COMMITTEE AS A WHOLE ZOOM MEETING OF THE BUSINESS AFFAIRS COMMITTEE OF THE BOARD OF TRUSTEES Community College of Philadelphia Thursday, October 7, 2021– 9:00 A.M.

- **Present for the Business Affairs Committee:** Mr. Michael Soileau, presiding; Mr. Rob Dubow, Lydia Hernández Vélez, Esq., and Mr. Steve Herzog
- **Present for the Trustees:** Mr. Patrick Clancy, Ms. Sheila Ireland, Ms. Rosalyn J. McPherson, Ms. Mindy Posoff, and Mr. Jeremiah J. White, Jr.
- Present for the Administration: Dr. Donald Guy Generals, Mr. Jacob Eapen, Ms. Carol de Fries, Ms. Josephine DiGregorio, Ms. Marsia Henley, Dr. Samuel Hirsch, Danielle Liautaud-Watkins, Esq., Mr. Gim Lim, Dr. Shannon Rooney, Mr. Derrick Sawyer, Mr. Vijay Sonty, Dr. David E. Thomas, Mellissia M. Zanjani, Ph.D., and Victoria L. Zellers, Esq.

Guest: Ms. Sabrina Maynard, Office of the Director of Finance, City of Philadelphia

PUBLIC SESSION

Mr. Soileau called the meeting to order at 9:01 A.M. He stated that an Executive Session will follow the Public Session.

(1) <u>Cyber and Infrastructure Security Presentation (Information Item)</u>

Background information: This presentation provides a background of cyber security trends and what tools and services CCP has in place to enhance our security protocols to prevent unauthorized system access, protect critical information, and respond to cyber threats by adopting best practices. This field is becoming increasingly significant due to the increased reliance on computer systems, the Internet and wireless network standards such as Bluetooth and Wi-Fi, and due to the growth of "smart" devices, including smartphones, televisions, and the various devices that constitute the "Internet of things." Cybersecurity is the protection of computer systems and networks from information disclosure, theft of or damage to the hardware, software, or electronic data, as well as from the disruption or misdirection of the services they provide. Like other institutions, at CCP, we will never have one silver bullet to completely reduce the risk of a cyber-attack but rather multiple technologies and processes in place to help ensure those threats are minimized. One of our key strategies is the creation of a zero-trust approach to security that comprises of four principles: no user should be trusted by default since they could be compromised; VPN and firewalls can't do it alone since they just guard the perimeter; identity and device authentication should take place throughout the network rather than just on the perimeter; and micro-segmentation really helps minimize damage from hackers by creating interior walls and locks. Attachment A includes the presentation.

<u>Discussion</u>: Mr. Eapen stated that Mr. Sonty, Associate Vice President for Information Technology, will provide a presentation on the background of cyber security trends. Mr. Sonty

stated that the 10-slide presentation is informational and will cover areas such as Cyber & Infrastructure Security – Background; 2021 Top 15 Cyber-Threats Landscape, Types of Security, Data Security Applications & Tools at CCP, and Chubb Cyber Insurance Policy.

Mr. Sonty stated that there is a cyber-attack that occurs every 39 seconds nationally. He mentioned that the COVID pandemic accelerated a need for additional cyber security because of users working from home. Mr. Sonty highlighted that all three major credit monitoring agencies had breaches. In 2017, Equifax announced that 148 million records were exposed. Mr. Sonty pointed out that it is critical that the College has the right tools in place to prevent hackers from accessing systems.

Mr. Sonty reviewed the cyber-threats landscape: malware, phishing, denial of service, and ransomware. He mentioned that 94% of the cyber security threats starts with an email. Mr. Sonty stated that two simulated phishing exercises were conducted recently. Anonymous emails were sent to faculty and staff, of which 6.5% clicked on the "email messages." Five individuals shared data or downloaded files. The second simulated phishing exercise showed a decline from 6.5% to 3.2%. One individual shared data.

Mr. Sonty spoke to the different levels of security: application security, physical security, data security, system security, and transmission security. He stated that the College has an outside company monitoring key CCP assets. Mr. Sonty stated that at the national level, President Biden signed an Executive Order and created the Cyber Security and Infrastructure Security Agency. The Best Practices from the Executive Order includes: MFA (Multi-Factor Authentication - because passwords alone are routinely compromised); Endpoint Detection & Response (to hunt for malicious activity on a network and block it); Encryption (so if data is stolen, it is unusable); Empowered Security Team (to patch rapidly, and share and incorporate threat information in your defenses); Backup Your Data, system images, and configurations, regularly test them, and keep the backups offline; Update and patch systems promptly; Test your incident response plan; Check Your Security Team's Work; and Segment your networks.

Mr. Sonty then reviewed the data security applications and tools at the College. He stated that it is very important to educate our faculty and staff. Mr. Sonty will be launching an initiative which will include a data breach group and a cyber-security group consisting of 25 members. The goal is to continue the training and to ensure compliance with the recommendations.

Mr. Sonty stated that Chubb is the College's cyber insurance carrier. Due to the recent security threats, the College's premium nearly doubled. He stated that if certain security protocols were not properly implemented or were in breach, then the insurance does not take effect. Mr. Sonty emphasized that IT has to be careful to ensure that all devices are "up and running;" and that as long as the systems are operating correctly and security protocols are in place and should there be a breach, then the College will be covered up to \$3 million.

Mr. Soileau asked if the College's employees use personal computers to access College information. Mr. Sonty responded that employees are able to access College information by using GoToMyPC, which is the first level of security. The second level of security is the desktop; the third level is the network security; and the fourth level is the application security. Mr.

Soileau asked if there are "human eyeballs" monitoring the systems 24/7. Mr. Sonty stated that the College uses a 24/7 monitoring tool. He explained that the College's network engineers will receive an alert if any critical events are triggered. Mr. Soileau asked if there is a "chain" that occurs if there is a critical failure. Mr. Sonty stated that if a breach occurs, protocols will be followed and legal counsel will be notified.

Mr. Dubow asked about the insurance exclusions. Mr. Sonty stated that if the College's devices are not functional, then the College will not be covered. Mr. Dubow asked about the cyber training security for employees. Mr. Sonty stated that the College performed two phishing simulated exercises and will be launching an initiative which will include a data breach group and a cyber threat group. He also mentioned a recent communication was sent out to all employees on tips to protect personal information online. Mr. Eapen added that during Professional Development Week, a session on cyber security is offered.

Mr. White asked how does the cyber security ties into the College's business interruption insurance. Mr. Sonty stated that the cyber policy covers up to \$3 million of business interruptions. Mr. White asked about the protocols for students who use different devices. Mr. Sonty pointed out that the students still need to authenticate to the network. The College will need to ensure the students have the latest operating systems and that patches are in place. Mr. White asked if the students are not able to comply, what steps does the College take. Mr. Sonty stated that the students are "automatically quarantined" and do not have access to the network or the applications. Mr. Soileau suggested that, in January/early February, Mr. Sonty work with Dr. Rooney to send a communication out to students so they are aware to use the system on the College's network so they are not kicked out of the system and quarantined.

Prior to the Executive Session, Mr. White reviewed Business Affairs Committee matters. Mr. Eapen confirmed that the Capital Budget Plan will be discussed at the October 20th, Business Affairs Committee meeting. Mr. Soileau pointed out that he would also like a review of the operating budget as Federal funding declines. Mr. Eapen stated that the Operating Budget Plan will be discussed in November.

EXECUTIVE SESSION

An Executive Session followed the Public Session at 9:30 A.M.

PUBLIC SESSION

The Committee returned to Public Session at 9:40 A.M.

(2) <u>Lease Agreement Between Community College of Philadelphia as the</u> <u>Landlord and Saxbys, PBC, as Tenant (with Final Terms) (Action Item)</u>

<u>Background Information</u>: At the April 1, 2021 meeting, the Board of Trustees approved the proposal of Saxbys to enter a lease with the College for Saxbys to lease and operate a student-run Café in the College's Mint Building near the entrance of the new Library and Learning Commons. The College finished negotiating the final terms of the lease agreement with Saxbys. Staff is requesting that the Business Affairs Committee move the approval of the Lease Agreement with Saxbys to lease and operate a student-run café.

Mr. Soileau requested a motion that the Business Affairs Committee move the approval of the Lease Agreement with Saxbys to lease and operate a student-run café in the College's Mint Building near the new Library and Learning Commons.

<u>Action</u>: Ms. Hernández Vélez moved and Mr. Dubow seconded the motion that the Business Affairs Committee recommend to the full Board the Lease Agreement between Community College of Philadelphia as the Landlord and Saxbys, PBC, as Tenant (with Final Terms). The motion passed unanimously.

(3) <u>Next Meeting</u>:

The next regularly scheduled meeting of the Business Affairs Committee will be held on Wednesday, October 20th at 9:00 A.M.

Mr. Soileau adjourned the meeting at 9:43 A.M.

JE/Im Attachments

ATTACHMENT A

Cyber & Infrastructure Security Presentation



Cyber & Infrastructure Security - Background



the adoption of collaboration and cloud technologies as the world rapidly scaled up home working... this could heighten the cyber-resilience deficit where cybersecurity capacity is insufficient."

World Economic Forum



CYBERSECURITY



INFRASTRUCTURE SECURITY





2021 Top 15 Cyber-Threats Landscape

Malware, commonly referred to as "malicious software," is a term that describes any program or code that harmfully probes systems. The malware is designed to harm your computer or software and commonly masquerades as a warning against harmful software.

Phishing scams are one of the most common ways hackers gain access to sensitive or confidential information. Phishing involves sending fraudulent emails that appear to be from a reputable company, with the goal of deceiving recipients into either clicking on a malicious link or downloading an infected attachment, usually to steal financial or confidential information.



Denial of Service is a cyber-attack in which the perpetrator seeks to make a machine or network resource unavailable to its intended users by temporarily or indefinitely disrupting services of a host connected to the Internet. It is typically accomplished by flooding the targeted machine or resource with superfluous requests in an attempt to overload systems and prevent some or all legitimate requests from being fulfilled.

Ransomware is software that gains access to and locks down access to vital data. Files and systems are locked down and a fee is demanded commonly in the form of cryptocurrency.



Types of Security







CYBERSECURITY & INFRASTRUCTURE SECURITY AGENCY

Best Practices from the President's Executive Order

May 12, 2021

- MFA (Multi-Factor Authentication because passwords alone are routinely compromised)
- Endpoint Detection & Response (to hunt for malicious activity on a network and block it)
- Encryption (so if data is stolen, it is unusable)
- Empowered Security Team (to patch rapidly, and share and incorporate threat information in your defenses)
- Backup your data, system images, and configurations, regularly test them, and keep the backups offline
- Update and patch systems promptly
- Test your incident response plan
- Check Your Security Team's Work
- Segment your networks



Data Security Applications & Tools at CCP

Data Security Applications & Tools	Name	Implemented
Malware	Microsoft Exchange Online Protection (EOP) - O365	Yes
Phishing	Microsoft Exchange Online Protection (EOP) - O365	Yes
Virus Protection	Microsoft Exchange Online Protection (EOP) - O365	Yes
Spam	Microsoft Exchange Online Protection (EOP) - O365	Yes
DDoS (Distributed Denial of Service Attacks)	Kinber (Keystone Initiative for Network Based Education & Research)	Yes
MFA (Multi-Factor Authentication)	Unifyed (Partial Implementation)	Yes
Firewall	Fortinet	Yes
NAC (Network Access Control)	Fortinet (Purchased – Implementation started – to be completed by 3/22)	In Progress
Single Signon	Unifyed	Yes
Network Monitoring	Whatsup Gold (Availability) & ForeSite (Log Alerting)	Yes
SIEM (Security Incident Event Management)	ForeSite	Yes
File Transfer Protocol	SFTP	Yes
Encryption	SSL Communications with websites	Yes
DLP (Data Loss Prevention)	Microsoft 365 Compliance	In Progress
Wireless Security	Cisco (Use of ACL's - access control lists) & ForeSite (Monitoring Logs)	Yes
Intrusion Detection (Network Security & Monitoring)	ForeSite	Yes
OS Patching for workstations - PC's	SCCM (Microsoft System Configuration Manager)	Yes
OS Patching for workstations - Apple Mac's	JAMF	Yes
Endpoint Security of Workstations	Microsoft Defender	Yes
VPN Software	FortiClient	Yes
Web Filtering	FortiGate Firewalls and Proxy Servers	Yes



Chubb Cyber Insurance Policy

\$100,000

Limit (\$) **Insuring Agreement New Program Structure** Third Party Coverage 7/1/2021 - 7/1/2022 Security & Privacy Liability; Regulatory \$3,000,000 Fines; PCI Fines; Media Liability Breach Response Coverage: Notification/Credit Monitoring; Forensic \$3,000,000 Investigation; PR/Crisis Management; Legal Expense **CHUBB** First Party Coverage \$3M LIMIT Network Business Interruption (NBI) \$3,000,000 Previous Premium: \$15,880 NBI due to System Failure \$3,000,000 **New Premium: \$28,376** Dependent Business Interruption (DBI) \$3,000,000 DBI due to System Failure \$3,000,000 Waiting Period 24 Hours Data Restoration \$3,000,000 Cyber Extortion Retention: **Reputational Harm** \$3,000,000 \$50,000 Hardware Replacement \$3,000,000

Fraudulent Instruction



Benchmarking

Cyber

Industry: Education Limit: CCP's limit is slightly above the median but below the average of its revenue peer group. Under \$100M **Revenue: Peer Count:** 22 **Retention:** At \$50k, the retention is average relative to CCP's revenue peer group \$25 \$160,000 \diamond \$140,000 \$20 \$120,000 \$100,000 \$15 Limit (M) Retention \$80,000 \$10 \$60,000 \diamond \diamond \$40,000 \$5 \diamond \diamond \$20,000 Min \$0 \$0 CCP Q3 Max Median Q1 Average Limits (M) \$3 \$5 \$2 \$1 \$5 \$20 \$1 Retention \$58,295 \$25,000 \$10,000 \$50,000 \$150,000 \$2,500



Cyber Coverage Overview

- Breach Response coverages: Direct breach response costs may include those incurred to hire a law firm, complete a forensic investigation, hire a public relations firm, send notifications to affected individuals, set up call center services, complete identity theft restoration, conduct data reconstruction, and provide credit monitoring services.
- Network Security and Privacy Liability coverage: Coverage for indemnity and defense costs for third party claims and
 regulatory actions alleging a security failure or privacy event. This insuring agreement usually includes coverage for PCI fines,
 expenses, and costs.
- Media Liability: Coverage for indemnity and defense costs for third party claims alleging media wrongful acts such as defamation, disparagement, and copyright / trademark infringement in the dissemination of internet content and media.
- Business / Network Interruption: Indemnification for loss of income, incurred extra expenses, and claims preparation costs that
 arise directly out of a network security breach which disables the insured's network.
- Contingent Business / Network Interruption: Extends the business interruption to cover your lost income and extra expenses incurred due to a network interruption occurring at one of your critical third parties or outsourced providers that you rely on to conduct business. Examples of these third parties include cloud service providers, web hosting, and Software as a Service (Saas) providers.
- System Failure: Broadens out the business interruption coverage to include interruption resulting from an unintentional and unplanned interruption of the insured organization's computer systems. This includes things like software programming or patching errors that unintentionally bring down the network, hardware or software glitches, and human error.
- Contingent System Failure: Extends the System Failure coverage to cover your lost income and extra expense incurred due to a System Failure event occurring at one of your critical third party parties or outsourced providers that you rely on to conduct business.
- Cyber Extortion: Covers extortion payments and associated expenses to investigate a security threat to release or refuse to unencrypt sensitive information or to bring down a network unless a ransom is paid. Coverage extends to those payments made via traditional currencies, as well as non-traditional crypto-currencies such as Bitcoin.



Cyber Liability

February 2021 update

State of the market and claims, legal, emerging trends



Rate prediction: +25% to >50%

- Cybercriminals are targeting businesses of all kinds with ransomware attacks. As these attacks become more sophisticated, carrying the potential to affect a wholesale inability to access a firm's entire electronic infrastructure, ransom demands have increased often reaching eight figures.
- The SolarWinds cyber event has also given many markets pause.
- This explosion in severity, coupled with high frequency, has had a direct impact on premiums, capacity and underwriting scrutiny.
- Certain carriers have put in place SolarWinds exclusions and are requiring supplemental ransomware applications, even when in an excess position.
- Carriers are starting to sublimit ransomware coverage, 50% of the limit or a 50% co-insurance.
- Carriers are rethinking positions in large towers and looking more closely at rates in perceived burn layers.
- The average cost of a data breach in 2020 was \$3.86M, according to a new report from IBM and the Ponemon Institute.
- Costs remain highest in the U.S., where the average cost of a data breach was \$8.19M, up 5.3% since 2019, driven by a complex regulatory landscape that can vary from state to state, especially when it comes breach notification. Health care was again the most expensive industry, with data breach costs in 2019 averaging \$7.13M.
- The human element continues to be the leading cause of cyber loss, contributing to 62% of the claims included in the 2020 Reported Claims Index.
- According to Willis Re's 4th annual cyber survey of cyber insurance buyers and underwriters, risk managers, claim staff, actuaries and brokers, 86% think the frequency of cyber attacks will in crease as a result of COVID-19 and over half (54%) think the severity of those attacks will also increase.



Technical Controls & Core Focus Areas

REMOTE DESKTOP PROTOCOL

RDP is a dominant attack vector for ransomware. Recommendations to secure RDP include:

- VPN
- Encryption
- RDP Gateway
- Complex Passwords
- Multi-Factor Authentication
- Restrict access via a firewall
- Enable Restricted Admin Mode

MULTIFACTOR AUTHENTICATION

In addition to securing RDP, insurers are looking for insureds to utilize MFA to secure:

- Email
- Network Access
- Privileged User Accounts
- Virtual Desktop Instances (VDI)
- Cloud resources including Office365

ADDITIONAL SAFEGUARDS INCLUDE

- Placement Within the Network
- Network Level Authentication (NLA)
- Limit Domain Administrator Account Access
- Regular cybersecurity awareness & phishing training
- If using O365, O365 Advanced Threat Protection add-on
- Minimize the number of Local Administrator Accounts & ensure each is unique
- Use of account-naming convention that does not reveal organizational information

BACK-UP POLICIES

Property secured back-ups reduce the severity of Ransomware losses. Recommendations include:

- Encrypting backups
- Segregating backups; physically stored offsite and offline
- Regular testing backups for data integrity and restorability
- · Regularly performing full and incremental backups of data
- Annual testing of Incident Response/ Business Continuity Plan