Virginia Tech Board of Visitors Meeting

Information Session

Tuesday, August 23, 2022
9:15 a.m.

Maroon & Orange Room
Virginia Tech Newport News Center

Retreat Follow-Up Discussion
- Ms. Tish Long, Rector
- Ms. Carrie Chenery, Retreat Planning Committee
- Ms. Sharon Martin, Retreat Planning Committee

# Research: Competitive Growth
- Dr. Dan Sui, Senior Vice President for Research and Innovation

+ Foundation Partnership
- Justice Elizabeth McClanahan, Chief Executive Officer of Virginia Tech Foundation

# IT Transformation Dashboard
- Dr. Scott Midkiff, Vice President for Information Technology & Chief Information Officer
- Mr. Zo Qazi, IT Transformation Program Director

Constituent Reports
- Mr. Jamal Ross, Undergraduate Student Representative to the Board
- Ms. Anna Buhle, Graduate Student Representative to the Board
- Ms. Serena Young, Staff Representative to the Board
- Ms. Holli Drewry, Administrative and Professional Faculty Representative to the Board
- Dr. Robert Weiss, Faculty Representative to the Board

+ EDA Grant Discussion (Possible topic)
- Dr. John Provo, Director, Center for Economic and Community Engagement

# Discusses Enterprise Risk Management topic(s)
+ Discusses Strategic Investment Priorities topic(s)
Enterprise Risk Management: Competitive Growth

Dan Sui
Senior Vice President,
Office of Research and Innovation

August 2022

Preliminary FY22 figures show 10% increase over FY21 is expected.

### Research expenditures

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Extramural and institutional</th>
<th>Extramural only</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY10</td>
<td>$291.1</td>
<td></td>
</tr>
<tr>
<td>FY11</td>
<td>$285.6</td>
<td></td>
</tr>
<tr>
<td>FY12</td>
<td>$302.5</td>
<td></td>
</tr>
<tr>
<td>FY13</td>
<td>$296.6</td>
<td></td>
</tr>
<tr>
<td>FY14</td>
<td>$311.9</td>
<td></td>
</tr>
<tr>
<td>FY15</td>
<td>$320.1</td>
<td></td>
</tr>
<tr>
<td>FY16</td>
<td>$325.1</td>
<td></td>
</tr>
<tr>
<td>FY17</td>
<td>$321.4</td>
<td></td>
</tr>
<tr>
<td>FY18</td>
<td>$325.1</td>
<td></td>
</tr>
<tr>
<td>FY19</td>
<td>$321.4</td>
<td></td>
</tr>
<tr>
<td>FY20</td>
<td>$325.1</td>
<td></td>
</tr>
<tr>
<td>FY21</td>
<td>$321.4</td>
<td></td>
</tr>
</tbody>
</table>

2022 projected amounts available in Nov. 2022; values available in Jan. 2023.
National Landscape Highly Competitive, Rapidly Evolving

National growth outpaces Virginia Tech
In 2022, NSF established the Directorate for Technology, Innovation and Partnerships (TIP), envisioned to compose large fraction of NSF budget.
The Research Frontiers

**HEALTH**

Leading one health to achieve whole health

**SECURITY**

Innovating for secure and resilient communities

**ARTIFICIAL INTELLIGENCE**

Harnessing artificial intelligence for intelligence augmentation

**QUANTUM**

Advancing the quantum leap
Research Development strategy team – Covering 360 degree partnerships

Randy Heflin
Senior Associate Vice President, Research Development

Steve McKnight
Vice President, Strategic Research Alliances

Brandy Salmon
Associate Vice President, Innovation and Partnerships

Vince Baranauskas
Senior Research Development Coordinator

Jon Porter
Associate Vice President, Strategic Research Alliances

Brad Fravel
Executive Director, LINK
Research Portfolio Deeply Impacted by Faculty Retention

- About 4% of faculty depart or retained every year
- They account for 8% of our sponsored research portfolio
- Retained faculty have 4x as much sponsored research productivity as the average faculty member

Retention Strategies

- Support for nominating and winning prestigious awards
- Partnering across university to ensure equipment and space are available to support exceptional researchers
Room for Growth in National Institutes of Health Funding

NATIONAL SPONSORED RESEARCH, 2020

FEDERAL

Department of Defense
National Science Foundation

NONPROFIT

INDUSTRY
STATE/LOCAL
Other

55% of federal sponsorship

VIRGINIA TECH SPONSORED RESEARCH, 2020

FEDERAL

Department of Defense
National Science Foundation

NONPROFIT

INDUSTRY
STATE/LOCAL
Other

18% of federal sponsorship
Expanding National Institutes of Health Portfolio

- Expansion of Fralin Biomedical Research Institute at VTC, partnership with Children’s National
- Expanding collaboration and research portfolio of School of Medicine
- Ensuring adequate space in health and life science facilities
Facilities and infrastructure

- Research facilities are unique, expensive, complex
- Quality of research facilities influences quality and quantity of outcomes
- Health research has specific facility requirements
Takeaways

- Sponsored research landscape is highly competitive, rapidly evolving with federal sponsors expecting more partnerships and impact.
- Virginia Tech expanding research development support to help faculty in complex landscape.
- Faculty retention is critical to research enterprise.
- Quality of specialized research infrastructure for research strategy is critical, especially for NIH funding.
Founding of The Virginia Tech Foundation: The Story

• The Virginia General Assembly gives each public institution of higher education the authority to create a 501(c)(3) nonprofit foundation

• VPI Educational Foundation—1948

• 75th anniversary in 2023

• Value of endowment¹
  • 1948—$161,957.85
  • 2022—$1.689 billion²

¹Annual Report—www.vtf.org
²As of June 30, 2022
VTF: Key Mission Areas

**Fund Growth**
Grow and disperse strategic investments
Manage endowed gifts and create dynamic investment performance to fund University growth

**Economic Impact**
Translate research
Generate wealth in the ecosystem through company growth and research commercialization

**Talent Driver**
Recruit faculty
Build innovation environment to recruit more entrepreneurial faculty and retain graduate talent

**Real Estate**
Strategic holdings
Acquire properties to support University growth and create a global presence

**Programmatic Support**
Support University's SIPs
Provide direct support for University programs to positively impact faculty, staff, and students

**Academic excellence**
VTF Assets: Heightening the Curve

Virginia Tech Foundation, Inc.
Total Assets - 10 year History
in millions (audited)

FY12 FY13 FY14 FY15 FY16 FY17 FY18 FY19 FY20 FY21

Endowment Value

1,210.7 1,302.6 1,488.8 1,507.8 1,510.6 1,723.9 1,891.0 2,107.1 2,265.8 2,687.6

Fiscal Year

Virginia Tech Foundation, Inc.
A key University goal set in 2014 was to double the endowment by 2022. The goal was met a year early.
Endowment Returns Relative to the Benchmark Ending 6/30/2022

<table>
<thead>
<tr>
<th></th>
<th>1Y</th>
<th>3Y</th>
<th>5Y</th>
<th>10Y</th>
<th>20Y</th>
</tr>
</thead>
<tbody>
<tr>
<td>Endowment</td>
<td>-4.10%</td>
<td>4.50%</td>
<td>4.80%</td>
<td>7.50%</td>
<td>6.90%</td>
</tr>
<tr>
<td>BM</td>
<td>-15.70%</td>
<td>2.50%</td>
<td>4.40%</td>
<td>6.30%</td>
<td>6.30%</td>
</tr>
</tbody>
</table>

Best Ever!
## VTF Strategy: Macro Trends

1. Global Economic Pressures
   - Inflationary effects driving cost management and interest rates
   - Global recession uncertainties

2. Changing Needs from Industry
   - Accelerating workforce demands
   - Evolving research focus
   - More creative partnerships
   - Changing retail dynamics

3. Investments in Critical Technologies
   - Federal and industry investments accelerating
   - Critical areas driving demand (AI, renewables, manufacturing tech)
VTF Strategic Context: Impact on the University

1. Global Economic Pressures
   **Approach:**
   New sources of value coupled with cost reductions to maintain quality of service
   **How VTF Supports**
   - Extend operations to be more capital efficient
   - Manage cost impacts
   - Engage state and federal funding to bolster external operations

2. Changing Needs from Industry
   **Approach:**
   More industry engagement and holistic economic development
   **How VTF Supports**
   - Create more co-location and investment opportunities for industry engagement
   - Strategic sites to support: (IC, AREC, Roanoke, TechCenter, etc)

3. Investments in Critical Technologies
   **Approach:**
   Focus research investments around critical technologies (VT Research Frontiers)
   **How VTF Supports**
   - Extend VT’s ability to co-invest with industry and federal funding
   - Create more opportunities to leverage matching funds, infrastructure, and research related real estate properties
VTF: Supporting University Priorities

- **Flexible development to expand capacity quickly.** Partnerships for data and IT expansion and research.
- **Driving new opportunities to grow advancement and creating more endowment-based funds for accessibility and affordability.**
- **Adding opportunities to diversify revenue for the University.**
- **Create student and faculty opportunities for more experiential learning and entrepreneurship in socially relevant ecosystems.**

**Capacity and Infrastructure**

**Critical Programs**

**Research Frontiers**

**Tech Talent and Mid-Career Faculty**

- **Create infrastructure and market opportunity to translate research priorities, including computing, health and biomedical sciences, transportation, and AI.**
IT Transformation Program Summary

Active Projects, start dates
- Strengthen Controls (Cybersecurity - 6.1), October 2021
- IT Governance (Governance - 1.2), February 2022
- Streamlined Software Procurement (Finance - 2.2), February 2022
- Job Architecture (Talent - 3.2), February 2022
- Scaled Up Program and Project Management Office (Governance - 1.3), March 2022
- 24x7 Security Monitoring (Cybersecurity - 6.2), April 2022
- Improved Endpoint Protection (Cybersecurity - 6.4/6.5), May 2022
- New Minimum Security Standard Guides (Cybersecurity - 6.6), June 2022
- University-wide IT Operating Model (Governance - 1.1), August 2022

Project Queue, anticipated starts
- Enhanced Data Governance (Technology Capabilities - 4.1), September 2022
- Common Integration Layer (Technology Capabilities - 4.2), September 2022
- Data Center Consolidation / Cloud Strategies (Technology Capabilities - 4.4), September 2022
- Improved Identity and Access Management (Cybersecurity - 6.3), October 2022
Program Office Development

• Program Office continues to build capacity, and hired two new contract Project Managers, Will Jones and Rick Rabideau.

• A permanent Program Director has been hired -- Zohaib Qazi began his work at Virginia Tech on the week of August 15.

• IT Transformation website has been expanded to include the members of the Program Office team.

• Dashboard development is complete. Further enhancements and refinements will be made to the dashboard as Transformation projects proceed. Dashboard can be viewed on the SVPCBO’s IT Transformation page.

View Program Dashboard at svpcbo.vt.edu/ittransformation
The dashboard includes:
• Single-pane projects overview
• Results can be filtered by multiple parameters
• Bimonthly project status updates
• Progress on specific deliverables, issue resolution, success factors

View Program Dashboard at svpcbo.vt.edu/ittransformation
DASHBOARD continued, Project Detail Views

Strengthen Controls (Deloitte Recommendation 6.1)

Impact: Heightened security baselines position VT to be proactive in security while enabling faster detection and recovery

Percent Complete of Deliverables

<table>
<thead>
<tr>
<th>Gap Assessments</th>
<th>2%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implementation Plans</td>
<td>0%</td>
</tr>
<tr>
<td>Implementations</td>
<td>0%</td>
</tr>
</tbody>
</table>

Deliverables Detail

<table>
<thead>
<tr>
<th>Completion Status</th>
<th>Name</th>
<th>Description</th>
<th>Target Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>In Progress</td>
<td>Gap Assessments</td>
<td>Completion of IG2-level gap assessments</td>
<td>10/31/2023</td>
</tr>
<tr>
<td>Not Started</td>
<td>Implementation Plans</td>
<td>Completion of implementation plans to address IG2-level gaps by organizational units with High- or Moderate-risk data</td>
<td>6/30/2024</td>
</tr>
<tr>
<td></td>
<td>Implementations</td>
<td>University-wide compliance with IG2 controls for protection of high- and moderate-risk data</td>
<td>6/30/2025</td>
</tr>
</tbody>
</table>

Issues

No critical issues are being reported at this time

Highlights

1) Steering Committee met twice, Charter being finalized, IG2 safeguards being tailored for VT, Implementation Plan format being developed
2) Project communication to go out to President's Council August 10
3) Project communication to go out to senior management level immediately after August 10

View Program Dashboard at svpcbo.vt.edu/ittransformation
24x7 Security Operations Center (Deloitte Recommendation 6.2)  
Updated: 8/4/2022

Impact: 24x7 coverage allows VT to protect, detect and respond to threats at all times

<table>
<thead>
<tr>
<th>Percent Complete of Deliverables</th>
<th>Deliverables Detail</th>
</tr>
</thead>
</table>
| **Full 24x7 security monitoring** | In Progress  
25% Complete  
| **Full compliance with IT Logging Standard** | Full 24x7 security monitoring  
Improved cybersecurity through 24x7 incident response  
40% Complete  
| **Mesh VT/OmniSOC incident response processes** | Full compliance with IT Logging Standard  
Raise awareness, provide support, and implement enforcement of logging standard  
30% Complete  
| **Virtual Command Center** | Mesh VT/OmniSOC incident response processes  
Revise VT cyber incident process to include OmniSOC monitoring/triage of incident severity  
25% Complete  
|  | Virtual Command Center  
Comprehensive visibility into network traffic and log analysis  
0% Complete  

Issues
Planning for phase one of the Security Operations Center project has uncovered resource gaps in the VT response process to security alerts for off-hours, weekends, and holidays

Highlights
1) VT Kafka cluster, used to aggregate logs and provide a secure way to transfer data to OmniSOC, is connected to the OmniSOC and continues testing

2) A subset of the log sources are being delivered to the OmniSOC test environment

Overview of Projects | Strengthen Controls (6.1) | 24x7 Security Operations Cen... | IT Governance (1.2) | Streamline Software Procure... | Improved Endpoint Protection... | New < >

View Program Dashboard at svpbo.vt.edu/ittransformation
Program Overview

<table>
<thead>
<tr>
<th>Pipeline Phase</th>
<th>Project Name</th>
<th>Description</th>
<th>Category</th>
<th>Percent Complete</th>
<th>Health Status</th>
<th>Start Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active</td>
<td>24x7 Security Operations Center (6.2)</td>
<td>The VT Security Operations Center (SOC) will provide comprehensive (24x7x365) monitoring and detection, intelligence and incident response capabilities to mitigate cybersecurity risks.</td>
<td>Cybersecurity</td>
<td>26-50%</td>
<td>At Risk</td>
<td>4/1/2022</td>
<td>12/31/2023</td>
</tr>
<tr>
<td>Improved Endpoint Protection (6.4/6.5)</td>
<td>Improve endpoint protection through deployment of endpoint detection and response (EDR) and endpoint data loss prevention (DLP) solutions.</td>
<td>Cybersecurity</td>
<td>1-23%</td>
<td>On Track</td>
<td>5/12/2022</td>
<td>4/30/2024</td>
<td></td>
</tr>
<tr>
<td>IT Governance (1.2)</td>
<td>Establish university-wide IT governance model to enable greater collaboration, transparency and mission alignment.</td>
<td>IT Governance</td>
<td>51-75%</td>
<td>On Track</td>
<td>2/21/2022</td>
<td>11/30/2022</td>
<td></td>
</tr>
<tr>
<td>Job Architecture (3.2)</td>
<td>Standardize job classifications for IT staff across VT</td>
<td>IT Talent</td>
<td>76-100%</td>
<td>On Track</td>
<td>2/1/2022</td>
<td>6/30/2023</td>
<td></td>
</tr>
<tr>
<td>New Minimum Security Standard</td>
<td>Create procedure guides outlining how to implement the minimum standard</td>
<td>Cybersecurity</td>
<td>51-75%</td>
<td>On Track</td>
<td>6/10/2022</td>
<td>12/31/2023</td>
<td></td>
</tr>
</tbody>
</table>
IT Governance Project 1.2 – University-wide IT Governance Model

Impact: A University-wide IT governance model enables greater collaboration, transparency and mission alignment in IT

Percent Complete of Deliverables

<table>
<thead>
<tr>
<th>Deliverables</th>
<th>Progress</th>
<th>Actual</th>
<th>Projected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive Committee launched</td>
<td>95% 95%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subcommittees launched</td>
<td>20% 20%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Deliverables Detail

<table>
<thead>
<tr>
<th>Completion Status</th>
<th>Name</th>
<th>Description</th>
<th>Target Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>In Progress</td>
<td>Executive Committee launched</td>
<td>Establishment and Implementation of the Executive IT Governance Committee</td>
<td>9/30/2022</td>
</tr>
<tr>
<td></td>
<td>Subcommittees launched</td>
<td>Identification of and acceptance by nominated subcommittee members, Establishment and implantation of the subcommittees</td>
<td>9/30/2022</td>
</tr>
</tbody>
</table>

Issues

No critical issues are being reported at this time

Highlights

Executive Committee has been formed
IT Governance Project 1.3 – Scale up Program Office and Project Management Office

Scaled Up Program and Project Management (Deloitte Recommendation 1.3)

**Impact:** A university-wide IT project management function provides clear oversight of VT-wide IT initiatives and supports consistent management of projects.

### Percent Complete of Deliverables

- **Executive Dashboard launched:** 100%
- **Operational staffing of Program Office:** 100%
- **Operationalize the PMO:** 20%
- **Project Management Support staffing:** 100%

### Deliverables Detail

<table>
<thead>
<tr>
<th>Completion Status</th>
<th>Name</th>
<th>Description</th>
<th>Target Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete</td>
<td>Executive Dashboard launched</td>
<td>Development and deployment of Executive Dashboard on the IT Transformation website</td>
<td>8/11/2022</td>
</tr>
<tr>
<td></td>
<td>Operational staffing of Program Office</td>
<td>Operational staffing includes (Interim) Program Director, communications support and administrative support</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Project Management Support staffing</td>
<td>Staffing project managers to manage IT Transformation projects</td>
<td></td>
</tr>
<tr>
<td>In Progress</td>
<td>Operationalize the PMO</td>
<td>Complete/Implement the processes, tools, forms/templates, governance</td>
<td>10/11/2022</td>
</tr>
</tbody>
</table>

### Issues

No critical issues are being reported at this time.

### Highlights

- Executive Dashboard has been launched on the IT Transformation website.
- Program Director interviews conducted; Offer has been made and candidate has accepted.
- Two project managers staffed to PMO.
### Streamline Software Procurement (Deloitte Recommendation 2.2)

**Impact:** A streamlined software procurement process improves the customer experience & supports strategic sourcing of IT goods and services.

#### Percent Complete of Deliverables

<table>
<thead>
<tr>
<th>Deliverable</th>
<th>Status</th>
<th>Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communications Plan for Low-risk, Low-cost Pilot</td>
<td></td>
<td>100%</td>
</tr>
<tr>
<td>Develop and execute communications plan</td>
<td></td>
<td>0%</td>
</tr>
<tr>
<td>Implement request form for concierge pilot</td>
<td></td>
<td>0%</td>
</tr>
<tr>
<td>Implementation of Low-risk, Low-cost procurement workflow</td>
<td></td>
<td>100%</td>
</tr>
<tr>
<td>Updated HokieMart and Pcard processes for Low-risk, Low-cost</td>
<td></td>
<td>100%</td>
</tr>
<tr>
<td>Updated IT PALS website for Concierge Pilot</td>
<td></td>
<td>0%</td>
</tr>
<tr>
<td>Updated IT PALS website for Low-risk, Low-cost Pilot</td>
<td></td>
<td>100%</td>
</tr>
</tbody>
</table>

#### Deliverables Detail

<table>
<thead>
<tr>
<th>Completion Status</th>
<th>Name</th>
<th>Description</th>
<th>Target Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>In Progress</td>
<td>Comm. Plan for Low-risk, Low-cost Pilot</td>
<td>Communication Plan to include FAQ, Campus Notice, email to President’s Council, news articles in iTell, CART, and perhaps other venues</td>
<td>8/5/2022</td>
</tr>
<tr>
<td></td>
<td>Implement request form for concierge pilot</td>
<td>ServiceNow request process that includes registration for the concierge service</td>
<td>10/15/2022</td>
</tr>
<tr>
<td></td>
<td>Implementation of Low-risk, Low-cost procurement workflow</td>
<td>ServiceNow request process that includes registration of the software/service and attestation that the software meets the definition of low-risk and low-cost</td>
<td>7/29/2022</td>
</tr>
<tr>
<td></td>
<td>Updated HokieMart and Pcard processes for Low-risk, Low-cost Pilot</td>
<td>HokieMart and Pcard processes for generating purchase requisitions, purchase orders, and Pcard requests and approvals</td>
<td>7/29/2022</td>
</tr>
</tbody>
</table>

#### Issues

No critical issues are being reported at this time.

#### Highlights

The pilot process for low-risk, low-cost procurement was launched within one month of being changed by the CIO.
IT Talent Project 3.2 – Administrative and Professional Faculty Job Architecture

Job Architecture (Deloitte Recommendation 3.2)

Impact: Provides compensation transparency and empowers employee career growth and training opportunities

Percent Complete of Deliverables

<table>
<thead>
<tr>
<th>Deliverable</th>
<th>Completion Status</th>
<th>Percent Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approval of Job Architecture for the Information Technology Job Function</td>
<td>In Progress</td>
<td>75%</td>
</tr>
<tr>
<td>Approval of mapping of Information Technology jobs into the Job Architecture</td>
<td>In Progress</td>
<td>75%</td>
</tr>
<tr>
<td>Position Description Questionnaires completed for Division of IT</td>
<td>In Progress</td>
<td>98%</td>
</tr>
<tr>
<td>Systems Implementation of Job Architecture</td>
<td>In Progress</td>
<td>5%</td>
</tr>
</tbody>
</table>

Deliverables Detail

<table>
<thead>
<tr>
<th>Completion Status</th>
<th>Name</th>
<th>Description</th>
<th>Target Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>In Progress</td>
<td>Approval of Job Architecture for the Information Technology Job Function</td>
<td>Leadership within the Division of IT will approve the job architecture as appropriate for Virginia Tech</td>
<td>8/30/2022</td>
</tr>
<tr>
<td></td>
<td>Approval of mapping of Information Technology jobs into the Job Architecture</td>
<td>Leadership within HR and IT will approve the mapping of jobs to job architecture as appropriate for Virginia Tech</td>
<td>9/30/2022</td>
</tr>
<tr>
<td></td>
<td>Position Description Questionnaires completed for Division of IT</td>
<td>PDQs provide duties, responsibilities, and supervision levels for use in creating a job architecture</td>
<td>8/4/2022</td>
</tr>
<tr>
<td></td>
<td>Systems Implementation of Job Architecture</td>
<td>Job architecture and mapping information will be stored in university systems for use in recruitment, career pathing, and compensation activities</td>
<td>5/31/2023</td>
</tr>
</tbody>
</table>

Issues

Project management for this project was transitioned in July 2022 due to unforeseen staffing realities within Human Resources. The Division of IT volunteered to provide individuals who had experience working on systems implementations with HR to assist with this need. Bringing new project management in mid-project has caused some slippage in project timelines as the new members to the team get up to speed.

Highlights

Ernst & Young communicated on 8.3.22 that they have a draft of a job architecture for the Information technology job function that they will share with IT leadership in a meeting on 8.12.22. Ernst & Young has also done a preliminary mapping for those positions in the Information technology job function that have completed a PDQ.

The Division of Information Technology has made it a priority to complete the PDQs in a timely manner. So far, the...
## Cybersecurity Project 6.1 – Raise Security Baselines and Strengthen Controls

### Strengthen Controls (Deloitte Recommendation 6.1)

**Impact:** Heightened security baselines position VT to be proactive in security while enabling faster detection and recovery

### Percent Complete of Deliverables

- **Gap Assessments:** 3%
- **Implementation Plans:** 0%
- **Implementations:** 0%

### Deliverables Detail

<table>
<thead>
<tr>
<th>Completion Status</th>
<th>Name</th>
<th>Description</th>
<th>Target Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>In Progress</td>
<td>Gap Assessments</td>
<td>Completion of IG2-level gap assessments</td>
<td>10/31/2023</td>
</tr>
<tr>
<td>Not Started</td>
<td>Implementation Plans</td>
<td>Completion of implementation plans to address IG2-level gaps by organizational units with High- or Moderate-risk data</td>
<td>6/30/2024</td>
</tr>
<tr>
<td></td>
<td>Implementations</td>
<td>University-wide compliance with IG2 controls for protection of high- and moderate-risk data</td>
<td>6/30/2025</td>
</tr>
</tbody>
</table>

### Issues

No critical issues are being reported at this time

### Highlights

1. Steering Committee met twice; Charter being finalized; IG2 safeguards being tailored for VT; Implementation Plan format being developed
2. Project communication to go out to President’s Council August 10
3. Project communication to go out to new management level immediately after August 10
Cybersecurity Project 6.2 – 24x7 Security Operations Center

Impact: 24x7 coverage allows VT to protect, detect and respond to threats at all times

**Percent Complete of Deliverables**

<table>
<thead>
<tr>
<th>Deliverable</th>
<th>Actual</th>
<th>Projected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full 24x7 security monitoring</td>
<td>25%</td>
<td></td>
</tr>
<tr>
<td>Full compliance with IT Logging Standard</td>
<td>40%</td>
<td></td>
</tr>
<tr>
<td>Mesh VT/OmniSOC incident response processes</td>
<td>45%</td>
<td></td>
</tr>
<tr>
<td>Virtual Command Center</td>
<td>25%</td>
<td></td>
</tr>
</tbody>
</table>

**Deliverables Detail**

<table>
<thead>
<tr>
<th>Completion Status</th>
<th>Name</th>
<th>Description</th>
<th>Target Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>In Progress</td>
<td>Full 24x7 security monitoring</td>
<td>Improved cybersecurity through 24x7 incident response</td>
<td>3/31/2023</td>
</tr>
<tr>
<td></td>
<td>Full compliance with IT Logging Standard</td>
<td>Raise awareness, provide support, and implement enforcement of logging standard</td>
<td>12/31/2023</td>
</tr>
<tr>
<td></td>
<td>Mesh VT/OmniSOC incident response processes</td>
<td>Revise VT cyber incident process to include OmniSOC monitoring/triage of incident severity</td>
<td>12/31/2022</td>
</tr>
<tr>
<td></td>
<td>Virtual Command Center</td>
<td>Comprehensive visibility into network traffic and log analysis</td>
<td>3/31/2023</td>
</tr>
</tbody>
</table>

**Issues**

Planning for phase one of the Security Operations Center project has uncovered resource gaps in the VT response process to security alerts for off-hours, weekends, and holidays.

**Highlights**

1) VT Kafka cluster, used to aggregate logs and provide a secure way to transfer data to OmniSOC, is connected to the OmniSOC and continues testing

2) A subset of the log sources are being delivered to the OmniSOC test environment
Cybersecurity Project 6.4/6.5 – Improved Endpoint Protection

**Improved Endpoint Protection (Deloitte Recommendation 6.4/6.5)**

**Impact:** Endpoint Detection & Response (EDR) and Data Loss Prevention (DLP) solutions aid in the proactive prevention of compromised systems and the unauthorized movement of high-risk data

### Percent Complete of Deliverables

<table>
<thead>
<tr>
<th>Deliverable</th>
<th>Actual</th>
<th>Projected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop IT evaluation model</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>DLP policies standardized</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>DLP policies/standard(s) implemented on</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>EDR and DLP services operationalized</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>MDE baseline configuration standardized</td>
<td>10%</td>
<td>50%</td>
</tr>
<tr>
<td>MDE service operationalized</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Security Operations Center integrated</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Security standard(s) updated to</td>
<td>0%</td>
<td></td>
</tr>
</tbody>
</table>

**Progress**
- ▢ Actual
- □ Projected

### Deliverables Detail

<table>
<thead>
<tr>
<th>Completion Status</th>
<th>Name</th>
<th>Description</th>
<th>Target Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>In Progress</td>
<td>MDE baseline configuration standardized</td>
<td>Attack Surface Reduction policies finalized based on best practices in the environment</td>
<td>6/30/2023</td>
</tr>
<tr>
<td>In Progress</td>
<td>MDE service operationalized</td>
<td>Service for departments to onboard into Microsoft Defender for Endpoint (MDE) and begin deploying sensors to devices</td>
<td>8/30/2022</td>
</tr>
<tr>
<td>Not Started</td>
<td>Develop IT evaluation model</td>
<td>Assess university department's ability to participate in an IEP solution.</td>
<td>12/31/2022</td>
</tr>
<tr>
<td>Not Started</td>
<td>DLP policies standardized</td>
<td>Finalize DLP policies (including Saas) for environments and endpoints based on best practices, recommendations and impact.</td>
<td>8/31/2023</td>
</tr>
</tbody>
</table>

### Issues

- No critical issues are being reported at this time

### Highlights

1. Expanding Defender for Endpoint pilot (2121 devices as of 8/30/2022)
2. OARC completed interviews on VT IT readiness for endpoint management (report from OARC expected next month)
**Cybersecurity Project 6.6 – Develop Guidelines for New Minimum Security Standard**

**New Minimum Security Standard Guidelines (Deloitte Recommendation 6.6)**

**Impact:** Procedure Guides can aid in consistent and effective implementation of compliance standards

### Percent Complete of Deliverables

- **Communication Plan:** 0%
- **Procedure Guides for the Minimum Security Standard:** 60%

### Deliverables Detail

<table>
<thead>
<tr>
<th>Completion Status</th>
<th>Name</th>
<th>Description</th>
<th>Target Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>In Progress</td>
<td>Procedure Guides for the Minimum Security Standard</td>
<td>A procedure guide will be created for each element of the Minimum Security Standard (endpoints, servers and applications)</td>
<td>12/31/2022</td>
</tr>
<tr>
<td>Not Started</td>
<td>Communication Plan</td>
<td>A plan will be created for communicating the existence of the guides to university departments</td>
<td>12/31/2022</td>
</tr>
</tbody>
</table>

### Issues

No critical issues are being reported at this time.

### Highlights
Constituent Report by Undergraduate Student Representative to the Board, Jamal Ross, will be presented at Tuesday’s Information Session
Constituent Report by Graduate Student Representative to the Board, Anna Buhle, will be presented at Tuesday’s Information Session.
Constituent Report by President of Staff Senate, Serena Young, will be presented at Tuesday’s Information Session.
Constituent Report by
President of Administrative and
Professional Faculty Senate,
Holli Gardner Drewry,
will be presented at Tuesday’s
Information Session
Constituent Report by President of Faculty Senate, Robert Weiss, will be presented at Tuesday’s Information Session