contains student information, financial information, and human resources data.

OBJECTIVES, SCOPE, AND METHODOLOGY

The audit objective was to assess the information technology general controls that the University of North Carolina General Administration (UNC-GA) maintained as an organization providing hosting services to participating University of North Carolina campuses.

The Office of the State Auditor initiated this audit to support the annual financial statement audits of campuses participating in UNC-GA hosting services.

The audit scope focused on hosting services at UNC-GA that support Banner systems at nine UNC campuses. The hosted services significantly impacted disclosures in the campuses' financial statements and expenditures of federal financial assistance. Auditors conducted the fieldwork from November 2015 to May 2016.

To accomplish the audit objective, auditors gained an understanding of UNC-GA's policies and procedures, interviewed personnel, observed operations, inspected documentation, reviewed the appropriate technical literature, and reviewed computer-generated reports. Whenever sampling was used, auditors applied a nonstatistical approach. Therefore, results could not be projected to the population. This approach was determined to adequately support audit conclusions.

Because of the test nature and other inherent limitations of an audit, together with limitations of any system of internal and management controls, this audit would not necessarily disclose all performance weaknesses or lack of compliance.

As a basis for evaluating internal control, auditors applied the internal control guidance contained in professional auditing standards. However, our audit does not provide a basis for rendering an opinion on internal control, and consequently, we have not issued such an opinion.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

FINDINGS, RECOMMENDATIONS, AND RESPONSES

The audit found security deficiencies considered reportable under generally accepted government auditing standards. These deficiencies are reported to the University by separate letter in accordance with these standards. These items should be kept confidential as provided by *North Carolina General Statute 132-6.1(c).*

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