Tennessee Board of Regents

Jackson State Community College
CYBER INCIDENT RESPONSE PLAN

5/16/23

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VP Financial & Administrative Affairs
Date

5/16/23

Dr. Kimberly McCormick, Interim President
Date

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Contents

EXECUTIVE SUMMARY

The State of Tennessee, Treasury Department, Division of Risk Management and Claims Administration, has purchased Cyber Liability Insurance Coverage to protect State Agencies and Departments including the Universities, Community Colleges and Colleges of Applied Technology under the umbrella of the Tennessee Board of Regents. This Cyber Incident Response Plan (CIRP) supports this protection with a plan for discovery, investigation, response and remediation. It includes procedures for technical staff and users for detailing, communicating, responding to, and reporting security incidents. This plan is an extension of information security practices, where potential incidents are identified and passed to this plan for further review and processing.

A security incident refers to an adverse event in an information system, and/or network, or the threat of the occurrence of such an event. Incidents can include but are not limited to unauthorized access, malicious code, network probes and denial of service attacks. *(See Appendix C for a glossary of terms.)*

The CIRP will assist with decision-making, internal and external coordination, unity of effort, and minimization of reputational and financial losses. The CIRP provides operational instructions for the discovery of a cyber-breach, the investigation and remediation process, the assembly of the internal response team, determining the escalation level, contacting law enforcement, the utilization of vendors, the notification process, establishing a call center and post incident lessons learned.

Cyber incidents can be accidental or malicious actions or events that have the potential of causing unwanted effects on the confidentiality, integrity and availability of State information and IT assets. Cyber incidents include, but not limited to, theft or loss of physical equipment, illegal access to systems or information, and failing to protect and secure electronic Personal Identifiable Information (PII) and/or Personal Health Information (PHI). These situations cause institutions to face unnecessary expense in productivity, significant damage to systems and damage to reputation.

The goal of this CIRP is to assist TBR institutions with managing a cyber-security event or incident for the purpose of mitigating damages, increasing the confidence and trust of all stakeholders and to reduce the recovery time and costs of a cyber-security breach. The CIRP will assist with decision making, internal and external coordination, unity of effort, and minimization of reputational and financial losses for an organization achieved through the implementation of procedures outlined in this plan. The CIRP provides operational instructions for the discovery of a cyber-breach, the investigation and remediation process, the assembly of the internal response team, determining the escalation level, contacting law enforcement, the utilization of vendors, the notification process to TBR, establishing a call center and post incident lessons learned.

Effective planning must incorporate coordination across all business functions, for example, organizational communications among leadership, regulatory affairs, legal, compliance and audit

and operational functions. Internal coordination, combined with easily accessible documentation of CIRP, ensures that all levels of an organization can react with greater alertness during an incident.

Document Control

Document Version

Version No.	Version Date	Author	Summary of Changes
1.0	04/1/2019		Initial Document
1.1	05/05/2020	Dana Nails	Update Response Team information, credit bureau information and IFAP information.
1.2	04/01/2021	Dana Nails	Update Response Team information, checked links and phone numbers
1.3	04/29/2022	Dana Nails	Update Response Team information, checked links and phone numbers.
1.4	05/16/2023	Dana Nails	Update Response Team information, checked links and phone numbers

Document Approval

This plan and all updates have been reviewed and approved on the dates listed below:

Name	Title	Date of Approval	Version No.
Dr. Allana Hamilton	President	04/2019	1.0
Tim Dellinger	Vice President, Finance & Administrative Affairs	04/2019	1.0
Dr. Jeff Sisk	Interim President	05/2020	1.1
Tim Dellinger	Vice President, Finance & Administrative Affairs	05/2020	1.1
Dr. George Pimentel	President	05/2021	1.2
Tim Dellinger	Vice President, Finance & Administrative Affairs	05/2021	1.2
Dr. George Pimentel	President	05/2022	1.3
Tim Dellinger	Vice President, Finance & Administrative Affairs	05/2022	1.3
Dr. Kimberly McCormick	Interim President	05/2023	1.4

Tim Dellinger	Vice President, Finance & Administrative Affairs	05/2023	1.4

Record of Distribution

A hard copy of the plan is kept in JSCC Information Technology department and the vault in Business Services. Electronic copies of this plan are kept on the Information Technology shares and jWEb. A copy is also place in the cloud in Microsoft Azure. The plan and all updates are distributed each fall to all staff for review:

Office	Date of Distribution
Sent out via email to review all policies and plans	11/02/2020
Sent out via email to review all policies and plans	10/27/2021
Part of Know Be 4 Security Training	09/28/2022

Acronyms Used in this Document

Below are commonly used acronyms found in this document. Appendices B and C provide further definitions and explanations for some of these terms.

CIO – Chief Information Officer

CIRP – Cyber Incident Response Plan

EMT – Executive Management Team

FERPA - Family Educational Rights and Privacy Act

IDPS - Intrusion Detection/Prevention Systems

IL – Incident Lead

IRS - Incident Response Support-Treasury

IRT – Incident Response Team

IRT PC – Incident Response Team Primary Contact

NTS – Networking & Technical Services

PCI – Payment Card Industry

PCI DSS – Payment Card Industry Data Security Standard

PHI – Personal Health Information

PII – Personally Identifiable information

PIO – Public Information Officer

PR – Public Relations

SSN – Social Security Number

STS - Strategic Technology Solutions

TBR – Tennessee Board of Regents

Overview

Purpose of the Cyber Incident Response Plan (CIRP)

The CIRP is required in order to bring needed resources together in an organized manner to deal with an adverse event related to the safety and security of Jackson State Community College (JSCC) and their computer resources and the securing of Personal Identifiable Information (PII) and Personal Health Information (PHI). This adverse event may be malicious code attack, unauthorized access to systems, unauthorized access to services, general misuse of systems and failure to secure PII and PHI information and other information classified as sensitive under the institution's data classification policy and procedures.

Goals

The goals of this CIRP are to assist Jackson State Community College (JSCC) with managing a cyber-security event or incident including:

- mitigating damages,
- minimizing disruption to academic, business, network operations and other college processes
- increasing the confidence and trust of all stakeholders
- reducing the recovery time and costs of a cyber-security breach
- allowing for legal (to include criminal and/or civil) actions against perpetrators
- providing accurate reports and useful recommendations

Scope

This process applies to all users (including but not limited to staff, faculty, students, contractors, consultants, and visitors) while using information systems resources throughout the TBR system. All users will be advised of this plan and are required to comply with this process.

Document Review and Revision Schedule

This document will be reviewed annually for informational updates for names, titles, and contact information and for procedural, policy and other updates.

Incident Response Team

The Office of Information Technology and its staff are responsible for maintaining and overseeing the incident response process and assuring that members at each campus are part of their respective IRT. The IRT, at each campus, has the authority to monitor suspicious activity and to disconnect any equipment that is in violation of university, campus, state or federal regulations.

The IRT at each site is accountable to the CIO for the investigation, declaration, analysis, and disposition of an incident. The membership of the IRT is dependent on the type of incident and the means necessary to mitigate its effect on the confidentiality, integrity or availability of information resources.

To adequately respond to an intrusion or incident, predetermined teams will participate depending on the incident characteristics. As the situation develops and the impact becomes more significant, the various teams will be called to contribute.

Purpose of the Incident Response Team (IRT)

The purpose of the TBR and its associated member institutions' Incident Response Team is to:

- Protect information assets of Jackson State Community College.
- Provide subject matter expertise with managing and handling incidents.
- Determine the extent to which the incident poses problems related to identity theft, loss of individuals' privacy or confidentiality or the security of Jackson State Community College information and systems.
- Manage activities to recover from the breach and mitigate the resulting damage, including decisions relating to external breach notification.
- Implement the response plan, engage the proper resources and track the efforts and the progress of containing the breach.
- Prevent the use of Jackson State Community College systems in attacks against other systems (which could incur legal liability).
- Minimize the potential for negative exposure with Jackson State Community College reputation and regaining and building public trust.

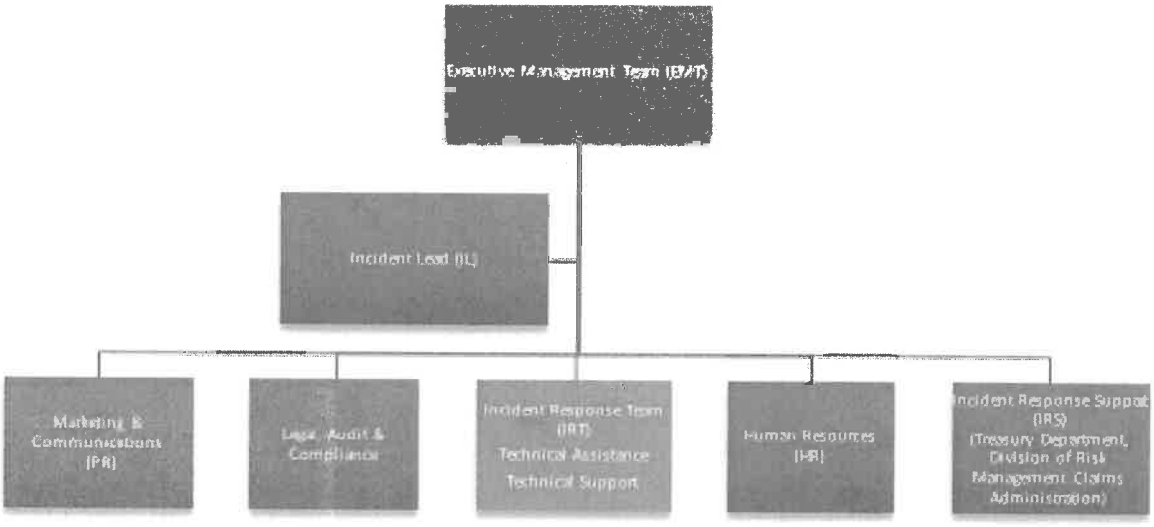
Objectives of the Incident Response Team (IRT)

- Contain and minimize threat.
- Determine the source of the incident. Identify key tasks, manage timelines and document all response efforts from beginning to end.
- Assign and establish team roles and responsibilities, along with specifying access credentials.
- Determine how the incident occurred.
- Avoid escalation and further incidents from specific breach.
- Limit immediate incident impact to customers and partners.
- Summarize the steps needed to assess the scope of a breach.
- Assess the impact and damage in terms of financial harm, reputational harm or other harm.

- Recover from the incident.
- Outline the budget and resources needed to handle a breach.
- Find out how to avoid further exploitation of the same vulnerability.
- Recommend updates to policies and procedures as needed.
- Ensure contact lists remain updated and team members remain ready to respond.
- Analyze response efforts post-breach to better prepare TNR and its affiliated institutions' Incident Response Team for the next incident.

Incident Response Team Structure

See Appendix A for list of names and contact numbers for team members.



See Appendix B for more detail covering the responsibilities of specific personnel.

Incident Response Team Responsibilities

To adequately respond to an intrusion or incident, predetermined teams will participate depending on the incident characteristics. As the situation develops and the impact becomes more significant the various teams will be called to contribute.

IRT Members should be responsible for the following areas:

- Determining the tools and technology utilized in intrusion detection,
- Performing appropriate pre-incident activities (e.g. monitoring network activity, vulnerabilities, logs, etc.)
- Defining and classifying incidents,
- Determining if an incident should be investigated and the scope of such an investigation (i.e. law enforcement agencies, forensic work)
- Securing the network
- Conducting follow-up reviews.

Incidents

Common Attack Methods

Events can be detected through automated or manual means. Automated detection capabilities include network-based and host-based Intrusion Detection/Prevention Systems (IDPSs) and antivirus/antimalware software. Incidents may also be detected through manual means, such as problems reported by users or observations of abnormal resource utilization, suspicious account activity and log analysis. Additionally, TBR and its affiliated institutions may receive reports from sources external to the institutions that have detected issues and reported the activity. Although incidents occur in many ways, this plan focuses on the procedures to handle incidents that use the following common attack vectors:

Incidents can occur in a variety of ways, but the four fundamental ways data breaches can occur are:

- **Theft or Loss of Physical Equipment** - A data breach can occur with the theft or loss of physical equipment which stores data, such as laptop computers or memory storage devices.
- **Illegal Access to the Systems or Information** - A data breach can occur through malicious code delivered via external/removable media or email, denial of service attacks, unauthorized access, and unlawful access to personally-identifiable information by technological means such as hacking into existing computer systems or hijacking computers with viruses, worms or Trojans. Once inside a system, a cyber-criminal can steal data, infect it or overload computer systems.
- **Insiders** - A data breach can be committed by current employees, ex-employees or even through social engineering where an employee is tricked into providing access or unauthorized release of sensitive information either within or outside of the State such as, but not limited to, phishing, spear phishing, hacking into social networks, and other socially-engineered activities.
- **Oversight** - A data breach can occur when no one thought the information needed to be protected and no precautions were taken to safeguard the data in the first place.

Response Stages

The defined stages of response include:

1. Preparation
2. Incident Discovery/Detection
3. Triage and Analysis
4. Eradication and Recovery
5. Initial Notification
6. Follow-Up

Preparation

Knowing how to respond to an incident BEFORE it occurs can save valuable time and effort in the long run through the practice of table top exercises and annual training. A review of existing information system(s) and data identifies where personally-identifiable information (PII), protected health information (PHI) and other information classified as sensitive under the institution's data classification policy and procedures resides. This can be done by the following:

- Documenting what PII, PHI and other information classified as sensitive under the institution's data classification policy and procedures is maintained by the organization, where it is stored (including backup storage and archived data), and how it is kept secure;
- Conducting regular risk assessments and evaluating privacy threats for the organization, as well as any contractors, vendors, and other business partners;
- Reviewing who is approved for access to PII, PHI and other information classified as sensitive under the institution's data classification policy and procedures and checking user activity status to determine which accounts should be deactivated after a pre-determined period of inactivity
- Reviewing separation of duties to help ensure integrity of security checks and balances as employees should only have access to information related to their job function;
- Implementing mitigation controls designed to prevent and detect unauthorized access, theft or misuse of PII, PHI and other information classified as sensitive under the institution's data classification policy and procedures, which includes hard copy files;
- Implementing security controls, such as encryption of sensitive data in motion and at rest (where feasible);
- Regularly reviewing and keeping up-to-date data destruction policies, to minimize the risk of data breaches through unauthorized access to archived media or computers that are no longer in use; and
- Annually reviewing and updating this response plan and conducting annual table top exercises that include the Executive Management Team (EMT).

Incident Discovery/Detection

It is important that anyone who reports a security incident provides as much relevant information as possible. This information is to be reported on an Incident Reporting Form as shown in *Appendix G* completing the fields for information known at the time of completion. Based upon the type of the incident, notifications need to go to the appropriate people in the Incident Classification Chart. Additionally, the IRT will identify the appropriate technical team members that are needed to assist with the analysis phase of the incident.

Events are any observable occurrence in a system or network. This event could be a precursor or indicator of a security event (also known as a security incident). For example, observing one of the following events is generally inconclusive. However, a combination of any of the following activities can represent a security event and should be investigated:

- Unsuccessful logon attempts;
- Unexplained system crashes;
- Unexplained poor system performance;
- Port scanning (use of exploit and vulnerability scanners, remote requests for information about systems and/or users, or social engineering attempts);
- Unusual usage times (statistically, more security incidents occur during non-working hours than any other time);
- Requests for information about systems and/or users or other social engineering attempts;
- An indicated last time of usage of an account that does not correspond to the actual last time of usage for that account.

Any event which involves suspected or known incidents involving personally identifiable information should be reported to appropriate information technology personnel immediately. As much as possible of the following information should be obtained from the person reporting a known or suspected breach of PII and other information classified as sensitive under the institution's data classification policy and procedures:

- Person reporting the incident
- Person who discovered the incident
- Date and time the incident was discovered
- Nature of the incident
- Name of system and possible interconnectivity with other systems
- Description of the information lost or compromised
- Storage medium from which the information was lost or compromised
- Controls in place to prevent unauthorized use of the lost or compromised information
- Number of individuals potentially affected
- Whether law enforcement was contacted

Triage and Analysis

This involves limiting the scope and magnitude of an incident because some incidents may involve malicious code and these types of incidents can spread rapidly. This can cause massive destruction and loss of information. As soon as an incident is recognized, containment should begin immediately. This work involves the containment of stolen or unauthorized access to electronic stored data or dissemination of information to an external database. During this phase of the incident handling, it is important to initially identify the criticality of the incident (this may be changed during the analysis phase). This will be done by the Incident Lead (IL) and the Incident Response Team (IRT).

The IL and IRT should consider and determine that an incident may have a **system-wide** impact. The IL and IRT will undertake appropriate root cause analysis and actions to minimize the risk to the institution's core business operations. The IRT will utilize the evidence handling and forensics techniques identified in *Appendix H* when working the incident.

The institution may need to hire a certified Forensics investigator or turn the incident over to law enforcement depending on the magnitude of the incident.

Eradication and Recovery

Restoring a system to its normal business status is essential. Once a restore or recovery has been performed, it is important to verify that the restore operation was successful and that the system is back to its normal condition or the breached data has been contained.

- A computer forensic examination of all loss of data shall be conducted to determine all possible external electronic storage locations.
- The computer forensic examination shall also verify if the breached data has or has not been disseminated to any other known or unknown external electronic location.
- The IL shall document all ongoing events, all people involved and all discoveries into a timeline for evidentiary use.
- The EMT will determine if an external notification process shall be activated (affected individuals, affected businesses, local law enforcement, FBI and/or contracted cyber response vendors).
- To determine whether notification of a breach is required, the likely risk of harm caused by the breach and then the level of risk must be assessed. It will be important to determine whether PII was accessed and how many records or individuals were affected.
- A wide range of harm should be considered, such as harm to reputation and the potential for harassment or prejudice, particularly when health or financial benefits information is involved in the breach. Removing the cause of the incident can be a difficult process. It can involve virus removal, conviction of perpetrators or dismissing employees.

Initial Notification

Identify whether or not an incident has occurred. If one has occurred, the incident response team (IRT) can take the appropriate actions.

- If the initial cyber incident is determined to be **moderate or high**, the EMT shall notify and activate appropriate segments of the IRT and determine if the Tennessee Bureau of Investigation involvement is warranted.
- **Agencies shall report actual or suspected data breaches and significant cyber security incidents within 24 hours of discovery to the Tennessee Board of Regents. The Tennessee Board of Regents will then contact the State Comptroller, the State Treasurer, and the Treasury Department, Division of Risk Management Claims Administration.**

Depending on the totality of the circumstances, notification to the State Attorney General, the Executive Branch, and the Chancellor of Tennessee Board of Regents (TBR), other agencies as applicable, and, if determined, members of the General Assembly. **All Departments are still subject to audit by the Comptroller of the Treasury authorized by Tennessee Code Annotated, Section 8-4-109(a)(2).**

- The highest appointed/elected official in the EMT of the institution shall notify the State of Tennessee Board of Regents Chancellor.
- The internal notification process shall include details of the incident, initial risk rating (Low, Moderate, High or Very High), as well as the actions that have been taken to respond to the incident thus far.

- Upon discovery, the Incident Lead of the Incident Response Team shall report actual or suspected breaches, significant breaches of departmental data or significant cyber security incidents to the EMT and as soon as possible to the Tennessee Board of Regents who will inform the Department of Treasury, Division of Risk Management Claims Administration, with a brief status report of what has occurred as determined by the IRT. The IRT will work with the EMT to record the incident information and the details of the breach in the Cyber Incident Investigation Report Form.

Note: For individual instances of malware, the IRT should not be activated.

In preparing for initial notification, the following should be considered:

- How difficult is it to contain the incident?
- How fast is the incident spreading?

Follow-Up

Performing follow-up activity is an important activity in the response procedure. The IRT and the EMT should hold a "lessons learned" meeting with all involved parties after a major incident and, optionally, after lesser incidents as resources permit. This meeting provides a chance to review what occurred, what was done to intervene, and how well intervention worked. This follow-up can also support any efforts to prosecute those who have broken the law.

- This includes, but not limited to, changing Jackson State's policies as appropriate. After an incident is resolved, all incidents that have reached a severity of Level 4 or higher (see next section for incident classification scheme) will be reviewed and a final incident report will be compiled to ensure that all existing processes were followed and were adequate.
- Schedule a lessons-learned meeting with IRT and EMT to discuss any identified improvements to the response plan and the processes to the response that worked well during the incident.
- Determine if other external services, such as law enforcement, insurance company, or cyber vendors, should be considered to assist with future cyber breaches and incidents.
- Determine the estimated financial impact to JSCC?
- Determine the affect the incident will have on Jackson State's image or public trust
- Maintain a logbook of the events that occurred and develop an investigation report.
- The investigation report will include, describe and answer the following:
    - The description of the data lost, including the amount and its sensitivity or classification level and description of any hardware damaged or lost.
    - For cyber security incidents, the nature of the cyber threat (e.g., Advanced Persistent Threat, Zero Day Threat and data exfiltration).
    - Nature and number of persons affected (e.g., employees, external customers, students, citizens, vendors) and if the incident disrupted ongoing operations.
    - Likelihood data is accessible and usable from unauthorized personnel or cyber criminals.
    - Likelihood the data was intentionally targeted.

- Evidence that the compromised data is actually being used to commit identity theft.
- Strength and effectiveness of security technologies protecting data.
- Likelihood the breach may lead to harm and the type of harm. Such harm may include confidentiality or fiduciary responsibility, blackmail, disclosure of private facts, mental pain and emotional distress, the disclosure of address information for victims of abuse, the potential for secondary uses of the information which could result in fear or uncertainty.
- Ability to mitigate the risk of harm.

Incident Classification

Classifying an incident is perhaps the most critical decision point in the incident handling process. An incident will be classified as one of six (6) severity levels. These severity levels are based on the impact to JSCC and can be expressed in terms of financial impact, impact to services and/or performance of Jackson State's mission functions, impact to image or impact to public trust. All security incidents are classified by the actual and potential impacts on day-to-day activities of the institution. This criticality review must occur within all phases and, as the criticality changes, appropriate notifications need to be made.

Severity	Description	Sensitive Data involved **FERPA** **HIPPA** **PII** PCI	Image and/or Trust	Services Impacted	Multiple Systems Impacted
6 – Very High	Multiple systems inoperable or taken offline preventing the performance of daily duties impacting the servicing of customers, or **confirmed** data breach or system compromise of more than one application, system or area, or involving sensitive application or system data.	X	X	X	X
5 – High	Single system inoperable or taken offline, preventing the performance of daily duties impacting the servicing of customers, or **confirmed** data breach or system compromise of a single application, system or area involving non-sensitive application or system data.		X	X	
4 - Moderate	Server(s) is operable with minor damage. Minor damage to facility or business areas which prevents the performance of daily duties which impact the servicing of customers, or **unconfirmed** suspected data or system compromise.			X	X
3 - Low	Server operable with no significant degradation of performance or more than five end user sites affected by the same MINOR severity event.				X
2 - Minor	More than five workstations blocked for reimaging.				X
1 – Very Minor	Single workstation blocked for reimage. No data compromise.				

Incident Notification

The criticality review must occur within all phases and, as the criticality changes, appropriate notifications need to be made. This criticality review must occur within all phases and, as the criticality changes, appropriate notifications need to be made.

- Incidents suspected or confirmed incidents determined to be MINOR and above: The IRT-PC will be notified.
- Incidents classified LOW and above will be escalated by the IRT-PC to the IL.
- Incidents determined to be **MODERATE** and above will be escalated by the IL to the EMT. At the EMT's discretion, notification will be given to the State of Tennessee Board of Regents Chancellor and CIO who will then bring that information where appropriate to the attention of other agencies such as the Legislative Branch, the Treasurer, the Comptroller, the Secretary of State, the Attorney General, and the Executive Branch.

Severity	Minimum Notifications					
	EMT	IL	PIO	Legal/HR/ Audit	IRT	IRS
6 – Very High	X	X	X	X	X	X
5 – High	X	X	X	X	X	X
4 - Moderate	X	X	X		X	X
3 - Low		X			IRT Primary Contact	
2 - Minor					IRT Primary Contact	
1 – Very Minor						

There may be times when other notifications need to take place, and the Notification Target is only the minimum notification requirement. The TBR and JSCC Command Centers are responsible for maintaining up-to-date contact lists. The JSCC CIO or designee will contact them to initiate any required contacts that are not already available.

- TBR Chief Information Officer (615) 268-0782 (cell)
  (615) 366-4456 (office)

Incident Response Team

The IRT shall assess data breaches and incidents involving PII, PCI, PHI, FERPA, federal tax information, business intelligence information and other information classified as sensitive under the institution's data classification policy and procedures or all other data breaches and incidents with support from Treasury Department, Division of Risk Management Claims Administration. The assessment will be based on the details included in the incident report and will assign an initial potential impact level of Low, Moderate or High. The potential impact levels describe the worst-case potential impact on the organization, individual person, employee, or vendor of the breach/cyber incident.

The Student Aid Internet Gateway (SAIG) Agreement requires that as a condition of continued participation in federal student aid programs, the college must report actual data breaches, as well as suspected data breaches. Title IV postsecondary institutions must report on the day that a data breach is detected or even suspected. To report a breach, fill out the form at Cybersecurity Breach Intake | Cybersecurity (ed.gov) or send email to cpssaig@ed.gov including the information below.

- Date of the breach (known or suspected)
- Impact of the breach (number of records, number of students, etc)
- Method of the breach (hack, accidental disclosure, etc.)
- Information security program point of contact (email address and phone number are required)

Additional information can be found in the SAIG Participation Agreement form as well as at

https://fsawebenroll.ed.gov/PMEnroll/index.jsp

The EMT shall determine, as the incident has more impact (severity level increases), the escalation process that will be invoked to involve appropriate resources.

Incidents should be handled at the lowest escalation level that is capable of responding to the incident, with as few resources as possible, to reduce the total impact, and to keep tight control.

Escalation Considerations

The Executive Management Team (EMT) will consider several characteristics of the incident before escalating the response to a higher level and prior to the EMT determining the severity of the data breach.
The following considerations should be answered:

- How widespread is the incident?
- What is the impact to operations?
- How difficult is it to contain the incident?

- How fast is the incident spreading?
- What is the estimated financial impact?
- Should law enforcement be notified?
- Will this affect TBR and its affiliated institutions' public image negatively?

This table defines the escalation levels with the associated team involvement.

Severity	Minimum Notifications
6 – Very High	EMT IL IRT IRS (Incident Response Support-Treasury) PIO/Media Communications (PR) Legal/HR/Audit/Compliance
5 – High	EMT IL IRT IRS (Incident Response Support-Treasury) PIO/Media Communications (PR) Legal/HR/Audit/Compliance
4 - Moderate	EMT IL IRT IRS (Incident Response Support-Treasury) PIO/Media Communications (PR)
3 - Low	IL IRT PC
2 - Minor	IRT PC
1 – Very Minor	No Notification

Team Responsibilities at each Escalation Level

The Jackson State's EMT and IRT will determine the appropriate course of action, including notification to affected individuals, the resources needed, and any appropriate remedy options. The EMT and IRT shall notify the State of Tennessee Division of Risk Management Claims Administration (DRMCA) for insurance purposes. The EMT and/or IRT may request additional support from DRMCA upon request.

Escalation Level 1 – Very Minor

Escalation Level 1 – Very Minor	
Normal Operations	Monitor all known sources for alerts or notification of a threat. Single workstation blocked for reimage. No data compromised. **NO NOTIFICATION REQUIRED.**

Escalation Level 2 – Minor

Escalation Level 2 – Minor	
Incident Response Team – Primary Contact	▪ Verify that an incident has actually occurred. This activity typically involves the unit systems administrator and end user, but may also result from proactive incident detection work of the Security Office or central IT operations. If it is determined that an incident has occurred, inform appropriate authorities. ▪ Monitor all known sources for alerts or notification of a threat. More than five workstations blocked for reimage. No data compromised. ▪ Determine if the Incident Lead needs to be contacted to escalate to Levels 3, 4, 5, or 6.

Escalation Level 3 - Low

Escalation Level 3 – Low	
Incident Response Team - Primary Contact	▪ Conduct a thorough assessment of the type and scope of data exposed following applicable laws, regulation, and policy. ▪ Determine initial defensive action required. ▪ Prepares the Incident Reporting Form if not already completed. ▪ Notify the Incident Lead. ▪ Server operable with no significant degradation of performance, or more than five end user sites affected by the same minor severity event. ▪ Take steps to remove the cause of the exposure, reduce the impact of the exposure of the sensitive data, and restore operations if the incident compromised or otherwise put out of service a system or network, and ensure that future risk of exposure is mitigated.
Incident Lead	▪ Based upon the incident classification, determine if an "Executive Communications Team" needs to be formed. ▪ Receive and track all reported potential threats. ▪ Escalate Incident Response to appropriate Escalation Level if a report is received indicating that the threat has manifested itself. ▪ Determine relevant assignment of tasks for personnel to conduct the assessment the data breach has been confirmed. ▪ Alert IT organizations and applicable support organizations of the potential threat and any defensive action required. ▪ Alert the Executive Management Team and the Communication Team of the potential threat if determined the incident needs to escalate to Levels 4, 5, or 6. ▪ Alert Legal, Audit and Compliance of the potential threat if determined the incident needs to escalate to Levels 5 and 6. ▪ Notify the Incident Response Support Team (DRMCA) of the potential threat if determined the incident needs to escalate to Levels 4, 5, or 6.

Escalation Level 4 - Moderate

Escalation Level 4 – Moderate	
Executive Management Team (EMT)	▪ Assume responsibility for directing activities in regard to the incident. ▪ Determine whether Escalation Level 4 is appropriate or escalate to Level 5, or possibly Level 6. ▪ Determine when the risk has been mitigated to an acceptable level. ▪ President determines when internal notification process should be activated. ▪ President determines if Tennessee Bureau of Investigation notification process should be activated. ▪ Determine when the breach of data has been either contained or mitigated to an acceptable level through the activation of the computer forensic examination. ▪ Determine if external notification process shall be activated (affected individuals, affected businesses, local law enforcement, FBI and/or contracted cyber response vendors). ▪ Ensure a computer forensic examination of all loss of data will be conducted to determine all possible external electronic storage locations. ▪ Determine risk of harm caused by the breach and then the level of risk must be assessed to escalate to Levels 5 or 6. ▪ **Determine if notice to individuals whose data may have been exposed by the incident is addressed. Swiftness in notifying those affected by a breach of personally identifiable information (PII), as well as informing certain government entities, is legally mandated in many states and, depending on the nature of the data, also federal law. Speed is also important from a public relations standpoint. To this end, many of the sub-steps can and should be undertaken in parallel to accommodate these needs.**

Escalation Level 4 – Moderate (Cont.)	
Incident Lead ***Note:*** *The chronological log will be used to support possible follow up on legal action as determined by Institution State General Counsel, and President.*	▪ Notify the EMT of the manifestation of the threat. ▪ Notify the IRT of the incident. ▪ Receive status from the Technical Assessment Team and report to the Executive Management Team. ▪ Start a chronological log of events.
Incident Response Team -Technical Assessment and Support	▪ Prepares the Incident Reporting Form if not already completed. ▪ Determine and take best course of action for containment of the incident. ▪ Report actions taken and status to the Incident Lead. ▪ Report actions taken and status to the Incident Response Coordinator. ▪ Report actions taken, number of personnel involved etc. to Incident Coordinator for the chronological log.
Communication Team/PIO ***Note:*** *The Communication and Executive Management Teams should consider notifying the public media as soon as possible after the discovery of a breach. However, if possible, the incident response plan and notification content should be developed prior to notifying the media.*	▪ Message the employee population informing them of the incident if deemed appropriate by the Executive Management Team. ▪ Message the employee population of any action they need to take as determined by the Technical Assessment and Support Team and directed by the Executive Management Team. ▪ Determine, with Legal, Audit and Compliance, the specific legal obligations and timeline for notification. ▪ Assist the Executive Management Team with determining if or when the data breach should be released to affected individuals and/or the media. ▪ Notification content should focus on providing information, including links to resources, to aid the public in its response to the breach.

Escalation Level 4 – Moderate (Continued)	
Communication Team/PIO *(continued)*	▪ Notification may be delayed upon the request of law enforcement. ▪ To the extent possible, prompt public media disclosure is generally preferable because delayed notification may erode public trust.
Incident Response Support (IRS) – Risk Management Claims Administration - Treasury	▪ Obtain copy of initial investigation report from the Incident Lead or the Executive Management Team. ▪ Notify State of Tennessee's insurance broker and insurance carrier. ▪ Submit the initial investigation report to insurance carrier and broker. ▪ Determine if a recommendation to activate cyber response vendors is needed to the Incident Lead or the Executive Management Team. ▪ Respond to any request for assistance from the Incident Lead or the Executive Management Team.

Escalation Level 5 - High

Escalation Level 5 – High	
Executive Management Team	▪ Direct the Incident Response Support Team to: o Set up communications between all Executive Team Managers and the Technical Support Team. o Establish and assume occupancy of the command center. o Initialize an incident voice mail box where status messages can be placed to keep institution personnel updated. ▪ President determines if Tennessee Bureau of Investigation (TBI) notification process should be activated. In some circumstances, the President, Executive Team Managers, and TBI may consider delaying external notification to affected individuals and media if a notification would seriously impede the investigation of the breach or the affected parties. However, any delay should not worsen risk or harm to any affected individual. ▪ Alert the Extended Team of the incident notifying them of the Severity Level. ▪ Determine when external notification process shall be activated (affected individuals, affected businesses, local law enforcement, FBI, and/or contracted cyber response vendors). ▪ Determine when a computer forensic examination of all loss of data will be conducted to determine all possible external electronic storage locations. ▪ Determine when the risk has been mitigated to an acceptable level. ▪ Provide status updates from the leadership hierarchy within the institution. ▪ Ensure that all needed information is being collected to support legal action or financial restitution. ▪ Determine if the information that has been lost or stolen is properly protected by encryption and has been validated by the Technical Assessment Team. If it is determined that the data is encrypted, the risk of compromise may be low to nonexistent. ▪ Determine if and when the cyber vendor's call center and monitoring services will be used for the data breach/cyber incident.

Escalation Level 5 – High (Cont.)	
Executive Management Team (Continued)	▪ Determine if notice to individuals whose data may have been exposed by the incident is addressed. Swiftness in notifying those affected by a breach of personally identifiable information **(PII),** as well as informing certain government entities, is legally mandated in many states and, depending on the nature of the data, also federal law. Speed is also important from a public relations standpoint.
Incident Lead	▪ Continue maintaining the chronological log of event. ▪ Post numbered status messages in the incident voice mail box for updating executive management. ▪ Continue to have oversight over the tasks and progress of the Technical Assessment and Support Team. ▪ Report progress of the Technical Assessment and Support Team to the Executive Management Team.
Incident Response Team – Technical Assessment and Technical Support	▪ Prepares the Incident Reporting Form if not already completed. ▪ Continue to monitor all known sources for alerts, looking for further information or actions needed to eliminate the threat. ▪ Continue reporting status, actions taken, number of personnel, etc. to the Incident Lead for the chronological log of events. ▪ Monitor effectiveness of actions taken and modify them as necessary. ▪ Provide status updates to the Incident Lead on effectiveness of actions taken and progress in eliminating the threat.
Legal, Audit and Compliance	▪ Determine, with Communications, the specific legal obligations and timeline for notification. Consult Tennessee Code Annotated, Section 47-18-2107 for specific requirements, and with the Consumer Protection Division of the Attorney General's Office. ▪ Notify the Executive Management Team to determine if or when the data breach notification letter should be released to affected individuals and/or the media. ▪ If the breach involves a state contractor or a public-private vendor operating a system of records on behalf of the institution, the Legal, Audit, and Compliance Team is responsible for ensuring or determining if any notification and corrective actions needs to be taken by the institution. ▪ Review contract and outline the roles, responsibilities, and relationships with contractors or vendors, and prepare a summary reflecting cyber insurance requirements within contract. ▪ Work directly with the state-contracted Cyber Coach Attorney and/or obtain an engagement letter with outside counsel or firm that specializes in cyber breaches/ incidents. Consult with Attorney General's Office if an engagement letter is required.

Escalation Level 5 – High (Continued)	
Communication Team/PIO Note: The Communication and Executive Management Teams should consider notifying the public media as soon as possible after the discovery of a breach. However, if possible, the incident response plan and notification content should be developed prior to notifying the media.	▪ Message the employee population informing them of the incident if deemed appropriate by the Executive Management Team. ▪ Message the employee population of any action they need to take as determined by the Technical Assessment Team and directed by the Executive Management Team. ▪ Determine, with Legal, Audit and Compliance, the specific legal obligations and timeline for notification. ▪ Assist the Executive Management Team with determining if occurrence of the data breach should be released to affected individuals and/or the media and, if so, when to release information. ▪ Notification content should focus on providing information, including links to resources, to aid the public in its response to the breach. ▪ Notification may be delayed upon the request of law enforcement. ▪ To the extent possible, prompt public media disclosure is generally preferable because delayed notification may erode public trust.
Incident Response Support (Risk Management Claims Administration – Treasury)	▪ Obtain a copy of initial investigation report from the Incident Lead or the Executive Management Team. ▪ Notify State of Tennessee's insurance broker and insurance carrier. ▪ Submit the initial investigation report to insurance carrier and broker. ▪ Determine if a recommendation to activate cyber response vendors is needed to the Incident Lead or the Executive Management Team. ▪ Respond to any request for assistance from the Incident Lead or the Executive Management Team.
Human Resources	▪ HR, Legal, Audit and Compliance, and President determine if disciplinary action or termination is warranted if the breach of data/cyber incident was from an internal source.

Escalation Level 6 – Very High

Escalation Level 6 – Very High	
Executive Management Team	▪ Direct the Incident Response Support Team to: o Set up communications between all Executive Team Managers and the Technical Support Team. o Establish and assume occupancy of the command center. o Initialize an incident voice mail box where status messages can be placed to keep institution personnel updated. ▪ President determines if Tennessee Bureau of Investigation (TBI) notification process should be activated. In some circumstances, the President, Executive Team Managers, and TBI may consider delaying external notification to affected individuals and media if a notification would seriously impede the investigation of the breach or the affected parties. However, any delay should not worsen risk or harm to any affected individual. ▪ Alert the Extended Team of the incident notifying them of the Severity Level. ▪ Determine when external notification process shall be activated (affected individuals, affected businesses, local law enforcement, FBI, and/or contracted cyber response vendors). ▪ Determine when a computer forensic examination of all loss of data will be conducted to determine all possible external electronic storage locations. ▪ Determine when the risk has been mitigated to an acceptable level. ▪ Provide status updates from the President to the leadership hierarchy within the institution. ▪ Ensure that all needed information is being collected to support legal action or financial restitution.

Escalation Level 6 – Very High (Continued)	
Executive Management Team	▪ Determine if the information that has been lost or stolen is properly protected by encryption and has been validated by the Technical Assessment Team. If it is determined that the data is encrypted, the risk of compromise may be low to nonexistent. ▪ Determine if and when the cyber vendor's call center and monitoring services will be used for the data breach/cyber incident. ▪ Determine if notice to individuals whose data may have been exposed by the incident is addressed. Swiftness in notifying those affected by a breach of personally identifiable information (PII), as well as informing certain government entities, is legally mandated in many states and, depending on the nature of the data, also federal law. Speed is also important from a public relations standpoint. To this end, many of the sub-steps can and should be undertaken in parallel to accommodate these needs.
Incident Lead	▪ Continue maintaining the chronological log of events. ▪ Post numbered status messages in the incident voice mail box for updating agency executive management. ▪ Continue to have oversight over the tasks and progress of the Technical Assessment Team and the Technical Support Team. ▪ Report progress of both the Technical Assessment Team and the Technical Support Team to the Executive Management Team.
Incident Response Team – Technical Assessment and Support	▪ Prepares the Incident Reporting Form if not already completed. ▪ Continue to monitor all known sources for alerts, looking for further information or actions needed to eliminate the threat. ▪ Continue reporting status to the Incident Lead for the chronological log of events. ▪ Monitor effectiveness of actions taken and modify them as necessary. ▪ Provide status updates to the Incident Lead on effectiveness of actions taken and progress in eliminating the threat. ▪ Continue actions to eradicate the threat as directed by the Executive Management Team, the Incident Lead, and the Incident Response Team. ▪ Continue to report actions taken, number of personnel, etc. to the Incident Lead for the chronological log.

Escalation Level 6 – Very High (Cont.)	
Legal, Audit and Compliance	▪ Determine, with Communications, the specific legal obligations and timeline for notification. Consult **Tennessee Code Annotated, Section 47-18-2107** for specific requirements, and with the Consumer Protection Division of the Attorney General's Office. ▪ Notify the Executive Management Team to determine if or when the data breach notification letter should be released to affected individuals and/or the media. ▪ If the breach involves a state contractor or a public-private vendor operating a system of records on behalf of the institution, the Legal, Audit, and Compliance Team is responsible for ensuring or determining if any notification and corrective actions needs to be taken by the institution. ▪ Review contract and outline the roles, responsibilities, and relationships with contractors or vendors, and prepare a summary reflecting cyber insurance requirements within contract. ▪ Work directly with the state-contracted Cyber Coach Attorney and/or obtain an engagement letter with outside counsel or firm that specializes in cyber breaches/incidents. Consult with Attorney General's Office if an engagement letter is required.
Communication Team/PIO Note: The Communication and Executive Management Teams should consider notifying the public media as soon as possible after the discovery of a breach. However, if possible, the incident response plan and notification content should be developed prior to notifying the media.	▪ Message the employee population informing them of the incident if deemed appropriate by the Executive Management Team. ▪ Message the employee population of any action they need to take as determined by the Technical Assessment Team and directed by the Executive Management Team. ▪ Determine, with Legal, Audit and Compliance, the specific legal obligations and timeline for notification. ▪ Assist the Executive Management Team with determining if occurrence of the data breach should be released to affected individuals and/or the media and, if so, when to release information. ▪ Notification content should focus on providing information, including links to resources, to aid the public in its response to the breach. ▪ Notification may be delayed upon the request of law enforcement. ▪ To the extent possible, prompt public media disclosure is generally preferable because delayed notification may erode public trust.

Escalation Level 6 – Very High (Cont.)	
Incident Response Support (Risk Management Claims Administration – Treasury)	▪ Submit updated status reports received from the Incident Lead or the Executive Management Team to insurance carrier. ▪ Determine if a recommendation to activate cyber response vendors is needed to the Incident Lead or the Executive Management Team. ▪ Respond to any request for assistance from the Incident Lead or the Executive Management Team. ▪ Assist the Executive Management Team with setting up cyber vendors call center and monitoring services.
Human Resources	▪ HR, Legal, Audit and Compliance, and President determine if disciplinary action or termination is warranted if breach of data/cyber incident was from an internal source.

Post Incident

Post Incident	
Incident Lead	▪ Prepare a report for institution executive management team to include: o Estimate of damage/impact; o Action taken during the incident (not technical detail); o Follow-up on efforts needed to eliminate or mitigate the vulnerability; o Policies or procedures that require updating; o Efforts taken to minimize liabilities or negative exposure; and o Document lessons learned and modify the Incident Response Plan accordingly. ▪ Maintain the incident information so it can be easily accessible.
Legal, Audit and Compliance	▪ Confirm transmission of any notifications determined necessary by law or policy. ▪ Provide the chronological log and any system audit logs requested by law enforcement or prosecutors, if applicable. ▪ Assist with preparing any or all documents, upon request, from law enforcement or prosecutors, if applicable.
Human Resources	▪ Work with the Director of Information Technology to determine if any additional training regarding PII, HIPAA, or FERPA is needed for all or certain classes of employees. ▪ Work with the Director of Information Technology to continue with scheduling annual training for PII, HIPAA or FERPA for all employees.

Notification Contents

Please note that Legal, Compliance, and Audit divisions should consult Tennessee Code Annotated, Section 47-18-2107 regarding notification requirements.

The notification letter should be provided in writing on Jackson State letterhead and should use concise and plain language.

The notice should include the following elements:

- A brief description of what happened, including the date(s) of the breach and of its discovery.
- A description of the types of personal information involved in the breach (e.g., full name, Social Security number, date of birth, home address, account number, disability code, etc.).
- A statement regarding whether the information was encrypted or protected by other means when determined such information would be beneficial and would not compromise the security of the system.
- The steps affected parties should take to protect themselves from potential harm, if any.
- The steps being taken to investigate the breach, to mitigate losses and to protect against any further breaches. The inclusion of any details concerning the investigation of the breach should take into consideration whether or not the inclusion of such details would jeopardize an ongoing law enforcement investigation.
- The contact information for impacted parties including a toll-free call center telephone number, e-mail address, and postal address.
- The information should be layered with the most important information up front and additional details in a Frequently Asked Questions (FAQ) format, or on the Jackson State institution website. If the affected parties are not English speaking, notice should also be provided in the appropriate language(s).

See *Appendix D* for sample of written notifications provided by the State of Tennessee Treasury Department, Division of Risk Management Claims Administration. *Appendix F* contains sample answers to Frequently Asked Questions, which should be updated to address the specific breach and then distributed to the Information Center or other call center established after an incident. *Appendix E* contains general guidelines to be considered when creating a call center at the college in response to a data breach.

Appendix A: Incident Response Teams Contact List

Executive Management Team (EMT)

Name	Title	Email	Phone Numbers
Dr. Kimberly McCormick	Interim President	kmccormick2@jscc.edu	423-619-8040
Dr. Jennifer Lopes	Vice President, Academic Affairs	jlopes@jscc.edu	864-992-6970
Tim Dellinger	Vice President, Finance & Administrative Affairs	tdellinger1@jscc.edu	731-609-7479
Kori Ebenhack	Interim Vice President, Student Services	kebenhack@jscc.edu	541-218-8244

Incident Lead (IL)

Name	Title	Email	Phone Numbers
Dana Nails	Director	dnails@jscc.edu	731-225-2509

Incident Response Team (IRT, Assessment and Technical Support)

Name	Title	Email	Phone Numbers
Dana Nails	Director	dnails@jscc.edu	731-225-2509
Linda Shirley	Technology Services Manager	lshirley@jscc.edu	731-549-6139
Kevin Johnson	Systems Administrator	kjohnson@jscc.edu	731-220-2722
Sonny Davis	Systems Administrator	jdavis2@jscc.edu	731-697-7755
Patti Tanski-Mego	DBA/ERP Manager	pmego@jscc.edu	731-267-9284
Zach Tarr	Technology Specialist	ctarr1@jscc.edu	731-661-1508
Kat Hart	Director Admissions/Records	khart14@jscc.edu	484-767-8579
John Brandt	Director Financial Aid	jbrandt@jscc.edu	731-225-9046
Kathy Taylor	Director Business Services	ktaylor21@jscc.edu	731-676-8987
Dr. Vicki Burton	Coordinator, Human Resources	vburton@jscc.edu	731-695-3732

Incident Response Support (IRS)

Name	Title	Email	Phone Numbers
Rodney Escobar	Director of Risk Management and Claims Administration	Rodney.Escobar@tn.gov	615-741-9957

Jamie Fohl, ARM-P	Manager 4 – Claims and Risk Management – Treasury Department	Jamie.Fohl@tn.gov	615-741-9972

Communications

Name	Title	Email	Phone Numbers
Henry Kilpatrick	Coordinator, Public Relations & Marketing	hkilpatrick1@jscc.edu	731-513-0464

Legal, Audit and Compliance

Name	Title	Email	Phone Numbers
	Director, Internal Audit		
Terri Messer	Compliance & Risk Officer, Title IX Coordinator	tmesser@jscc.edu	731-694-3600
Heather Stewart Don Ungurait Wayne Pugh	TBR Legal Counsel	heather.stewart@tbr.edu donald.ungurait@tbr.edu wayne.pugh@tbr.edu	615-366-3933 615-366-3916 615-366-4439

Human Resources

Name	Title	Email	Phone Numbers
Dr. Vicki Burton	Coordinator, Human Resources	vburton@jscc.edu	731-695-3732

Law Enforcement Notification List

Name	Title	Email	Phone Numbers
Aaron Patton	Director, Safety and Security	apatton1@jscc.edu	731-432-9575
Nashville Headquarters	Tennessee Bureau of Investigation		615-744-4000
De'Greaun Reshun Frazier	Special Agent - TBI Crime Lab & Regional Headquarters		731-426-1910 - Crime Lab 731-984-6600 - Investigations
TBI - Memphis Field Office			901-379-3400
Joseph Upton	Local FBI Office	joseph.upton@ic.fbi.gov	731-431-2947 cell 731-668-9578 office

Appendix B: Roles and Responsibilities

The following is the point of contact for information regarding this Incident Response Plan:

Point of contact information

Public Information Officer (PIO) – The Communications/PR Coordinator will coordinate communication for both internal and external audiences and determine proper delivery mechanism(s). The content will be created with consultation from the IRT, EMT and other subject matter experts. The Communications Officer is typically the coordinator of Public Relations/Marketing.

Executive Management Team (EMT) – The executive management team is comprised of the senior leadership for TBR and its affiliated institutions.

HelpDesk – JSCC has two helpdesks. Distance Learning helpdesk handles calls concerning D2L and the Information Technology helpdesk assists with student accounts and Active Directory. Both helpdesks should report any system anomalies or suspected security incidents to the Director of Information Technology.

Human Resources (HR) – The Director of Human Resources will work with Legal, Audit and Compliance if required if incidents at Level 5 and higher require personnel action or training.

Incident Lead (IL)– The incident lead is an individual appointed by the college president to direct and manage the internal response team, as well as to act as the go-between for the Executive Management Team. In the event of an event escalated to Level 3 or higher, the Incident Lead will coordinate with the IRT Primary Contact and the Incident Response Team (IRT) to review the incident and respond according to the specific SOP. The IL will coordinate the response with the IT staff, and other agencies as necessary (including but not limited to Campus Security Officers, Student Affairs, Public Relations, Office of the General Counsel, and the Federal Bureau of Investigation). If the event is escalated to a Level 4 or higher, the IL will notify the Executive Management Team.

Incident Response Team (IRT) – This team is comprised of operational and technical employees who undertake the actions required to mitigate the threat and investigate computer security events and incidents. These can be system administrators, database administrators, network engineers, or application administrators/programmers.

Incident Response Support (IRS) – This group is comprised of State subject matter experts who provide guidance, advice and support for cyber incidents categorized at level 4 or higher.

IRT Primary Contact – The IRT Primary Contact is responsible for the gathering of all necessary information pertaining to a security incident and for the tracking and reporting of specific incidents. The primary contact is the communication liaison between the affected groups and the Incident Lead. The IRT Primary Contact is typically the Director of Information Technology.

Institutional Student Information Report (ISIR) – The report generated by the Department of Education and sent to the institutions chosen by the students.

Legal, Audit and Compliance – The legal, audit and compliance team is comprised of TBR and its affiliated institutional Director of Internal Audit. They will coordinate and communicate with TBR and Treasury personnel as needed.

Networking and Technical Services (NTS) – The Networking and Technical Services team will work in conjunction with the Incident Lead in order to identify, analyze, and respond to suspected and verified security incidents. Such responses may include disabling or re-enabling network ports, port scanning, and altering router access control lists or firewall policies, running malware and other detection software, re-imaging machines, restoring backups and other activities. The Technology Specialists, the Technology Services Manager, System Admins, and the Director of Information Technology will comprise the Networking and Technical Services team. The Director of Information Technology, the ERP Manager/DBA and the System Analysts are responsible for monitoring the systems within their areas to identify unusual behavior or symptoms, which may indicate a security incident.

Technology Specialists – The technology specialists are usually the first level of interaction for users experiencing IT issues which can also include security events. It is the technology specialist's responsibility to evaluate incoming information on a per user basis, advise individual users on handling individual security events or incidents, and forward information relating to an event or incident to the Technology Services Manager or Director of Information Technology. The Technology Specialist shall instruct the user not to reboot, disconnect, or otherwise alter the system when a confirmed incident has been discovered.

Users – Refers to all students, faculty, staff and others while accessing, using, or handling TBR and its affiliated institution information technology resources. "Others" include, but are not limited to, subcontractors, visitors, visiting scholars, potential students, grant and contract support personnel, media representatives, guest speakers, and non-college entities granted access. Users are responsible for monitoring unusual system behavior, which may indicate a security event. Users must be able to recognize the indications of a security event as outlined in the incident verification section of this document. Users are responsible for reporting events to a computer technician, the Technical Services Manager or the Director of Information Technology immediately. The user must **not** reboot, disconnect, or otherwise alter the system when an event has been discovered, unless directed otherwise by a member of the Incident Response Team. Otherwise, collection of valid evidence can be negatively impacted by losing critical information stored in system memory.

Appendix C: Glossary of Terms

Advanced Persistent Threat (APT) – An advanced persistent threat is a network attack in which an unauthorized person gains access to a network and stays there undetected for a long period of time. The intention of an APT attack is to steal data rather than to cause damage to your network or organization. An APT uses multiple phases to break into a network, avoid detection, and harvest valuable information over the long term.

Breach – The term "breach" is used to include the loss of control, compromise, unauthorized disclosure, unauthorized acquisition, unauthorized access, or any similar term referring to situations where any person that is not authorized and does not have an authorized purpose to have access or potential access to information, whether physical or electronic. It includes both intrusions (from outside the organization) and misuse (from within the organization). Malware infections will be considered a breach ONLY if it is widespread and infects computers where repairs or replacement costs exceed $25,000, or where data is known to have been compromised.

Business Identifiable Information (BII) – Business identifiable information is information about a company or other business entity that could be used to commit or facilitate the commission of fraud, deceptive practices or other crimes. Examples include, but are not limited to, bank account information, trade secrets, and confidential or proprietary business information and other information classified as sensitive under the institution's data classification policy and procedures.

Chain of Custody - A method of documenting the possession of an item from the time of collection to its final disposition. It includes details as to who, when, where and what was done to the item.

Command Center –For the purposes of this document, the command center is the central point of contact which any member of the respective government sector (STS/ TBR) can contact to report a cyber-security incident.

Cyber Security Event – A Cyber Security event is an observable change that adversely impacts the established security behavior of an environment or system.

Cyber Security Incident – An accidental or malicious violation or imminent threat of violation of information security policies, acceptable use policies, or standard security practices that can cause actual or potential threats to the confidentiality, integrity, and availability of JSCC data and information technology assets. Incidents can include computer intrusions, denial-of-service attacks, insider theft of information, copyright violations, and any activity that requires support personnel, system administrators, or computer crime investigators to respond.

Data Exfiltration – Data exfiltration is the unauthorized copying, transfer or retrieval of data from a computer or server. Data exfiltration is a malicious activity performed through various different techniques, typically by cybercriminals, over the internet or other network.

Denial of Service (DoS) – A DoS is a type of attack that attempts to prevent a system from performing its normal functions or, more frequently attempts to prevent authorized users from accessing a system.

Distributed Denial of Service (DDoS) – A DDoS is a type of DoS attack in which multiple compromised systems are used to target a single system or network.

Event – An observable occurrence in a system and/or network. It may be an early indication that an incident is occurring.

Free Application for Federal Student Aid (FAFSA) – The application for federal student aid which is completed by students and the output (ISIR) is submitted to the college(s) of the student's choosing.

Harm – For the purposes of this document, harm means any adverse effects that would be experienced by an individual or organization (e.g., that may be socially, public trust, physically or financially damaging) whose information was breached, as well as any adverse effects experienced by the organization that maintains the information.

Identity Theft - Identity theft is the act of obtaining or using an individual's identifying information without authorization in an attempt to commit or facilitate the commission of fraud or other crimes. The resulting crimes usually occur in one of the following ways. Identity thieves may attempt to:

- Gain unauthorized access to existing bank, investment or credit accounts using information associated with the person.
- Withdraw or borrow money from existing accounts or charge purchases to the accounts.
- Open new accounts with a person's identifiable information without that person's knowledge.
- Obtain driver's licenses, social security cards, passports or other identification documents using the stolen identity.

Imminent threat – a situation in which the institution has a factual basis for believing that a specific incident is about to occur. For example, the institution receives a bulletin from Microsoft warning of operating system vulnerabilities that must be patched immediately.

Inappropriate usage – entails the use of resources in ways other than their intended purpose or which have not been approved. Examples include, but are not limited to, any illegal use of State computer systems; using State computer systems to conduct personal business, and sending communications that violate established conduct policies.

Incident – Also known as a security incident. See definition below.

Incident Response – A structured, documented process used to respond to security incidents such as attacks and system compromises. The response includes multiple phases which are discovery/detection, triage/analysis, eradication/recovery and reporting.

Indicator – A sign that an incident may have occurred or may be occurring at the present time. Examples include anti-virus/malware alerts, unusual network traffic, unusual filenames in the system directory, and failed login attempts in system logs.

Malware – short for malicious software, malware is software that enters a computer system without the user's knowledge or consent and then performs an unwanted, and usually harmful, action. Examples include, but are not limited to, worms, viruses, key- loggers, rootkits and Trojans.

NIST – National Institute of Standards and Technology is a non-regulatory agency of the United States Department of Commerce that creates publications on best practices in Information Technology.

Out-of-Bounds Communication – Use of non-technical methods to communicate information. Examples include in person conversations, phone calls and paper reports.

Payment Card Industry-Data Security Standards (PCI-DSS) - Provides for developing a payment card security process including prevention, detection, and appropriate reaction to security incidents.

PII-Personally Identifiable Information – means an individual's first name or first initial and last name, in combination with any one (1) or more of the following data elements, when either the name or the data elements are not encrypted:

1) Social security number;
2) Driver license number; or
3) Account number, credit or debit card number, in combination with any required security code, access code, or password that would permit access to an individual's financial account.

"Personal information" does not include publicly available information that is lawfully made available to the general public from federal, state, or local government records.

Precursor – A sign that an incident may occur in the future. This could include items such as web server log entries, announcement of a new exploit or a threat from a person or group.

Security Incident - An adverse event in an information system, and/or network, or the threat of the occurrence of such an event. Incidents can include but are not limited to unauthorized access, denial-of-service attacks, malicious code, network probes and insider theft of information.

Social Engineering – The process of obtaining information from people, frequently with deception, to find gather information about an organization's information technology resources. Social engineering attacks can occur through in person visits, phone calls, faxes, e-mails, standard mail, etc.

Unauthorized access – This occurs when individuals or systems are able to access data, resources or environments without explicit approval from the owner.

Unauthorized Release of Data that is Protected by State or Federal Statute or Regulation

– An unauthorized release of data is a communication or physical transfer of confidential information to an unauthorized recipient. Examples include, but are not limited to, a user inadvertently sends a confidential file to an email list, a poorly written application allows users to gain access to sensitive information, and an unencrypted computer or data storage device with confidential information on it is lost or stolen.

Users – All students, faculty, staff and others while using, accessing or handling any of institution's information technology resources. "Others" includes but is not limited to vendors, visitors, and community members.

Threat – A potential source that might exploit a vulnerability or misuse access to cause a security incident.

Vulnerability – A weakness in a technology resource such as a system, application or network device that could be a potential source of exploitation or misuse.

Zero Day Threat – A Zero-Day Threat is a computer threat that exposes undisclosed or unpatched computer vulnerabilities. Zero-day attacks can be considered extremely dangerous because they take advantage of previously unknown vulnerabilities for which no solution is currently available.

Appendix D: Sample Written Notification

(Place on JSCC Letterhead)

Dear [firstname] [lastname]:

We are writing to you because of a recent security incident at Jackson State Community College that may involve some of your student information. *Your privacy is important to us. Details about the event, the data involved, and steps being taken to protect your information will be provided to you.*

(Description and details of the incident inserted here)

Jackson State takes the security of personal information very seriously, and we continue to work closely with the appropriate authorities to continue monitoring this situation. Additionally, Jackson State has taken immediate steps to strengthen its internal controls and safeguards have been established to prevent similar incidents in the future.

You are being notified so that you can take actions to minimize potential harm. *Jackson State* has also advised the three (3) major United States credit reporting agencies about this incident and has given those agencies a report alerting them of this incident.

Even though Jackson State is not aware of any personal information that has been used for identity theft or other criminal activity, *the college* has taken the added precaution of hiring the identify theft prevention firm *[Name of Vendor]* to provide you with one (1) year of identity protection services and the optional credit monitoring services all free of charge.

However, *you are encouraged* to protect yourself from the possibility of identity theft. We recommend that you complete a Federal Trade Commission ID Threat Affidavit. This added step will assist you with legally notifying your creditors that your identity may have been compromised. Any debts or newly opened lines of credit incurred, after that date, will not be assigned to you.

We also recommend that you place a fraud alert on your credit files. A fraud alert lets creditors know to contact you before opening new accounts. Just call any one of the three credit reporting agencies at the numbers below. This will let you automatically place fraud alerts with all of the agencies. You will then receive letters from all of them, with instructions on how to get a free copy of your credit report from each.

Equifax	Equifax.com/personal/credit-report-services	800-685-1111
	https://www.equifax.com/personal/education/	800-525-6285
Experian	Experian.com/help	888-EXPERIAN (888-397-3742)
	(Data Breach Support)	866-751-1323
TransUnion	TransUnion.com/credit-help	888-909-8872
		800-680-7289

Jackson State believes you should closely monitor your credit report and place a fraud alert on your credit file. If you do find suspicious activity on your credit report or have reason to believe your information is being misused, please call your local law enforcement agency for assistance. You may also file a complaint

with the Federal Trade Commission by visiting www.identitytheft.gov or calling 1-877-ID-THEFT (438-4338).

Even if you do not find any signs of fraud on your reports, we recommend that you check your credit report every three months for the next year. Just call one of the numbers above to order your reports and keep the fraud alert in place.

In closing, *Jackson State* also encourage you to access the following resources:

- Federal Trade Commission's website provides information about the three (3) major credit reporting agencies and identity theft consumer alerts: www.consumer.ftc.gov/topics/identity-theft
- Identity Theft Resource Center: www.idtheftcenter.org
- Privacy Rights Clearinghouse: www.privacyrights.org
- Federal Trade Commission www.identitytheft.gov

One of the top priorities of Jackson State is protecting the personal information that flows through the various programs that we are responsible for administering.

Sincerely,

[Name and Title]

Appendix E: General Guidance for the Establishment of a Call Center

In the event of a significant data breach involving PII, the following guidance is provided to help with the determination of whether to establish a call center. The purpose of a call center is to provide individuals a number to call to obtain further information regarding the data loss and possible action they may want to take to lessen the incident's impact on their personal lives.

The decision to establish a call center should be based on several considerations:

- If the breach affects a large number of individuals and those individuals are not easily identifiable or easily contacted, establishment of a call center should be considered to allow those potentially impacted to call and obtain additional information regarding the breach.
- Each situation will be unique and the decision to establish a call center must be based on individual circumstances. The main concern should be sharing of information with those affected and how they may obtain assistance.

Once a decision is made to establish a call center, there are several options:

- Contract with external cyber vendor to obtain call center and monitoring services.
- Establish an internal, fully-supported and staffed call center. A thorough description of the incident and set of frequently asked questions (FAQs) will also be required for call center to refer to when fielding calls.

Suggested items to consider based on the nature of the breach would include, but are not limited to, the following:

- Using existing TBR or affiliated institution personnel to staff the call center and monitoring services, if external cyber vendor services are not used.
- Ensuring training of call center operators.
- Pre-stage FAQs using the samples provided in *Appendix F.*
- Ability to adjust staffing in response to call volume.
- Daily hours of operations.
- Cost of service.
- Call logging.
- Establish reporting requirements such as dropped calls or wait time, number of callers, etc.
- Advertising call center numbers and making data breach information readily available to those affected.
- Quality assurance checks of call center effectiveness.

Appendix F: Call Center FAQ examples

Example Question	Example Answer
How can I tell if my information has been compromised?	At this point, there is no evidence that any missing data has been used illegally. However, Jackson State Community College is asking each individual to be extra vigilant and to carefully monitor bank statements, credit card statements and any statements relating to recent financial transactions. If you notice unusual or suspicious activity, you should report it immediately to the financial institution involved.
What is the earliest date at which suspicious activity might have occurred due to this data breach?	The information was stolen from an employee of Jackson State Community College during the month of _____. It is likely that individuals may notice suspicious activity during the month of _____.
I haven't noticed any suspicious activity in my financial statements, but what can I do to protect myself from being victimized by credit card fraud or identity theft?	Jackson State Community College strongly recommends that individuals closely monitor their financial statements, and visit the Jackson State Community College's special website at _____ for updates regarding this incident.
Should I reach out to my financial institutions or will [institution name] do this for me?	Jackson State Community College does not believe that it is necessary to contact financial institutions or cancel credit cards and bank accounts unless you detect suspicious activity. If so, you will need to report it.

Where should I report suspicious or unusual activity?	The Federal Trade Commissions (FTC) Identity Theft website (http://www.consumer.ftc.gov/features/feature-0014-identity-theft) recommends the following steps if you detect suspicious activity:
	
	Immediate steps:
	• Place an Initial Fraud Alert.
	• Contact the fraud department of one of the three major credit bureaus:
	  ○ Equifax: Fraud Victim Assistance Department, Consumer Fraud Division, PO Box 740256, Atlanta GA 30374, 1-800-525-6285 or 1-800-685-1111 www.equifax.com
	  ○ Experian: National Consumer Assistance PO Box 9554, Allen TX 75013, 1-888-EXPERIAN (397-3742) 1-866-751-1323 (data breach support) www.experian.com
	  ○ TransUnion: Fraud Victim Assistance Division, PO Box 2000, Chester PA 19016-2000, 1-800-680-7289 https://www.transunion.com/fraud-victim-resource/important-contacts
	• Order your credit report from the three major credit bureaus above.

	• Create an Identity Theft Report about the theft to the Federal Trade Commission (FTC) online at www.identitytheft.gov or call the FTC at 1-877-438-4338 or (1-866-653-4261 – TTY) When you finish writing all the details, print a copy of the report. It will be called an Identity Theft Affidavit. Bring your Identity Theft Affidavit when you file a police report. • File a police report with your local police department or the police department where the theft occurred, and get a copy of the police report or the report number. Your FTC Identity Theft Affidavit and your police report make an Identity Theft Report. • Consider whether you need an Extended Fraud Alert. If you have created an Identity Theft Report, you can get an extended fraud alert on your credit file. When you place an extended alert, you can get two free credit reports within 12 months from each of the three nationwide credit reporting companies, and the credit reporting companies must take your name off marketing lists for prescreened credit offers for five years, unless you ask them to put your name back on the list. The extended alert lasts for seven years. • Consider whether you need a Credit Freeze. You may choose to put a credit freeze on your file, but a credit freeze may not stop misuse of your existing accounts or some other types of identity theft. Also, companies that you do business with would still have access to your credit report for some purposes. A fraud alert will allow some creditors to get your report as long as they verify your identity. This measure is only recommended if you have confirmed your identity has been stolen. • Close any accounts that have been tampered with or opened fraudulently.
Where can I get further, up-to-date information?	Jackson State Community College has set up a special website which features up-to-date news and information. Please visit _____.
Does the data breach affect only certain individuals?	It potentially affects a large population of individuals. We urge everyone possibly affected to be extra vigilant and monitor their financial accounts.
What is Jackson State Community College doing to ensure that this does not happen again?	Jackson State Community College is working with law enforcement to investigate the data breach and to develop safeguards against similar incidents. Jackson State Community College has directed all employees to complete the Computer Security Awareness training. Appropriate law enforcement agencies, (Name of Law Enforcement agency/or Department) have launched full-scale investigations into this matter.
What additional information will I receive regarding this incident?	You will receive a Notification Letter from Jackson State Community College mailed to you by the Jackson State Community College vendor, (Name of Cyber Vendors) on _____. This letter will include a toll-free telephone number to the [Name of Cyber Vendor] call center for any questions and information regarding consumer identity protection, credit monitoring, and identity theft insurance services being provided free through [Name of Vendor]. You will be automatically enrolled in the consumer identity protection services. In addition, free optional credit monitoring services with three national credit bureaus and identity theft insurance is also available to those who register for these

	services. Jackson State Community College encourages you to take advantage of these free services.
Has the problem been contained?	Jackson State Community College believes this is an isolated incident and it does not appear that the file has been disseminated to other people or sources.
What specific information was disclosed about me?	Jackson State Community College has determined that the following information has been disclosed (List of items) for a limited number of records and unfortunately, your record was part of this group.

Appendix G: Sample FSA School Cyber Safety Notification

From:
Sent:
To: CPSSAIG <cpssaig@ed.gov>
Cc:
Subject: Potential PII Breach Notifications — Jackson State Community College

To: U.S. Department of Education Federal Student Aid Office

From: Jackson State Community College

Date:

Re: Notification of Suspected Data Breach

The Jackson State Community College (JSCC) Information Technology division is reporting a possible data exposure of student information. The possible exposure was discovered on DATE HERE, by way of [explain breach], immediate steps were taken to stop further access.

During the investigation, we determined that this access could have provided opportunity to view [xxx]. On [date], we began further investigation into .... During this part of the investigation, it was revealed [what information was breached, include specific information types if PII]

The college is following our JSCC Cyber Incident Response Plan (CIRP) to respond and remediate this exposure. Following the CIRP procedures, the college notified the state of Tennessee Department of Treasury and the Tennessee Board of Regents Chief Information Officer, as well as the executive management team of the college. As next steps, the college will appropriately notify and provide credit monitoring to all those who have had PII possibly exposed. The college is also ....

Data Breakdown as of [date]:

Total [Emails] [Files]	xxx
SSN contained in email	x
DL contained in email	x
DOB contained in email	x
Grade/GPA	x

I will update your office with additional information as we complete our investigation. Please do not hesitate to reach out to me with any questions.

Appendix H: Incident Reporting Form

Jackson State Community College

Cyber Incident Reporting Form

Date Submitted: _____

Submitted by: _____

Incident Date(s): _____

Incident Time(s): _____

Current Status: _____

Discovery Date: _____

Discovery Time: _____

Description: _____

_____

_____

Escalation Level: _____

Number of Persons Affected: _____

Number of Devices Impacted: _____

Incident Cause: _____

_____

Data Breach Y/N? _____ Known _____ Suspected _____

What type of data? _____

_____

How many Records? _____

Incident Type: _____

Is it spreading? _____

If so, how fast? _____

Can it be Contained? If so, how? _____

_____

Appendix I: Evidence Handling and Forensic Techniques

Depending on the nature of the incident, appropriate evidence handling techniques will be utilized such as those defined in *NIST Special Publication on Computer Security Incident Handling Guide #800-61 and NIST SP 800-86, Guide to Incident Response*. The primary reason for gathering evidence during an incident is to resolve an incident, but it may also be needed for legal proceedings. The extent of the forensics will vary depending on the type of incident and the potential for law enforcement involvement. It may be necessary for the institution to hire a certified forensic specialist depending upon the nature and extent of the incident and the college should work with law enforcement and Risk Management to make this decision. If a certified forensic investigator is not necessary, the following actions should be taken:

- All evidence should be accounted for at all times. A chain of custody form as found in *Appendix I* will be started for any systems being confiscated with signatures anytime the custody is changed.
- A detailed log should be kept for all evidence, including the following:
    - Identifying information (including location, serial number, model number, hostname, IP address) for the equipment.
    - Name, title and phone number of each individual who collected or handled the equipment.
    - Date and time for each occurrence of evidence.
    - Location where evidence was stored. Confiscated equipment will be stored in the computer room in the Information Technology department when feasible.
    - Photographs of the screen showing any messages (error, threat or compromise) should be taken.
    - Disk images will be taken of the compromised system on read-only media.
    - The volatile data should be collected before shutting the system down. This includes:
        - Current running processes
        - Network connections (netstat)
        - Arp tables (arp -a)
        - List of open files
- All equipment in the area of compromise should be labelled. Care should be taken to include all removable media.
- Photographs of the area should be taken before the equipment is moved and should show the location of the labelled equipment and what is connected to the system.
- Confiscated equipment will be held in the computer room in Information Technology department when feasible. Another location will be determined if needed.
- If equipment cannot be taken out of service or physically moved, the Director for Information Technology will consult law enforcement to decide the best course of action if needed.
- The following actions should be avoided:
    - Shutting down or rebooting the victim's computer.
    - Assuming that some components of the victim's computer may be reliable and usable.

Appendix J: Chain of Custody Form

Jackson State Community

Chain of Custody Form

Item Number(s): _____

To be completed by initial collector:
Evidence collected by (name): _____

Date/Time Collected: _____

Evidence Description: _____

_____

Where is evidence initially stored? _____

How is evidence initially secured? _____

Collector signature: _____ ***Date:*** _____

(Attach documentation to describe the collection method and application software/utility to view the evidence if needed)

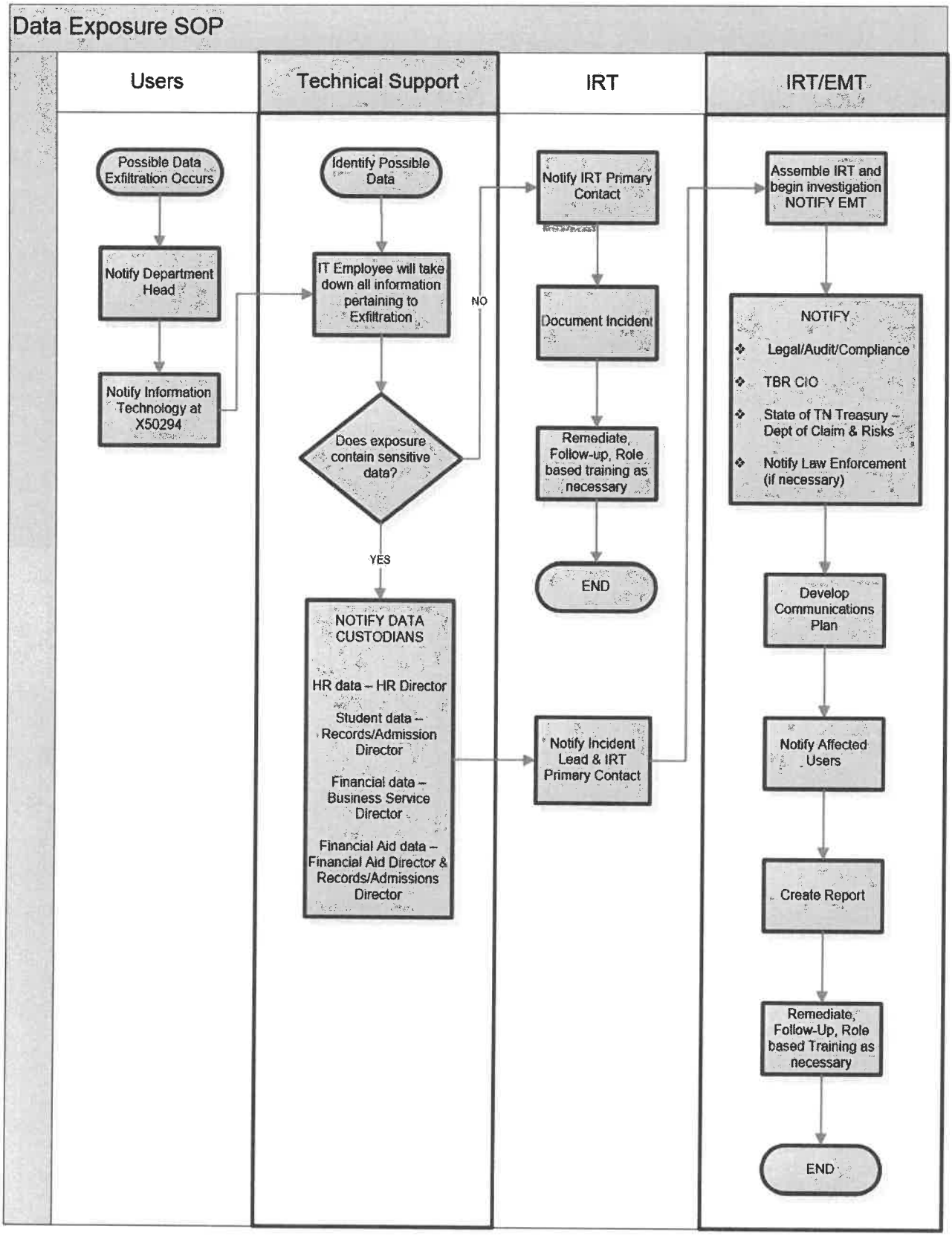
Copy History:

Date	*Copied By*	*Copy Method*	*Disposition of original and all copies*

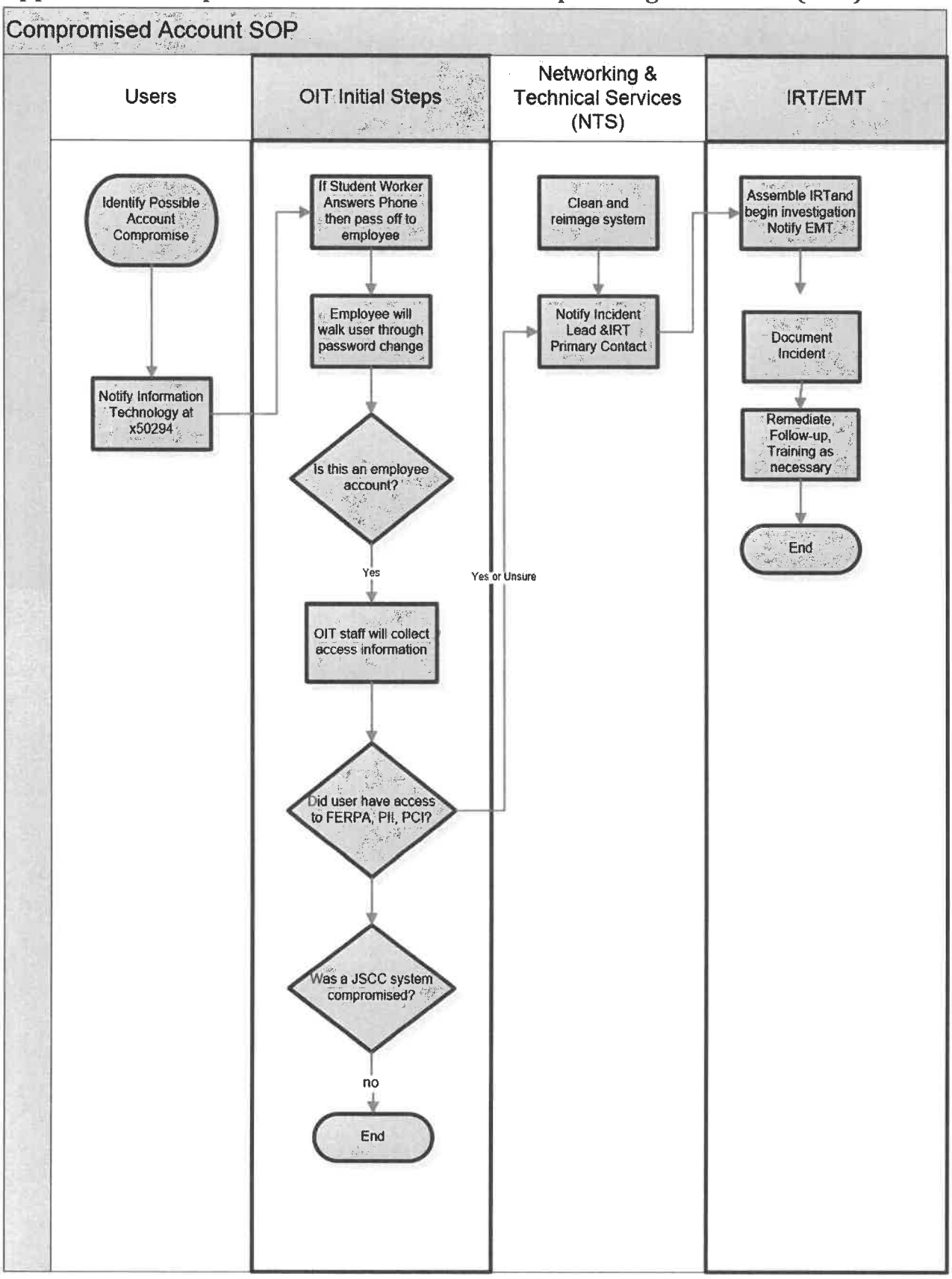
Transfer History:

From: (Sign and date)	*To: (Sign and date)*	*Storage Location*	*How Secured?*

Appendix K: Data Exposure Standard Operating Procedure (SOP)



Appendix L: Compromised Account Standard Operating Procedure (SOP)



Appendix M: Compromised Device Standard Operating Procedure (SOP)