



**VIRGINIA COMMONWEALTH  
BOARD OF VISITORS  
AUDIT, INTEGRITY AND COMPLIANCE COMMITTEE  
MARCH 23, 2023  
12:30 pm  
James Branch Cabell Library  
901 Park Avenue – Room 311**

**AGENDA**

**1. CALL TO ORDER**

**Dr. Shantaram Talegaonkar, Chair**

**2. ACTION ITEMS  
(1 MINUTE)**

**Dr. Shantaram Talegaonkar, Chair**

**Approval of Minutes December 8, 2022**

**FOR INFORMATION:**

**3. REPORT FROM EXECUTIVE DIRECTOR OF  
AUDIT AND COMPLIANCE SERVICES  
(20 MINUTES)**

**Ms. Karen Helderman, Executive Director  
Audit and Compliance Services  
Ms. Suzanne Milton, Chief Ethics and  
Compliance Officer**

- a. Committee Dashboard Measures
- b. Internal Audit Reports
  - i. Budget Process – Part II
  - ii. Export controls Administration for Research Projects
  - iii. University College Internal Control Review
  - iv. School of Nursing Internal Control Review
- c. Handout: Audit Work Plan Status FY23
- d. Ethics and Compliance Update

**4. EQUITY AND ACCESS SERVICES UPDATE  
(15 MINUTES)**

**Ms. Cleo Magwaro, Associate VP of  
Institutional Equity**

**5. INFORMATION TECHNOLOGY UPDATE  
(10 MINUTES)**

**Mr. Alex Henson, Chief Information  
Officer**

**6. ACH UPDATE  
(5 MINUTES)**

**Chief Venuti, Associate VP of Public  
Safety and Chief of Police**

## **CLOSED SESSION**

7. Freedom of Information Act Sections 2.2-3711(A)

(7) (8) and (19), specifically:

**(10 MINUTES)**

a. **Audit Reports for Discussion**

i. Google Workspace Security

**Ms. Karen Helderman**, *Executive Director, Audit and Compliance Services*

b. **University Counsel Litigation Update**

**(10 MINUTES)**

**Mr. Jacob Belue**, *Associate University Counsel*

## **8. RETURN TO OPEN SESSION AND CERTIFICATION**

Approval of Committee action on matters discussed in closed session, if necessary

**Dr. Shantaram Talegaonkar**, *Chair*

## **9. ADJOURNMENT**

**Dr. Shantaram Talegaonkar**, *Chair*

# AUDIT, INTEGRITY, AND COMPLIANCE COMMITTEE

## DASHBOARD MEASURES

### INFORMATION TECHNOLOGY GOVERNANCE - DATA INTEGRITY



#### DATA GOVERNANCE PROGRAM (development of program)



Program progressing successfully

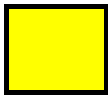


Barriers / challenges encountered that may have an impact on issue resolution or implementation. Executive Council to resolve challenge.



Significant challenge encountered; will require decision from Executive Leadership Team to resolve

The enterprise cloud-based data warehouse build continues to progress, with a pilot making Admissions data available planned to be substantially complete in mid-December. Data from other phases of the student lifecycle will be rolled into the data warehouse in January and February. The migration of the Banner system into the managed cloud environment that will be completed in early December allows for the availability of more real-time data to feed reports and dashboards, and the committee will continue to provide governance around what dashboards are published. The committee continues to work toward establishing a model for increased visibility and integration into the



#### DATA SECURITY (number of security incidents / breaches)



No data breaches have occurred or seem likely to occur; security risks are well understood and being mitigated; resources viewed as aligned with threat and risk environment



No breach has occurred, but minor security incidents or near-misses have occurred; significant audit findings have occurred but are being mitigated; some overload or challenges encountered that may require adjustment or reallocation of resources



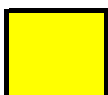
Significant breach requiring notification has occurred or conditions exist where significant barriers/challenges are likely to produce unacceptably high levels of risk

**Significant Security Incidents and Trends:** While we have seen an escalated number of scams targeting students and some successful use of multi-factor authentication protection, VCU has not experienced any major security incidents this quarter. One minor but noteworthy incident was the data breach of LastPass, a large and popular password management software. The LastPass data breach in December of 2022 directly affected VCU, but did not affect a vendor partner of VCU that was using LastPass. VCU worked with this partner to reissue credentials and no student records have been impacted. Phishing is still a major threat to the institution, and we have seen an increase in credential stuffing, where previously compromised credentials from various sources are reused against VCU systems. Mandatory multi-factor authentication still helps in defense against a variety of credential-based attacks and additional monitoring has been put in place for attempts to bypass multi-factor authentication.

**GLBA Compliance:** The VCU Information Security Office has completed the gap analysis for compliance with the new GLBA rules, and in collaboration with other administrative units in financial aid and student accounting, efforts are underway to address identified gaps. The preliminary timeline for completion of the remediation of all identified potential gaps is set for December 2023.

**SASE development:** VCU completed the purchase of its SASE platform and is deploying the platform to implement its location-agnostic security architecture. The successful deployment of the platform will provide seamless, consistent, and location-agnostic security and user experience.

### ERM PROGRAM



#### Status of ERM mitigation plans



Program progressing on schedule



Program not on schedule; ERM Committee to address.



Program significantly behind schedule; Executive Management attention required.

The ERM Steering Committee has recently reviewed Risk Mitigation and Management Plans (RMMP) and approved the risks identified as being out of tolerance. The Cabinet has also approved the risks identified as being out of tolerance. The next steps involve the working with owners of those identified as being out of tolerance to develop controls and opportunities to reduce the likelihood of the risk occurring.

**PLANNED AUDIT STATUS**



**PLANNED AUDITS** (status of audits - planned and unplanned to available resources)



**SPECIAL PROJECTS** (status of special projects - planned and unplanned to available resources)



- Progressing as planned and within overall budget
- Some overload or barriers / challenges encountered that may require adjustment or reallocation of resources to resolve
- Significant overload or barriers / challenges encountered resulting in major delays or changes to scheduled work plan

The audit plan is progressing well. The audit team is now fully staffed and we anticipate completing our workplan on schedule, providing no required state hotline investigations.

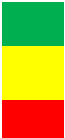
**INSTITUTIONAL COMPLIANCE PROGRAM**



**Compliance requirements compared to known material violations**

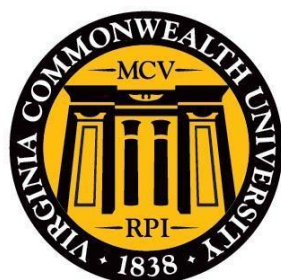


**Compliance Program Oversight & Effectiveness**



- No known material noncompliance; or ownership and accountability for compliance risks are established and operating at explicitly or implicitly approved levels of risk appetite
- Challenges encountered that have an impact on visibility, verification, strategy implementation or resolution
- Significant challenges to institutional compliance strategy or resolution encountered

**Notes:** There are no known material compliance violations related to regulatory, legal or university policies. The Integrity and Compliance



# VCU

VIRGINIA COMMONWEALTH UNIVERSITY

## Budget Process - Part 2

*Final Report*  
*February 6, 2023*

**Audit and Compliance Services**

## **Overview**

### **Budget Process**

The Office of Budget, Analysis and Financial Planning (Budget Office) manages annual budget forecasting and continuous budget monitoring for the university using a modified Responsibility Centered Management Model. The model, implemented in fiscal year 2020, centers financial forecasting around fourteen schools and colleges designated as revenue units. Revenue units plan budgets according to expected tuition and fees revenues and expenditures with the objective of responsible fiscal management. Revenue units' Chief Business Officers (Business Officers) coordinate ongoing budget activities within their respective units, acting as liaisons with Budget Office. The Office of Student Enrollment Management and Student Success develops projected enrollment data in collaboration with revenue units to aid in forecasting tuition and fees revenues. Revenue targets are designed based on tuition and fees per headcount or full-time equivalents, and expenditures are adjusted to assure coverage by those revenues.

This audit is part 2 of the Budget Process audit – Part 1 was conducted in fiscal year 2020, the first fiscal year the Revenue Center Model was implemented.

### **Budget Reports**

The Budget Office developed several budget reports available to units containing data on current financial positions relative to forecasts, current revenue, and other data to facilitate understanding and enable continuous monitoring of budget performance. These reports are designed so that Chief Business Officers can relay information to decision makers and evaluate financial performance. These reports are available in the university's reporting center, are integrated with the Banner Finance System and include: actual revenue and the most recent Banner revenue information; projected revenue; fiscal year end data; and, actual data compared to budget data.

### **Budget Management**

In addition to providing budget reports for use in budget planning, Budget holds annual meetings to review the budget process with Business Officers. During these meetings the Office trains Business Officers on the budget process and development of projections based on forecast data such as student enrollment. They share a budget timeline and discuss changes in future revenues and costs. Business Officers are directed to the Budget Office Wiki site to learn about the model, subvention, central cost allocation, and other budget related information. The Budget Management Policy Statement provides additional details especially regarding deficits, budget responsibilities, and budget structure. Business Officers regularly meet with the Assistant Budget Director to field impromptu questions, discuss budget issues and clarify procedures.

## **Scope**

The scope of the audit was to evaluate communication and reporting efforts of Budget Office with revenue units' Business Officers. Our audit also evaluated whether performance goals of Deans and Business Officers included financial and budget metrics to assess their accountability in the budget process.

## Objective

The objective of the audit was to determine whether budget communications with revenue units' Business Officers were satisfactory and understood by revenue units' decision makers. We also examined whether Deans' and Business Officers' performance goals included metrics for accountability in regards to budget and fiscal performance.

## Procedures

In developing procedures, we consulted with Budget to design a survey of Business Officers' experience with the budget process, communications and reports mentioned above. We:

- Distributed surveys among all 14 revenue units' Business Officers, receiving 13 responses. Surveys included questions about communications from the Office of Budget, Analysis and Financial Planning and revenue units' use of reporting center budget model data.
- Conducted interviews with four Business Officers to confirm our understanding and walkthrough how they derived enrollment data and used it for projections
- Evaluated Reporting Center budget model reports for reasonableness
- Reviewed job goals of revenue units' deans and financial officers to ascertain whether duties included budgeting responsibilities to indicate accountability for budget

## Conclusion

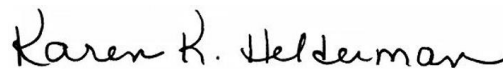
Based on results of our audit, budget communications were sufficient and understood by revenue units' decision makers; and Deans and Business Officers are accountable in the budget process.

A recommendation to strengthen training provided by the Office of Budget, Analysis, and Financial Planning was included in a separate report furnished to management.

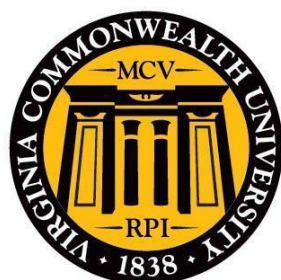
Prior to releasing this report in final form, the draft report was reviewed by, and management's action plans were provided or approved by, the following officials:

David Allen	Assistant Vice President, Office of Budget, Analysis, and Financial Planning
Karol Kain Gray	Senior Vice President and Chief Financial Officer

Our audit was conducted in conformance with the *International Standards for the Professional Practice of Internal Auditing* and included an evaluation of internal controls and such procedures as we considered necessary in the circumstances.



**Executive Director  
Audit and Compliance Services**



# VCU

VIRGINIA COMMONWEALTH UNIVERSITY

## **Export Controls Administration for Research Projects**

*Final Report*  
*February 14, 2023*

**Audit and Compliance Services**



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## EXECUTIVE SUMMARY

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### Overview

U.S. export control laws govern the transfer of controlled information, items, and technologies to foreign countries and foreign persons for national security purposes. The U. S. Departments of State (State), Commerce and Treasury establish regulations around those transfers as well as around international travel and shipping, and interactions with international students. State regulates defense related exports, while Commerce regulates commercial and some military exports, and Treasury regulates economic and trade sanctions affecting export. Export includes transfers of physical items, data, or technology outside to a foreign entity or individual within the U.S. Transfers may occur by involvement of foreign persons in research projects, restricted publication of research data or reports, oral exchange or many other means. The plethora of controlled items and means of transfer intensifies violation risks necessitating concentrated mitigation efforts, as a single violation may carry significant impact.

### Export Control Office Project Reviews

To address export risks related to research and ensure regulatory compliance, the VCU Export Control Office reviews research projects for export issues. Their tasks include export control analysis, identifying potential control issues, determining license requirements, developing with principal investigators (PIs) a technology control plan, training, and evaluating international travel for approval. Export Control conducts reviews in the research management projects system, Rams-spot, and screens projects for restricted entities and personnel, international travel, types of equipment, export controlled technologies and data, and restricted publishing. Reviewers may also examine statements of work, attachments, budgets, non-disclosure and other agreements involved in projects. If a project aligns with any of several regulatory exceptions, or is not funded, the review ends. If export concerns remain after review, a note is placed in the system that further review may be needed upon funding. When projects with export concerns are funded, the Export Controls Office develops technology control plans with PIs to mitigate export controls risks. The reviewer uses a project tracker spreadsheet to record review progress and monitor the status of funded research in completing technology control plans. The Export Control Office monitors the plans annually for changes in projects, and also whenever regulations change that may affect projects.

In calendar year 2022, the Export Control Office reviewed 324 projects and developed eight technology control plans, as the remaining 316 contained regulatory exemptions.

### Purpose

The objective of the audit was to determine whether the Export Control Office takes adequate measures to ensure compliance with export controls regulations to protect VCU from violations.

## Scope and Audit Procedures

Our scope of Export Controls Administration for Research Projects covered calendar year 2022, focusing on whether:

- Proposals identified with export control potential risk were adequately reviewed
- Sufficient monitoring procedures were followed for projects determined to be at risk for export control
- Processes to identify research projects with export control risk were effective
- Adequate training in export controls was provided and obtained by relevant parties

Our audit procedures included:

- Interviews with the Director and Assistant Director of the Export Compliance Program, and the Associate Vice President of the Division of Sponsored Programs to gain understanding of processes and procedures of export controls administration for research
- Review of policies and procedures related to export control processes
- Examination of funded and pending research proposals
- Evaluation of tracking and monitoring of research projects with export control concerns
- Verification of training required for PIs in export control requirements
- Evaluation of training materials
- Evaluation of documentation of the review of research projects identified with export control risks
- Review of monitoring of regulatory changes

## Conclusion

In our opinion, based on the results of our audit, the Export Control Office takes adequate measures to ensure compliance with export control regulations to protect VCU from violations.

Prior to releasing this report in final form, the draft report was reviewed by, and management's action plans were provided or approved by, the following officials:

Nicole Porter  
Tina Cunningham  
Srirama Rao

Export Compliance Officer  
Associate Vice President, Research Administration  
Vice President for Research and Innovation

Our audit was conducted in conformance with the *International Standards for the Professional Practice of Internal Auditing* and included an evaluation of internal controls and such procedures as we considered necessary in the circumstances.

  
**Executive Director**  
**Audit and Compliance Services**



# VCU

VIRGINIA COMMONWEALTH UNIVERSITY

## **University College**

*Internal Controls Compliance Review*

*Final Report*

*February 20, 2023*

**Audit and Compliance Services**



# VCU

**Audit and Compliance Services**

918 West Franklin Street  
Box 842503  
Richmond, Virginia 23284-2503  
Phone: (804) 828-2336  
Fax: (804) 828-2356

**To:** Michael Rao  
President

**From:** Karen Helderman  
Executive Director, Audit and Compliance Services

**Date:** February 20, 2023

**Subject:** Internal Controls Compliance Review of University College

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








Internal Audit has completed an Internal Controls Compliance Review of selected internal controls related to University College and have included the results in the attached Dashboard Report.

cc Constance Relihan, Dean, University College  
Nick Fetzer, Assistant Vice Provost, Finance and Administration (Life Sciences)








## Internal Controls Compliance Assessment Dashboard

<b>Audit name:</b>	University College
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<b>Reason for audit:</b>	Provide management with assurance that selected financial and administrative processes were performed and monitored properly.
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Conclusion by Process	Risk Rating
1. Financial Monitoring 1.1. Forecast Monitoring of approved budgets was performed 1.2. Budgets were reviewed and negative variances were addressed	 
2. Banner Reconciliations 2.1. Banner reconciliations were performed monthly or as required by the fiscal Administrator's Handbook 2.2. Reconciliations were signed and dated by both the reviewer and approver 2.3. Supporting documentation for transactions were readily available	  
3. Journal Vouchers 3.1. JVs were approved by the appropriate position depending on dollar amount 3.2. Documentation to support JVs was maintained	 
4. Petty Cash 4.1. Petty cash funds were secured according to the university Petty Cash policy 4.2. Custodian was the only authorized person with access to funds 4.3. Monthly and annual reconciliations were performed timely 4.4. Annual Trainings were completed by the custodian, dean/department head or designee	N/A N/A N/A N/A
5. Purchases – 5.1. Purchases had a valid business purpose and were reasonable 5.2. There was adequate documentation to support emergency or sole source purchases	 





<p>5.3. Purchases &gt;\$10,000 were routed through Procurement Services for review and approval</p> <p>5.4. Controls were in place to prevent the splitting of orders to avoid procurement rules</p> <p>5.5. Supporting documentation was maintained electronically</p> <p>5.6. Purchase orders were closed timely in RealSource</p>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
<p>6. Travel</p> <p>6.1. Travel &gt; \$500 or air/rail was approved prior to traveling and reimbursements were processed through Chrome River</p> <p>6.2. Transportation (air and rail) was booked through Christopherson</p> <p>6.3. Travel was for allowable business purposes</p> <p>6.4. Hotel and meals were within the appropriate per diem range</p>	<input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
<p>7. Purchase Cards (Pcards)</p> <p>7.1. Granted to the minimum necessary number of cardholders and provide the minimum necessary spending and transaction limits</p> <p>7.2. Applications were authorized by the cardholder's supervisor</p> <p>7.3. Only used by the cardholder and were not shared</p> <p>7.4. Individual cardholders were tasked with securing their Pcards</p> <p>7.5. Regularly monitored to ensure documentation supporting transactions was complete and uploaded timely</p> <p>7.6. Transactions were supported by receipts or valid invoices uploaded into the Pcard system</p> <p>7.7. Activity was monitored in BoA Works to ensure reviewers and approvers were timely reviewing and approving transactions</p> <p>7.8. Controls were in place to prevent Pcard holders from splitting transactions in to two or more transactions</p> <p>7.9. Sales taxes were excluded from Pcard purchases where appropriate</p> <p>7.10. Purchases were reconciled to receipts and to the cardholder's monthly statement</p> <p>7.11. Purchases had a valid business purpose and were allowable based on the Purchasing Card Program Procedures</p>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
<p>8. Record Management</p> <p>8.1. Records were destroyed according to VCU's Record Retention Policy</p> <p>8.2. The unit identified a records custodian</p> <p>8.3. Records custodian attended records retention training</p> <p>8.4. The unit developed a records inventory</p>	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<p>9. Grants</p> <p>9.1. Expenditures were in accordance with the grant agreement</p>	N/A

9.2. Performance/progress reports were submitted to the sponsor timely where required	N/A
10. Fixed Assets 10.1. Annual inventory was completed and submitted to Fixed Asset Accounting Office 10.2. Assets were properly tagged 10.3. Assets stolen, traded-in, or transferred had the surplus forms completed 10.4. HEETF purchases \$500 and above were recorded as fixed assets	   
11. ARMICS 11.1. Yearly ARMICS documentation was completed and submitted by the due date set by the controller's office 11.2. ARMICS testing was completed thoroughly and identified issues were addressed timely 11.3. Supporting documentation for unit testing was readily available	  
12. Local Applications 12.1. Annual access reviews for local applications were performed 12.2. Local Applications were inventoried according to the Passwords Authentication and Access Standard 12.3. Application server(s) were administered or supported by central IT through a SLA 12.4. Signed copy(s) of the Service Level Agreement with Technology Services were available	N/A N/A N/A N/A

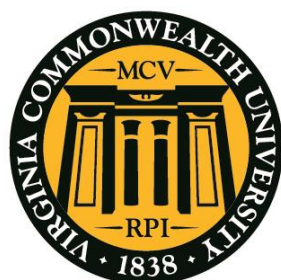
Our assessment was conducted in conformance with the *International Standards for the Professional Practice of Internal Auditing* and included an evaluation of internal controls and such procedures as we considered necessary in the circumstances.

**Note: Risk Classifications/Definitions and Issue Table, if applicable, are included on following page.**

## Risk Classifications and Definitions

 <b>Full Compliance</b>	<ul style="list-style-type: none"> <li>• Overall control environment representative of good practice, well-designed, effective, and functioning properly.</li> <li>• No improvement opportunities identified. Full Compliance.</li> </ul>
 <b>Verbal Finding</b>	<ul style="list-style-type: none"> <li>• Adequate control environment in most areas.</li> <li>• Moderate risk improvement opportunities identified, which require corrective action</li> <li>• Minor Findings of non-compliance.</li> <li>• Finding and recommendation verbally communicated to management and no written corrective action required.</li> </ul>
 <b>Management Level Finding</b>	<ul style="list-style-type: none"> <li>• Some key controls do not exist, or are not properly implemented, and there are improvement opportunities.</li> <li>• Control environment is impaired.</li> <li>• Finding and recommendation communicated to management and written corrective action required.</li> </ul>
 <b>Board Level Finding</b>	<ul style="list-style-type: none"> <li>• Control environment is unacceptable with critical issues, individually or in the aggregate, having been identified or major noncompliance with University policies.</li> <li>• Control environment contains insufficient internal controls to address key risks and the impact may be substantial in size or nature or their effect cannot be quantified.</li> <li>• Immediate corrective action should be implemented.</li> <li>• VP level involvement needed.</li> <li>• Finding and recommendation communicated to the Board and written corrective action required.</li> </ul>
<b>N/A</b>	<ul style="list-style-type: none"> <li>• Function is not applicable to the reviewed department/division.</li> </ul>





# VCU

VIRGINIA COMMONWEALTH UNIVERSITY

## **School of Nursing**

*Internal Controls Compliance Review*

*Final Report*

*February 28, 2023*

**Audit and Compliance Services**



# VCU

**Audit and Compliance Services**

918 West Franklin Street  
Box 842503  
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**To:** Michael Rao  
President

**From:** Karen Helderman  
Executive Director, Audit and Compliance Services

**Date:** February 28, 2023

**Subject:** Internal Controls Compliance Review of School of Nursing

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Internal Audit has completed an Internal Controls Compliance Review of selected internal controls related to the School of Nursing and have included the results in the attached Dashboard Report. There is one management finding regarding ARMICS.

cc Jean Giddens, Dean  
Sterling Daniel, Associate Dean for Business Administration

## Internal Controls Compliance Assessment Dashboard

<b>Audit name:</b>	School of Nursing
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<b>Reason for audit:</b>	Provide management with assurance that selected financial and administrative processes were performed and monitored properly.
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Conclusion by Process	Risk Rating
1. Financial Monitoring 1.1. Forecast Monitoring of approved budgets was performed 1.2. Budgets were reviewed and negative variances were addressed	 
2. Banner Reconciliations 2.1. Banner reconciliations were performed monthly or as required by the fiscal Administrator's Handbook 2.2. Reconciliations were signed and dated by both the reviewer and approver 2.3. Supporting documentation for transactions were readily available	  
3. Journal Vouchers 3.1. JVs were approved by the appropriate position depending on dollar amount 3.2. Documentation to support JVs was maintained	 
4. Petty Cash/Gift Cards 4.1. Petty cash funds /Gift cards were secured according to the university Petty Cash policy 4.2. Custodian was the only authorized person with access to funds/gift cards 4.3. Monthly and annual reconciliations were performed timely 4.4. Annual Trainings were completed by the custodian, dean/department head or designee	   N/A
5. Purchases – 5.1. Purchases had a valid business purpose and were reasonable 5.2. There was adequate documentation to support emergency or sole source purchases 5.3. Purchases >\$10,000 were routed through Procurement Services for review and approval	  





<p>5.4. Controls were in place to prevent the splitting of orders to avoid procurement rules</p> <p>5.5. Supporting documentation was maintained electronically</p> <p>5.6. Purchase orders were closed timely in RealSource</p>	<input checked="" type="checkbox"/>  <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
<p>6. Travel</p> <p>6.1. Travel &gt; \$500 or air/rail was approved prior to traveling and reimbursements were processed through Chrome River</p> <p>6.2. Transportation (air and rail) was booked through Christopherson</p> <p>6.3. Travel was for allowable business purposes</p> <p>6.4. Hotel and meals were within the appropriate per diem range</p>	<input checked="" type="checkbox"/>  <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
<p>7. Purchase Cards (Pcards)</p> <p>7.1. Granted to the minimum necessary number of cardholders and provide the minimum necessary spending and transaction limits</p> <p>7.2. Applications were authorized by the cardholder's supervisor</p> <p>7.3. Only used by the cardholder and were not shared</p> <p>7.4. Individual cardholders were tasked with securing their Pcards</p> <p>7.5. Regularly monitored to ensure documentation supporting transactions was complete and uploaded timely</p> <p>7.6. Transactions were supported by receipts or valid invoices uploaded into the Pcard system</p> <p>7.7. Activity was monitored in BoA Works to ensure reviewers and approvers were timely reviewing and approving transactions</p> <p>7.8. Controls were in place to prevent Pcard holders from splitting transactions in to two or more transactions</p> <p>7.9. Sales taxes were excluded from Pcard purchases where appropriate</p> <p>7.10. Purchases were reconciled to receipts and to the cardholder's monthly statement</p> <p>7.11. Purchases had a valid business purpose and were allowable based on the Purchasing Card Program Procedures</p>	<input checked="" type="checkbox"/>  <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>  <input checked="" type="checkbox"/>  <input checked="" type="checkbox"/>  <input checked="" type="checkbox"/>  <input type="checkbox"/> <input checked="" type="checkbox"/>  <input checked="" type="checkbox"/>
<p>8. Record Management</p> <p>8.1. Records were destroyed according to VCU's Record Retention Policy</p> <p>8.2. The unit identified a records custodian</p> <p>8.3. Records custodian attended records retention training</p> <p>8.4. The unit developed a records inventory</p>	<input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
<p>9. Grants</p> <p>9.1. Expenditures were in accordance with the grant agreement</p> <p>9.2. Performance/progress reports were submitted to the sponsor timely where required</p>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>

10. Fixed Assets 10.1. Annual inventory was completed and submitted to Fixed Asset Accounting Office 10.2. Assets were properly tagged 10.3. Assets stolen, traded-in, or transferred had the surplus forms completed 10.4. All HEETF purchases \$500 and above were recorded as fixed assets	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
11. ARMICS 11.1. Yearly ARMICS documentation was completed and submitted by the due date set by the controller's office 11.2. ARMICS testing was completed thoroughly and identified issues were addressed timely 11.3. Supporting documentation for unit testing was readily available	<input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>
12. Local Applications 12.1. Annual access reviews for local applications were performed 12.2. Local Applications were inventoried according to the Passwords Authentication and Access Standard 12.3. Application server(s) were administered or supported by central IT through a SLA 12.4. Signed copy(s) of the Service Level Agreement with Technology Services were available	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>

Our assessment was conducted in conformance with the *International Standards for the Professional Practice of Internal Auditing* and included an evaluation of internal controls and such procedures as we considered necessary in the circumstances.

**Note: Risk Classifications/Definitions and Issue Table, if applicable, are included on following page.**

## Risk Classifications and Definitions

 <b>Full Compliance</b>	<ul style="list-style-type: none"> <li>● Overall control environment representative of good practice, well-designed, effective, and functioning properly.</li> <li>● No improvement opportunities identified. Full Compliance.</li> </ul>
 <b>Verbal Finding</b>	<ul style="list-style-type: none"> <li>● Adequate control environment in most areas.</li> <li>● Moderate risk improvement opportunities identified, which require corrective action</li> <li>● Minor Findings of non-compliance.</li> <li>● Finding and recommendation verbally communicated to management and no written corrective action required.</li> </ul>
 <b>Management Level Finding</b>	<ul style="list-style-type: none"> <li>● Some key controls do not exist, or are not properly implemented, and there are improvement opportunities.</li> <li>● Control environment is impaired.</li> <li>● Finding and recommendation communicated to management and written corrective action required.</li> </ul>
 <b>Board Level Finding</b>	<ul style="list-style-type: none"> <li>● Control environment is unacceptable with critical issues, individually or in the aggregate, having been identified or major noncompliance with University policies.</li> <li>● Control environment contains insufficient internal controls to address key risks and the impact may be substantial in size or nature or their effect cannot be quantified.</li> <li>● Immediate corrective action should be implemented.</li> <li>● VP level involvement needed.</li> <li>● Finding and recommendation communicated to the Board and written corrective action required.</li> </ul>
<b>N/A</b>	<ul style="list-style-type: none"> <li>● Function is not applicable to the reviewed department/division.</li> </ul>

**Audit and Management Services**  
**Status of Fiscal Year 2022-2023 Audit Work Plan**  
**February 20, 2023**

Area		Status
<b><u>Risk-based Audits/Other Reviews</u></b>		
Faculty Initiated Grade Change Process		Completed
Government Relations Internal Controls Review		Completed
Massey Cancer Center Internal Controls Review		Completed
Budget Process – Part 2		Completed
University College Internal Controls Review		Completed
Export Controls - Research		Completed
School of Nursing Internal Controls Review		Completed
Google Workspace		Completed
Various Fiscal & Administrative Reviews		In Progress
Records Destruction		In Progress
Parking and Billing Analysis		In Progress
Research Computing/High Performance Computing Security Review		In Progress
School of Dentistry Axium System Review		In Progress
ERM RMM Plan Evaluation		In Progress
Data Integrity – VCU Website		In Progress
Financial Aid SCHEV Reporting		Not Started
Student-athlete name, image & likeness; Compliance Review		Not Started
Software Asset Inventory		Not Started
School of Pharmacy		Not Started
Tableau Security		Not Started
Blackbaud CRM		Not Started

**Audit and Management Services**  
**Status of Fiscal Year 2022-2023 Audit Work Plan**  
**February 20, 2023**

<b><u>Annual Engagements and Activities</u></b>	
President's Discretionary Fund and Travel Activity Review – FY23	Completed
VCU Police Department – Unannounced Property Inspection – FY23 Part 1	In Progress
VCU Police Department – Unannounced Property Inspection – FY23 Part 2	Not Started
Annual Review of Audit Recommendations Outstanding – FY23	In Progress
Audit Risk Assessment – FY24	In Progress

<b>Special Project</b>	<b>Status</b>
<b><u>Continuing Projects</u></b>	
State Employees Fraud, Waste, and Abuse Hotline	In Progress – 1; Closed – 2
<b><u>Other Projects</u></b>	
Facilities Division – Surplus Vehicles	Completed



# VCU Board of Visitors

Audit, Integrity and Compliance Committee







March 23, 2023

# For Action: Approval of Minutes

- Audit, Integrity and Compliance Committee Meeting held on December 8, 2022
- Motion to approve the Minutes



# Committee Dashboard Measures

-  Data Governance Program
-  Data Security
-  ERM Mitigation Plans
-  Planned Audits
-  Planned Special Projects
-  Ethics and Compliance Program Oversight

# Budget Process Part II

***Conclusion: Budget communications were sufficient and understood by revenue units' decision makers;***

***Deans and Business Officers are accountable in the budget process***

## No Board level findings

We evaluated communication and reporting efforts of the Budget Officers and whether performance goals of Deans and Business Officers included financial and budget metrics to assess their accountability in the budget process.



# Export Controls Administration for Research Projects

***Conclusion: The Export Control Office takes adequate measures to ensure compliance with export control regulations to protect VCU from violations.***

## No Board level findings

- Proposals identified with export control potential risk were adequately reviewed
- Sufficient monitoring procedures were followed for projects with export control risks
- Processes to identify research projects with export control risk were effective
- Adequate training in export controls was provided and obtained by relevant parties



# Internal Control and Compliance Reviews

***Business areas reviewed: University College and School of Nursing***

- Reviewed selected controls and compliance areas  
Reconciliations, purchases, PCards, fixed asset management
- No Board level findings

# Ethics and Compliance Program Update

## Compliance Steering Committee (CSC)

- Beginning quarterly meetings, increased engagement
- Focused on coordination and best practices to ensure best-in-class compliance performance

## CSC Areas of Opportunity

- Training and communication: quality, just in time, integrated across VCU
- Monitoring and auditing; rigorous self-assessment, monitoring for gaps
- Risk assessment: ensuring regular reporting, plans for mitigation, ERM visibility
- Documentation: capturing VCU compliance program in one concise document

# Ethics and Compliance Program Update

## Ethics and Compliance Annual Training FY23

- Completion rate - 95%
- Videos and messages well received
- Supervisors asked to consider noncompletion in “accountability/integrity” section of annual review

## Training/Communication FY23 & FY24

- Support integrated compliance messages and engaging concise training across VCU
- Delivered timely to target audiences (CSC collaboration)

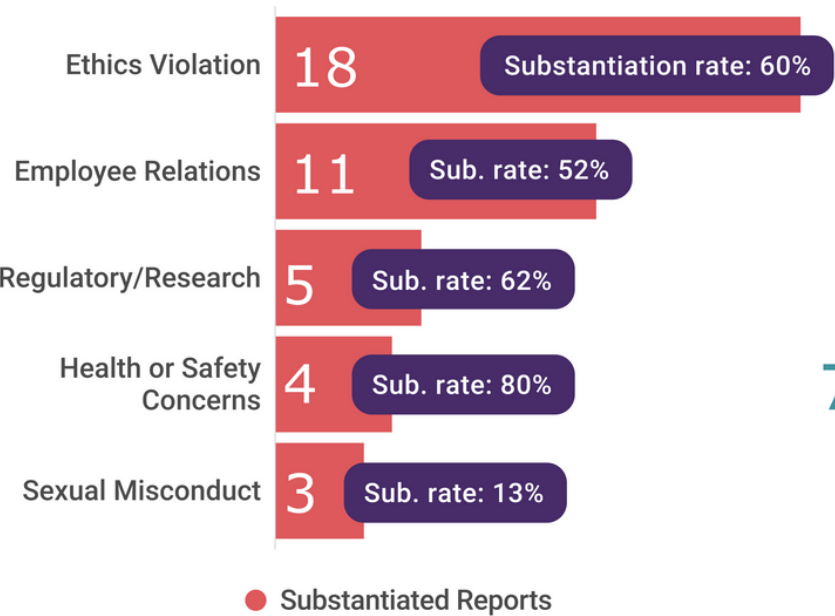


# FY 23 Midyear Trends vs SPLY in University-Wide Reported Concerns

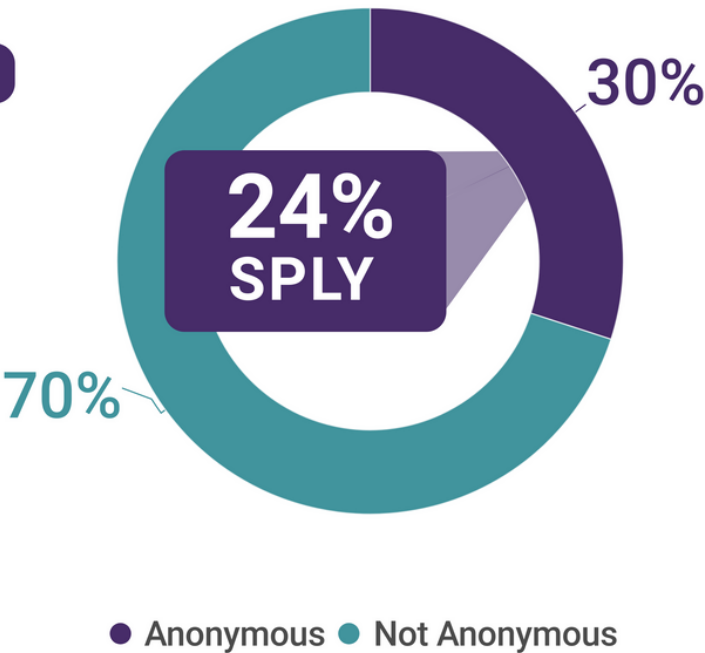
Total Volume Reported Concerns **118**  **10%** from FY 2022

Severity **97** Low **3** High  
**17** Medium

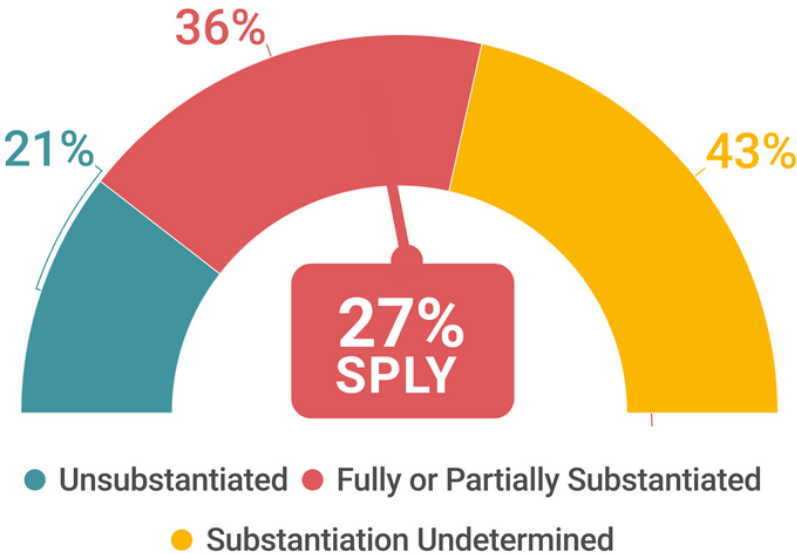
Top Five Substantiated Concerns








Overall Anonymous Reporting Rate



Overall Substantiation Rate



# FY 23 Midyear Trends vs Benchmarks in Reported Concerns

	 Cases per 100 Employees	 Anonymous Reporting Rate	 Substantiation Rate	 Concerns of Retaliation	 Most Common Issue Type
NAVEX Benchmark	1.7	50%	43%	1.72%	HR, Diversity, and Workplace Respect
VCU Internal Benchmark	1.95	23%	44%	7%	Ethics Violation
Current Fiscal Year	2.20	30%	36%	7%	Ethics Violation



# Equity and Access Services 2021-2022

## Summary Report: BOV



# Equity and Access Services (EAS)

Equity and Access Services (EAS) is composed of 4 distinct units, and 7 major policies, reports to the Office of the President.

EAS operationalizes different areas of federal and state laws and regulations in the following units:

- ADA/Accessibility Services
- Equal Opportunity and Affirmative Action Office
- Protection of Minors
- Title IX Office

# Equity and Access Services

- Human-centered, systems approach.
- Maxient case management software.
- Future trend tracking to be incorporated.
- Database for Minors on Campus under review.
- EAS achieves compliance with state and federal civil rights laws and regulations through implementation of the **7 pillars of compliance** (see: [EAS Annual Report](#)).

## Seven Pillars of EAS Compliance



# *ADA & Accessibility*

Overhaul of [ADA & Accessibility](#) in 2021:

- Maxient case management now in use.
- COVID-19 pandemic added to overall caseload in ADA accommodations.
- [Accessibility & Reasonable Accommodation for Individuals with Disabilities policy](#) amended.
- Hired inaugural Chief Accessibility Officer.
- [Animals on University Property policy](#) currently under review.



# EO/AA

EO/AA office established and delivered VCU's inaugural [nondiscrimination training](#) in 2021. Core functions:

- Investigations.
- Inquiries or referrals.
- Intake or resources only cases.
- Affirmative Action Plans (AAPs).
- Training, outreach and support.

# *Protection of Minors*

EAS took over compliance, support and oversight in 2022.

Benefits of restructure:

- Identified as an *emerging risk* by the Enterprise Risk Management Committee, thereby increasing mitigation efforts.
- Compliance manager now serves on VCU's Threat Assessment Team (TAT).
- Multi-disciplinary Workgroup is updating the Protection of Minors Policy and practices.



# *Title IX*

Title IX landscape remains in a state of flux:

- Summer 2022 - U.S., DOE released [Notice of Proposed Rule-Making](#) (NPRM) and summary.
- Current VCU Title IX processes comply with 2020 Final Rule.
- VCU will comply with changes to Final Rule once these become available in the next couple of months.



**VCU**

Technology Services

# **IT Risk Management Update**

Board of Visitors Meeting

Audit, Integrity and Compliance Committee

Alex Henson, Chief Information Officer

March 23, 2023

# Enterprise IT Risk Out of Tolerance

IT System Availability and Data Security

Extended systems or  
connectivity outage

Theft or improper  
exposure of data

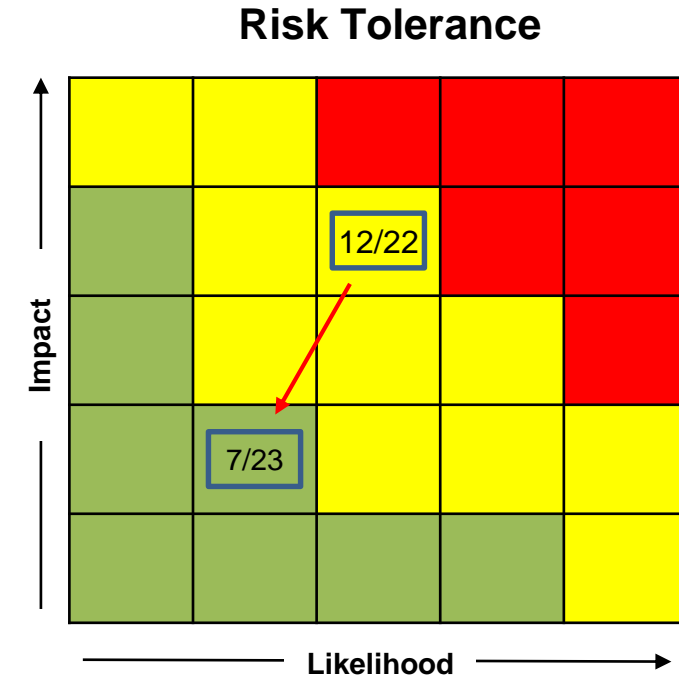
# Highest Sub-Risks and Drivers

## Unplanned outage of Ellucian Banner ERP System (Finance, HR, Student)

- Run on-premise in one data center
- Limited fail-over capability
- Vulnerable to power and weather conditions
- Time to restore in the event of disaster increased impact/severity associated with risk

## Data exposure or theft through Ransomware, Malware, or other attack vector focused on end-users

- Decentralized device management
- Current controls like Multi-factor authentication (MFA) and the Virtual Private Network (VPN) do not cover the whole enterprise



# Risk Mitigation: IT Infrastructure

Develop and maintain a modern, robust, and “always-on” IT infrastructure to maximize uptime and minimize vulnerabilities and operational impact due to external factors.

## Cloud Strategy and Service Migrations

- Cloud-first strategy and roadmap development
- Banner migration to Ellucian Cloud
- Cloud migration of other vendor managed applications
- Leverage Infrastructure as a Service (IaaS) where advantageous

## Technology Operations Center

- TOC Construction in progress for go-live of new data center in early 2024
- Redundant power and generator
- Robust back-up and recovery leveraging in-house and cloud resources

## Network Upgrades & Expansion

- Continued development of redundant fiber paths
- Use of multiple commodity internet providers
- Implementation of Application Centric Infrastructure (ACI) to automate and optimize the data network progressing

## IT Infrastructure Management

- Day to day maintenance, upgrades, support of systems/services
- Rigorous change management procedures/processes
- Leverage new technologies

# Migration to Ellucian Cloud Complete

Leveraging a robust and secure IT environment that provides the highest levels of security, redundancy, and business continuity.



## Dedicated Platform

Multi-instance platform designed to run mission critical Ellucian solutions



## Secure

Industry leading security controls integrated into Ellucian Cloud environments



## Back-up & Recovery

Databases backed-up regularly, stored securely, and available when needed to ensure business continuity



## IT Expertise

More than 200 Ellucian Cloud employees dedicated to student and institutional success



## Deep Integration

Ellucian Cloud offers unparalleled integration and we offer integration options for many third party applications



## Industry Leading Architecture

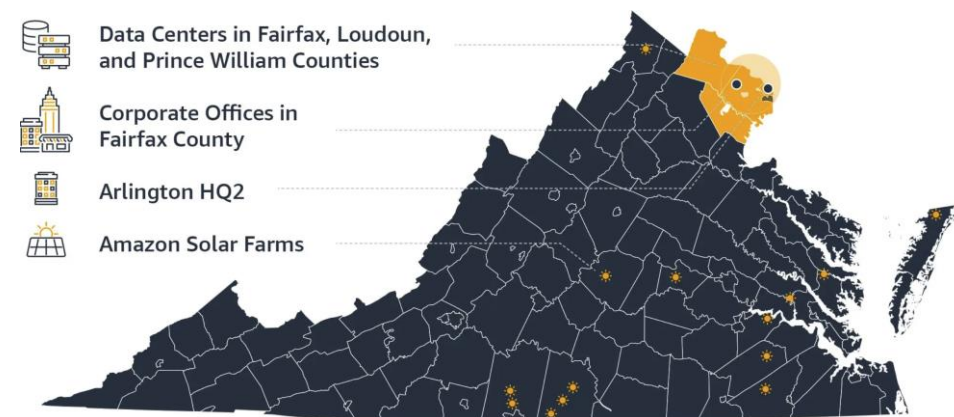
With an AWS platform, environments are optimally scaled to meet size and resource demands

# Leveraging the Ellucian Cloud: Availability

VCU's Banner instances run on the Ellucian Cloud, which runs on Amazon Web Services infrastructure, which distributes computing and storage capabilities across multiple regions, each with multiple fault tolerant data centers

United States – Regions and Availability Zones

Regions	Code	# of Zones	Location	State	Opened
US East (Ohio)	us-east-2	3	Columbus	Ohio	2016
US West (Oregon)	us-west-2	4	Eastern	Oregon	2011
US West (N. California)	us-west-1	3	San Francisco	California	2009
US East (N. Virginia)	us-east-1	6	Multiple	Virginia	2006
<b>Total</b>	<b>—</b>	<b>16</b>	<b>—</b>	<b>—</b>	<b>—</b>



# Risk Mitigation: Data Security

Develop and maintain a secure IT environment with supporting policies and processes that drive compliance to security and privacy laws and protect VCU data

## Implement New Security Architecture

- Phase 1 of Secure Access Server Edge (SASE) deployment underway
- Upgrading VPN and ultimately replacing with cloud-based service

## Expand Multi Factor Authentication

- Use of DUO multifactor authentication now mandatory for students
- DUO authentication required for all applications with any level of sensitive data

## Renewed Focus on Secure Data Use for Research

- Implementing new Horizon system for researchers accessing clinical data
- Strengthening Honest Broker program for researchers to use data protected by HIPAA
- Enhanced support for PIs

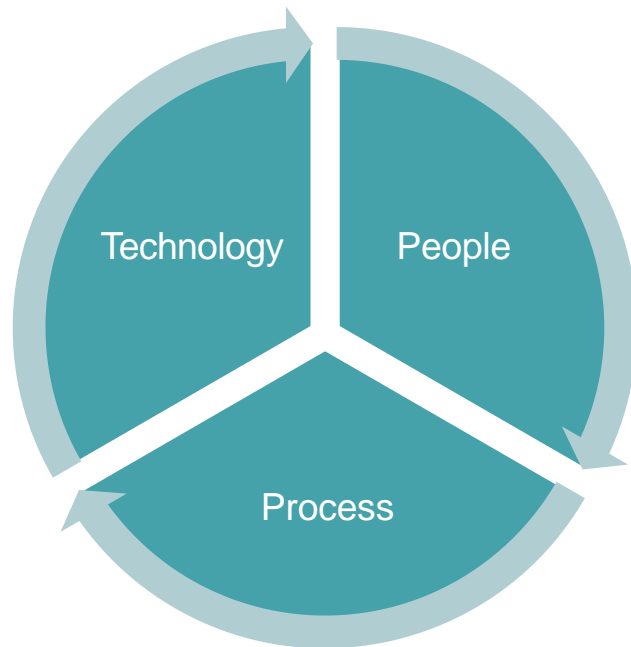
## IT Governance and Data Governance

- Revamping IT Governance program to ensure all IT purchases have thorough security review and data classification review
- Continued refinement of data governance policies and procedures and investment in technologies that automate data governance



# Leveraging the Ellucian Cloud: Security

Maintaining a secure IT environment with supporting policies and processes that drive compliance to security and privacy laws and protect VCU data



## People

- Industry Expertise
- Certifications
- Dedicated Security Response Team

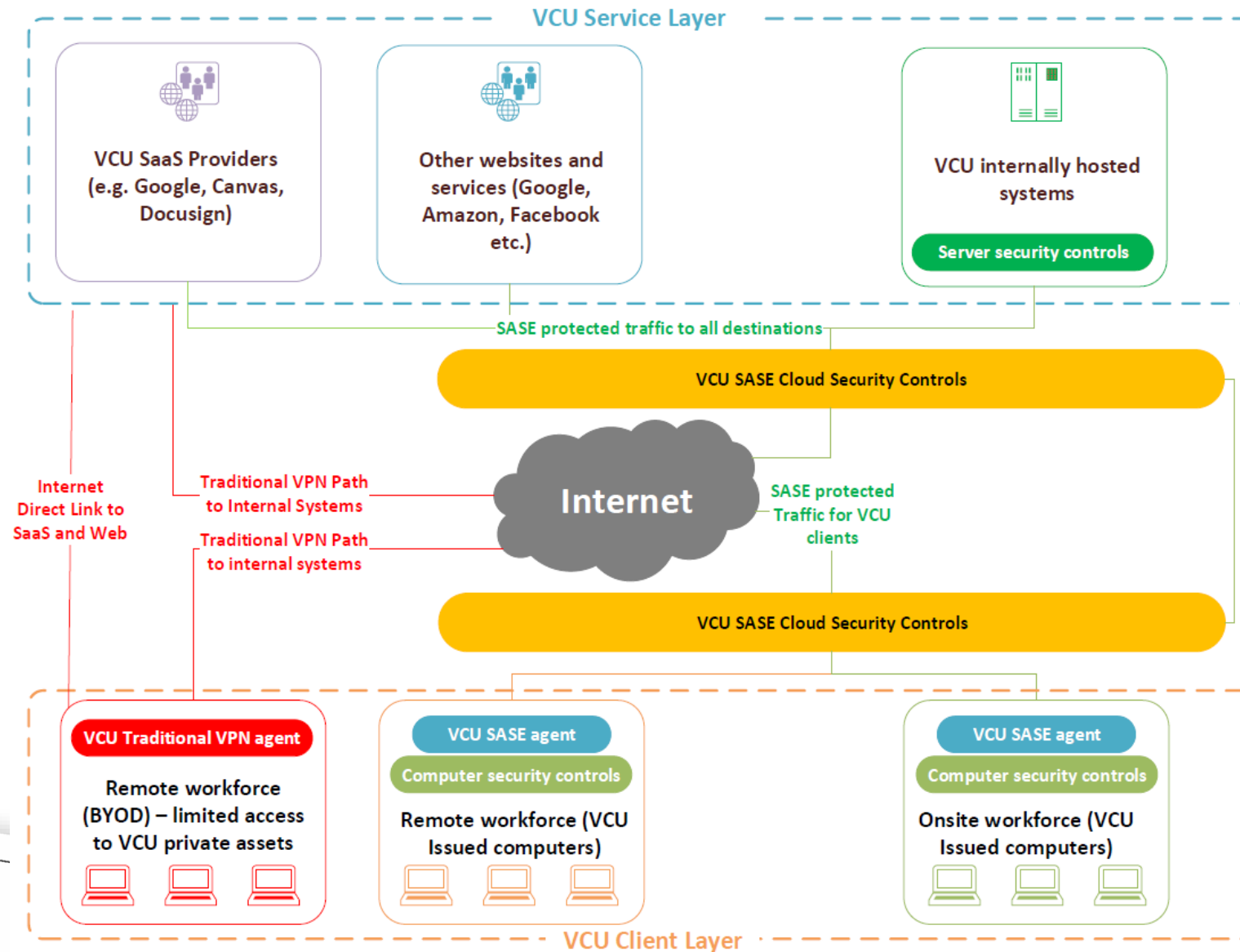
## Process

- ISO 27001 aligned
- SANS Top 20 Critical Controls
- SSAE 18 Audit
- SOC 1 & SOC 2 Type II reporting
- Security Incident Response and Forensics
- Policy training
- ITIL / ITSM

## Technology

- Automated Vulnerability Management
- Automated Patch Management
- Segregated Customer Environments
- Encryption Technology
- Secured VPN for back-end communications to on-campus systems
- Security Zones (source/destination port and protocol)
- Intrusion Detection System
- Multi-factor Authentication

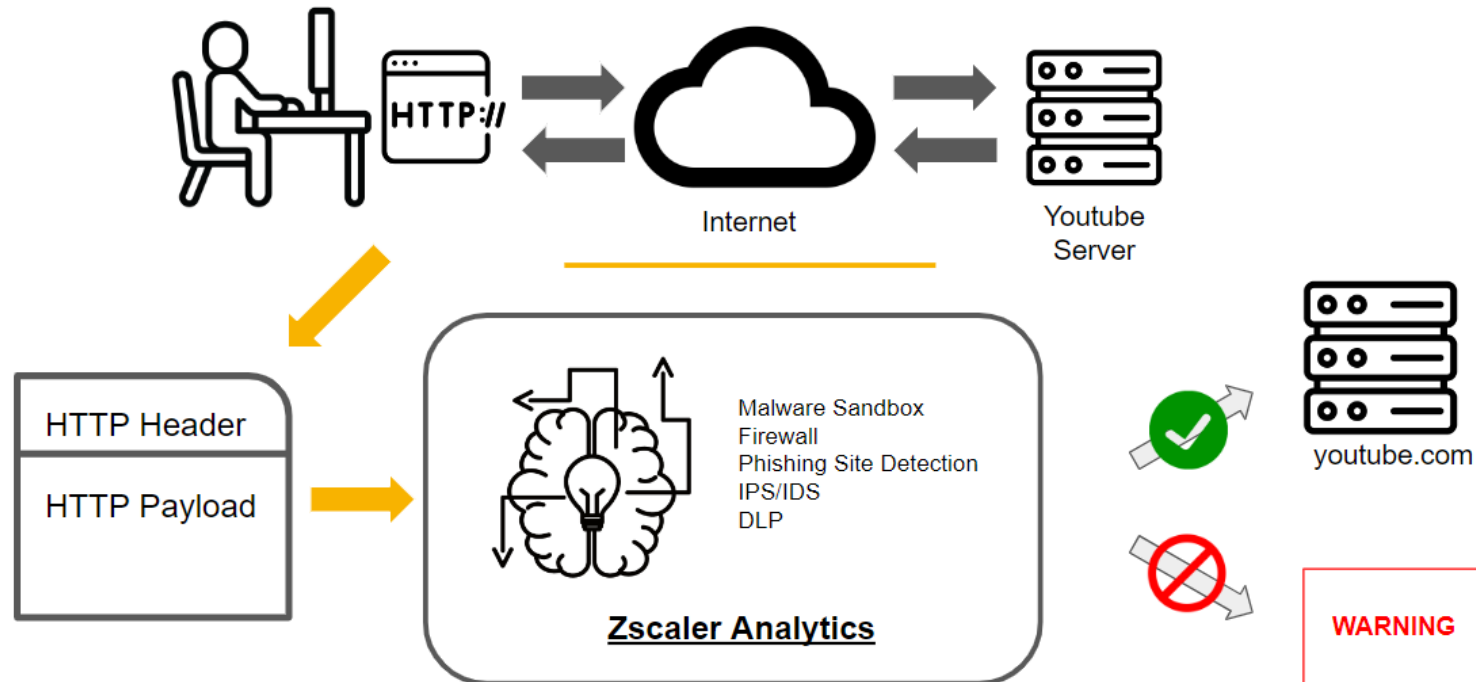
# Migration to Secure Access Server Edge (SASE)



# Implementing Zscaler

Migrating to Zscaler provides zero trust access to any VCU service (no matter where it resides) from both on and off the campus network

## How It Works with Zscaler



# Implementing Zscaler

Zscaler offers improved security over the Cisco AnyConnect Virtual Private Network (VPN)

## Comparison



Access VCU Applications?



Continual Access?



Detect Malware/Phishing?



Protect from Harmful Traffic?



# Questions?

# ACH Update

Chief John Venuti

Associate VP of Public Safety and Chief of Police