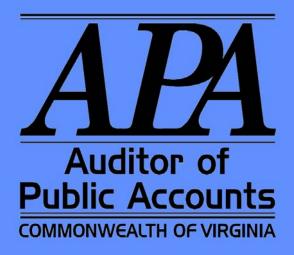
VIRGINIA COMMONWEALTH UNIVERSITY

REPORT ON AUDIT FOR THE YEAR ENDED JUNE 30, 2011



AUDIT SUMMARY

Our audit of Virginia Commonwealth University for the year ended June 30, 2011, found:

- the financial statements are presented fairly, in all material respects, with generally accepted accounting principles;
- a matter involving internal control requiring Management's attention that we do not consider to be a material weakness;
- no instances of noncompliance or other matters required to be reported under Government Auditing Standards.

We have audited the basic financial statements of Virginia Commonwealth University as of June 30, 2011, and for the year then ended and issued our report thereon dated December 12, 2011. Our report, included with the University's basic financial statements, is available at the Auditor of Public Accounts' web site at www.apa.virginia.gov and at the University's web site at www.vcu.edu.

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INTERNAL CONTROL FINDING AND RECOMMENDATION

Improve Database Security

The University should improve its protection of the databases storing critical and confidential data. Our audit of the Oracle databases supporting the administrative systems noted a lack of automated password and logging controls over the database administrators responsible for managing Oracle.

While the University exercises automated password and logging controls for most of its Oracle users, it does not require the same degree of rigor and control over the system accounts of its Oracle database administrators. These administrator accounts have significantly more access than typical user accounts, and therefore represent an increased security risk.

To protect the University's critical and confidential data and improve accountability for changes to this data, we recommend that the University establish automated password and logging controls over the administrator accounts. We recommend the University use automated mechanisms to enforce password controls consistent with existing password policies, log critical administrator activity, review the logs regularly to search for inadvertent or malicious changes, and prevent administrators from gaining access to the logs so they cannot alter them.

Specifically, these controls contain descriptions of the University's security mechanisms. Therefore, we have communicated the details of this recommendation to management in a separate confidential document that is Freedom of Information Act Exempt under Section 2.2-3705.2 of the <u>Code of Virginia</u>.



Commonwealth of Virginia

Auditor of Public Accounts

Walter J. Kucharski Auditor of Public Accounts P.O. Box 1295 Richmond, Virginia 23218

December 12, 2011

The Honorable Robert F. McDonnell Governor of Virginia

The Honorable Charles J. Colgan Chairman, Joint Legislative Audit and Review Commission

The Board of Visitors Virginia Commonwealth University

INDEPENDENT AUDITOR'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS

We have audited the financial statements of the business-type activities and the discretely presented component units of **Virginia Commonwealth University** as of and for the year ended June 30, 2011, which collectively comprise the University's basic financial statements and have issued our report thereon dated December 12, 2011. Our report includes a reference to other auditors. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in <u>Government Auditing Standards</u>, issued by the Comptroller General of the United States. We did not consider internal controls over financial reporting or test compliance with certain provisions of laws, regulations, contracts, and grant agreements for the financial statements of the component units of the University, which were audited by other auditors in accordance with auditing standards generally accepted in the United States of America, but not in accordance with <u>Government Auditing Standards</u>.

Internal Control Over Financial Reporting

Management of Virginia Commonwealth University is responsible for establishing and maintaining effective internal control over financial reporting. In planning and performing our audit, we considered the University's internal control over financial reporting as a basis for designing our auditing procedures for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the University's internal control over financial reporting. Accordingly, we do not express an opinion on the effectiveness of the University's internal control over financial reporting.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct misstatements on a timely basis. A material weakness is a deficiency, or a combination of deficiencies, in internal control such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis.

Our consideration of internal control over financial reporting was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control over financial reporting that might be deficiencies, significant deficiencies or material weaknesses. We did not identify any deficiencies in internal control over financial reporting that we consider to be material weaknesses, as defined above. However, we identified a deficiency in internal control over financial reporting entitled "Improve Database Security", which is described in the section titled "Internal Control Finding and Recommendation," that we consider to be a significant deficiency in internal control over financial reporting. A significant deficiency is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the University's financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit and, accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under <u>Government Auditing Standards</u>.

The University's response to the finding identified in our audit is included in the section titled "University Response." We did not audit the University's response and, accordingly, we express no opinion on it.

Report Distribution and Exit Conference

The "Independent Auditor's Report on Internal Control over Financial Reporting and on Compliance and Other Matters" is intended solely for the information and use of the Governor and General Assembly of Virginia, the Board of Visitors, and management, and is not intended to be and should not be used by anyone, other than these specified parties. However, this report is a matter of public record and its distribution is not limited.

We discussed this report with management at an exit conference held on December 21, 2011.

AUDITOR OF PUBLIC ACCOUNTS

AWP/alh



Virginia Commonwealth Un_iversity

December 22, 2011

Finance and Administration

Office of the Vice President

McAdams House 914 West Franklin Street P.O. Box 843076 Richmond, Virginia 23284-3076

804 828-6116 Fax: 804 828-0978 TDD: 1-800-828-1120 www.finance.vcu.edu

David A. Von Moll State Comptroller Virginia Department of Accounts P.O. Box 1971 Richmond, VA 23218

Subject:

Response to Internal Control and Compliance Findings and Recommendations of the Auditor of

Public Accounts

Dear Mr. Von Moll:

In compliance with the <u>Commonwealth Accounting Policies and Procedures</u> (CAPP) Manual, Section 10200, Financial Management, Virginia Commonwealth University (VCU) is submitting its response to the "Internal Control Findings and Recommendations" of the Auditor of Public Accounts' Report on Audit for the Year Ended June 30, 2011.

Should you have any questions or require additional information, please contact me at 828-6116.

Sincerely,

David W. Hanson

Vice President for Finance and Administration

Enclosure

cc: The Honorable Laura Fornash

Walter J. Kucharski, Auditor of Public Accounts

Richard D. Brown, Department of Planning and Budget

Response to Internal Control and Compliance Findings and Recommendations Of the Auditor of Public Accounts December 22, 2011 Page 2 of 2

During Virginia Commonwealth University's (VCU) annual audit, the Auditor of Public Accounts routinely considers internal controls to determine financial statement auditing procedures. Although the Auditor provides no assurance about internal controls, one reportable condition is noted in his report.

An internal control and compliance recommendation regarding database security is included in the VCU Report on Audit for the year ended June 30, 2011.

Although the Auditor's findings indicate conditions requiring management's attention, the conditions do not have a material effect on the financial statements.

Findings of the Auditor:

Improve Database Security

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To protect the University's critical and confidential data and improve accountability for changes to this data, we recommend that the University establish automated password and logging controls over the administrator accounts. We recommend the University use automated mechanisms to enforce password controls consistent with existing password policies, log critical administrator activity, review the logs regularly to search for inadvertent or malicious changes, and prevent administrators from gaining access to the logs so they cannot alter them.

Specifically, these controls contain descriptions of the University's security mechanisms. Therefore, we have communicated the details of this recommendation to management in a separate confidential document that is Freedom of Information Act Exempt under Section 2.2-3705.2 of the Code of Virginia.

VCU Response:

Current VCU operating procedures require that Oracle account passwords be changed every one hundred eighty days. In addition, a password "cracker" is periodically run against Oracle accounts to check for weak passwords. VCU will also implement the "password_verify_function" or other automated mechanism for ensuring Oracle account password compliance with University standards by March 1, 2012.

On November 18, 2011, VCU also implemented the "audit_sys_operations" function to log and monitor database administrator activity. These logs are being forwarded to VCU's syslog server for monitoring and investigative uses.

VIRGINIA COMMONWEALTH UNIVERSITY Richmond, Virginia

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