



# **Criminal Justice Information Services (CJIS) Security Policy**

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Approved by:  
CJIS Advisory Policy Board

## EXECUTIVE SUMMARY

Law enforcement needs timely and secure access to services that provide data wherever and whenever for stopping and reducing crime. In response to these needs, the Advisory Policy Board (APB) recommended to the Federal Bureau of Investigation (FBI) that the Criminal Justice Information Services (CJIS) Division authorize the expansion of the existing security management structure in 1998. Administered through a shared management philosophy, the CJIS Security Policy contains information security requirements, guidelines, and agreements reflecting the will of law enforcement and criminal justice agencies for protecting the sources, transmission, storage, and generation of Criminal Justice Information (CJI). The Federal Information Security Management Act of 2002 provides further legal basis for the APB approved management, operational, and technical security requirements mandated to protect CJI and by extension the hardware, software and infrastructure required to enable the services provided by the criminal justice community.






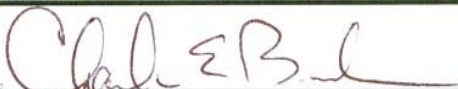
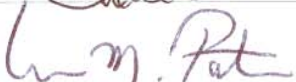
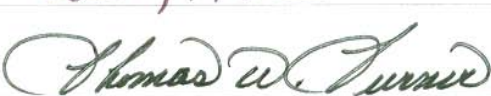
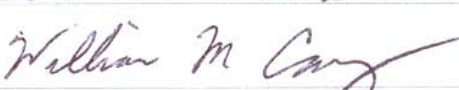

The essential premise of the CJIS Security Policy is to provide appropriate controls to protect the full lifecycle of CJI, whether at rest or in transit. The CJIS Security Policy provides guidance for the creation, viewing, modification, transmission, dissemination, storage, and destruction of CJI data. This policy applies to every individual—contractor, private entity, noncriminal justice agency representative, or member of a criminal justice entity—with access to, or who operate in support of, criminal justice services and information.

The CJIS Security Policy integrates Presidential directives, Federal laws, FBI directives and the criminal justice community's APB decisions along with nationally recognized guidance from the National Institute of Standards and Technology. The Policy is presented at both strategic and tactical levels and is periodically updated to reflect the security requirements of evolving business models. The policy features modular sections enabling more frequent updates to address emerging threats and new security measures. The provided security criterion assists agencies with designing and implementing systems to meet a uniform level of risk and security protection while enabling agencies the latitude to institute more stringent security requirements and controls based on their business model and local needs.

The CJIS Security Policy strengthens the partnership between the FBI and CJIS Systems Agencies (CSA), including, in those states with separate authorities, the State Identification Bureaus. Further, as use of criminal history record information for noncriminal justice purposes continues to expand, the CJIS Security Policy becomes increasingly important in guiding the National Crime Prevention and Privacy Compact Council and State Compact Officers in the secure exchange of criminal justice records.

The policy describes the vision and captures the security concepts that set the policies, protections, roles, and responsibilities with minimal impact from changes in technology. The policy empowers CSAs with the insight and ability to tune their security programs according to their needs, budgets, and resource constraints while remaining compliant with the baseline level of security set forth in this policy. The CJIS Security Policy provides a secure framework of laws, standards, and elements of published and vetted policies for accomplishing the mission across the broad spectrum of the criminal justice and noncriminal justice communities.

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# 1 INTRODUCTION

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This section details the purpose of this document, its scope, relationship to other information security policies, and its distribution constraints.

## 1.1 Purpose

The CJIS Security Policy provides Criminal Justice Agencies (CJA) and Noncriminal Justice Agencies (NCJA) with a minimum set of security requirements for the access to Federal Bureau of Investigation (FBI) Criminal Justice Information Services (CJIS) Division systems and information and to protect and safeguard Criminal Justice Information (CJI). This minimum standard of security requirements ensures continuity of information protection. The essential premise of the CJIS Security Policy is to provide the appropriate controls to protect CJI, from creation through dissemination; whether at rest or in transit.

The CJIS Security Policy integrates Presidential directives, Federal laws, FBI directives, the criminal justice community's Advisory Policy Board (APB) decisions along with nationally recognized guidance from the National Institute of Standards and Technology (NIST) and the National Crime Prevention and Privacy Compact Council (Compact Council).

## 1.2 Scope

At the consent of the advisory process, and taking into consideration Federal law and state statutes, the CJIS Security Policy applies to all entities with access to, or who operate in support of, FBI CJIS Division's services and information. The CJIS Security Policy provides minimum security requirements associated with the creation, viewing, modification, transmission, dissemination, storage, or destruction of CJI.

Entities engaged in the interstate exchange of CJI data for noncriminal justice purposes are also governed by the standards and rules promulgated by the Compact Council.

## 1.3 Relationship to Local Security Policy and Other Policies

The CJIS Security Policy may be used as the sole security policy for the agency. The local agency may complement the CJIS Security Policy with a local policy, or the agency may develop their own stand-alone security policy; however, the CJIS Security Policy shall always be the minimum standard and local policy may augment, or increase the standards, but shall not detract from the CJIS Security Policy standards.

The agency shall develop, disseminate, and maintain formal, documented procedures to facilitate the implementation of the CJIS Security Policy and, where applicable, the local security policy. The policies and procedures shall be consistent with applicable laws, Executive Orders, directives, policies, regulations, standards, and guidance. Procedures developed for CJIS Security Policy areas can be developed for the security program in general, and for a particular information system, when required.

This document is a compendium of applicable policies in providing guidance on the minimum security controls and requirements needed to access FBI CJIS information and services. These policies include Presidential directives, Federal laws, FBI directives and the criminal justice community's APB decisions. State, local, and Tribal CJA may implement more stringent

policies and requirements. Appendix I contains the references while Appendix E lists the security forums and organizational entities referenced in this document.

## **1.4 Terminology Used in This Document**

The following terms are used interchangeably throughout this document:

- **Agency and Organization:** The two terms in this document refer to any entity that submits or receives information, by any means, to/from FBI CJIS systems or services.
- **Information and Data:** Both terms refer to CJI.
- **System, Information System, Service, or named applications like NCIC:** all refer to connections to the FBI's criminal justice information repositories and the equipment used to establish said connections.

Appendix A and B provide an extensive list of the terms and acronyms.

## **1.5 Distribution of the CJIS Security Policy**

The CJIS Security Policy is a publically available document and may be posted and shared without restrictions.

## **2 CJIS SECURITY POLICY APPROACH**

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The CJIS Security Policy represents the shared responsibility between FBI CJIS, CJIS Systems Agency (CSA), and the State Identification Bureaus (SIB) of the lawful use and appropriate protection of CJJ. The policy provides a baseline of security requirements for current and planned services and sets a minimum standard for new initiatives.

### **2.1 CJIS Security Policy Vision Statement**

The executive summary of this document describes the vision in terms of business needs for confidentiality, integrity, and availability of information. The APB collaborates with the FBI CJIS Division to ensure that the policy remains updated to meet ever-changing business, technology and security needs.

### **2.2 Architecture Independent**

Due to advancing technology and evolving business models, the FBI CJIS Division is transitioning from legacy stovepipe systems and moving toward a flexible services approach. Systems such as National Crime Information Center (NCIC), National Instant Criminal Background Check System (NICS), and Integrated Automated Fingerprint Identification System (IAFIS) will continue to evolve and may no longer retain their current system platforms, hardware, or program name. However, the data and services provided by these systems will remain stable.

The CJIS Security Policy looks at the data (information), services, and protection controls that apply regardless of the implementation architecture. Architectural independence is not intended to lessen the importance of systems, but provide for the replacement of one technology with another while ensuring the controls required to protect the information remain constant. This objective and conceptual focus on security policy areas provide the guidance and standards while avoiding the impact of the constantly changing landscape of technical innovations. The architectural independence of the policy provides agencies with the flexibility for tuning their information security infrastructure and policies to reflect their own environments.

### **2.3 Risk Versus Realism**

Every “shall” statement contained within the CJIS Security Policy has been scrutinized for risk versus the reality of resource constraints and real-world application. The purpose of the CJIS Security Policy is to establish the minimum security requirements; therefore, individual agencies are encouraged to implement additional controls to address agency specific risks.

### 3 ROLES AND RESPONSIBILITIES

#### 3.1 Shared Management Philosophy

In the scope of information security, the FBI CJIS Division employs a shared management philosophy with federal, state, local, and tribal law enforcement agencies. Although an advisory policy board for the NCIC has existed since 1969, the Director of the FBI established the CJIS APB in March 1994 to enable appropriate input and recommend policy with respect to CJIS services. Through the APB and its Subcommittees and Working Groups, consideration is given to the needs of the criminal justice and law enforcement community regarding public policy, statutory and privacy aspects, as well as national security relative to CJIS systems and information. The Advisory Process represents federal, state, local, and tribal law enforcement and criminal justice agencies throughout the United States, its territories, and Canada.

The FBI has a similar relationship with the Compact Council, which governs the interstate exchange of criminal history records for noncriminal justice purposes. The Compact Council is mandated by federal law to promulgate rules and procedures for the use of the Interstate Identification Index (III) for noncriminal justice purposes. To meet that responsibility, the Compact Council depends on the CJIS Security Policy as the definitive source for standards defining the security and privacy of records exchanged with noncriminal justice practitioners.

#### 3.2 Roles and Responsibilities for Agencies and Parties

It is the responsibility of all agencies covered under this policy to ensure the protection of CJI between the FBI CJIS Division and its user community. The following figure provides an abstract representation of the strategic functions and roles such as governance and operations.

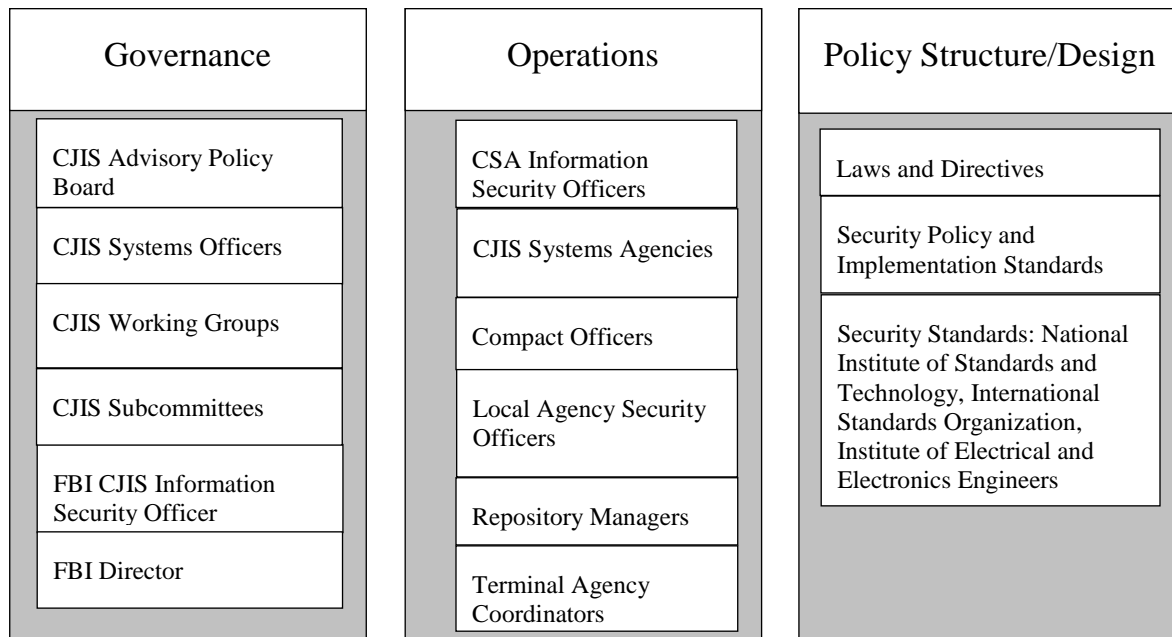


Figure 1 - Overview Diagram of Strategic Functions and Policy Components

This section provides a description of the following entities and roles:

1. CJIS Systems Agency.
2. CJIS Systems Officer.
3. Terminal Agency Coordinator.
4. Criminal Justice Agency.
5. Noncriminal Justice Agency.
6. Contracting Government Agency.
7. Agency Coordinator.
8. CJIS Systems Agency Information Security Officer.
9. Local Agency Security Officer.
10. FBI CJIS Division Information Security Officer.
11. Repository Manager.
12. Compact Officer.

### **3.2.1 CJIS Systems Agencies (CSA)**

The CSA is responsible for establishing and administering an information technology security program throughout the CSA's user community, to include the local levels. The head of each CSA shall appoint a CJIS Systems Officer (CSO). The CSA may impose more stringent protection measures than outlined in this document. Such decisions shall be documented and kept current.

### **3.2.2 CJIS Systems Officer (CSO)**

The CSO is an individual located within the CSA responsible for the administration of the CJIS network for the CSA. Pursuant to The Bylaws for the CJIS Advisory Policy Board and Working Groups, the role of CSO shall not be outsourced. The CSO may delegate responsibilities to subordinate agencies. The CSO shall set, maintain, and enforce the following:

1. Standards for the selection, supervision, and separation of personnel who have access to CJI.
2. Policy governing the operation of computers, access devices, circuits, hubs, routers, firewalls, and other components that comprise and support a telecommunications network and related CJIS systems used to process, store, or transmit CJI, guaranteeing the priority, confidentiality, integrity, and availability of service needed by the criminal justice community.
  - a. Ensure appropriate use, enforce system discipline, and ensure CJIS Division operating procedures are followed by all users of the respective services and information.
  - b. Ensure state/federal agency compliance with policies approved by the APB and adopted by the FBI.

- c. Ensure the appointment of the CSA ISO and determine the extent of authority to the CSA ISO.
  - d. The CSO, or designee, shall ensure that a Terminal Agency Coordinator (TAC) is designated within each agency that has devices accessing CJIS systems.
  - e. Ensure each agency having access to CJI has someone designated as the Local Agency Security Officer.
  - f. Approve access to FBI CJIS systems.
  - g. Assume ultimate responsibility for managing the security of CJIS systems within their state and/or agency.
  - h. Perform other related duties outlined by the user agreements with the FBI CJIS Division.
3. Outsourcing of Criminal Justice Functions
- a. Responsibility for the management of the approved security requirements shall remain with the CJA. Security control includes the authority to enforce the standards for the selection, supervision, and separation of personnel who have access to CJI; set and enforce policy governing the operation of computers, circuits, and telecommunications terminals used to process, store, or transmit CJI; and to guarantee the priority service needed by the criminal justice community.
  - b. Responsibility for the management control of network security shall remain with the CJA. Management control of network security includes the authority to enforce the standards for the selection, supervision, and separation of personnel who have access to CJI; set and enforce policy governing the operation of circuits and network equipment used to transmit CJIS data; and to guarantee the priority service as determined by the criminal justice community.

### **3.2.3 Terminal Agency Coordinator (TAC)**

The TAC serves as the point-of-contact at the local agency for matters relating to CJIS information access. The TAC administers CJIS systems programs within the local agency and oversees the agency's compliance with CJIS systems policies.

### **3.2.4 Criminal Justice Agency (CJA)**

A CJA is defined as a court, a governmental agency, or any subunit of a governmental agency which performs the administration of criminal justice pursuant to a statute or executive order and which allocates a substantial part of its annual budget to the administration of criminal justice. State and federal Inspectors General Offices are included.

### **3.2.5 Noncriminal Justice Agency (NCJA)**

A NCJA is defined (for the purposes of access to CJI) as an entity or any subunit thereof that provides services primarily for purposes other than the administration of criminal justice.

### **3.2.6 Contracting Government Agency (CGA)**

A CGA is a government agency, whether a CJA or a NCJA, that enters into an agreement with a private contractor subject to the CJIS Security Addendum. The CGA entering into an agreement with a contractor is to appoint an agency coordinator.

### **3.2.7 Agency Coordinator (AC)**

An AC is a staff member of the CGA who manages the agreement between the Contractor and agency. The AC shall be responsible for the supervision and integrity of the system, training and continuing education of employees and operators, scheduling of initial training and testing, and certification testing and all required reports by NCIC. The AC shall:

1. Understand the communications, records capabilities, and needs of the Contractor which is accessing federal and state records through or because of its relationship with the CGA.
2. Participate in related meetings and provide input and comments for system improvement.
3. Receive information from the CGA (e.g., system updates) and disseminate it to appropriate Contractor employees.
4. Maintain and update manuals applicable to the effectuation of the agreement, and provide them to the Contractor.
5. Maintain up-to-date records of Contractor's employees who access the system, including name, date of birth, social security number, date fingerprint card(s) submitted, date security clearance issued, and date initially trained, tested, certified or recertified (if applicable).
6. Train or ensure the training of Contractor personnel. If Contractor personnel access NCIC, schedule the operators for testing or a certification exam with the CSA staff, or AC staff with permission from the CSA staff. Schedule new operators for the certification exam within six (6) months of assignment. Schedule certified operators for biennial re-certification testing within thirty (30) days prior to the expiration of certification. Schedule operators for other mandated class.
7. The AC will not permit an untrained/untested or non-certified Contractor employee to access CJI or systems supporting CJI where access to CJI can be gained.
8. Where appropriate, ensure compliance by the Contractor with NCIC validation requirements.
9. Provide completed applicant fingerprint cards on each Contractor employee who accesses the system to the CJA (or, where appropriate, CSA) for criminal background investigation prior to such employee accessing the system.
10. Any other responsibility for the AC promulgated by the FBI.

### **3.2.8 CJIS System Agency Information Security Officer (CSA ISO)**

The CSA ISO shall:

1. Serve as the security point of contact (POC) to the FBI CJIS Division ISO.



2. Document technical compliance with the CJIS Security Policy with the goal to assure the confidentiality, integrity, and availability of criminal justice information to the user community throughout the CSA's user community, to include the local level.
3. Document and provide assistance for implementing the security-related controls for the Interface Agency and its users.
4. Establish a security incident response and reporting procedure to discover, investigate, document, and report to the CSA, the affected criminal justice agency, and the FBI CJIS Division ISO major incidents that significantly endanger the security or integrity of CJI.

### **3.2.9 Local Agency Security Officer (LASO)**

Each LASO shall:

1. Identify who is using the CSA approved hardware, software, and firmware and ensure no unauthorized individuals or processes have access to the same.
2. Identify and document how the equipment is connected to the state system.
3. Ensure that personnel security screening procedures are being followed as stated in this policy.
4. Ensure the approved and appropriate security measures are in place and working as expected.
5. Support policy compliance and ensure CSA ISO is promptly informed of security incidents.

### **3.2.10 FBI CJIS Division Information Security Officer (FBI CJIS ISO)**

The FBI CJIS ISO shall:

1. Maintain the CJIS Security Policy.
2. Disseminate the FBI Director approved CJIS Security Policy.
3. Serve as a liaison with the CSA's ISO and with other personnel across the CJIS community and in this regard provide technical guidance as to the intent and implementation of operational and technical policy issues.
4. Serve as a point-of-contact (POC) for computer incident notification and distribution of security alerts to the CSOs and ISOs.
5. Assist with developing audit compliance guidelines as well as identifying and reconciling security-related issues.
6. Develop and participate in information security training programs for the CSOs and ISOs, and provide a means by which to acquire feedback to measure the effectiveness and success of such training.
7. Maintain a current ISO homepage on the Law Enforcement Online (LEO) network and keep the CSOs and ISOs updated on pertinent information via the [iso@leo.gov](mailto:iso@leo.gov) email address.

### **3.2.11 Repository Manager**

The State Identification Bureau (SIB) Chief, i.e. Repository Manager, is the designated manager of the agency having oversight responsibility for a state's fingerprint identification services. If both state fingerprint identification services and CJIS systems control are managed within the same state agency, the SIB Chief and CSO may be the same person.

### **3.2.12 Compact Officer**

Pursuant to the National Crime Prevention and Privacy Compact, each party state shall appoint a Compact Officer who shall ensure that Compact provisions and rules, procedures, and standards established by the Compact Council are complied with in their respective state.

## **4 CRIMINAL JUSTICE AND PERSONALLY IDENTIFIABLE INFORMATION**

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### **4.1 Criminal Justice Information (CJI)**

Criminal Justice Information is the term used to refer to all of the FBI CJIS provided data necessary for law enforcement and civil agencies to perform their missions including, but not limited to biometric, identity history, biographic, property, and case/incident history data. The following categories of CJI describe the various data sets housed by the FBI CJIS architecture:

1. **Biometric Data**—data derived from one or more intrinsic physical or behavioral traits of humans typically for the purpose of uniquely identifying individuals from within a population. Used to identify individuals, to include: fingerprints, palm prints, iris scans, and facial recognition data.
2. **Identity History Data**—textual data that corresponds with an individual’s biometric data, providing a history of criminal and/or civil events for the identified individual.
3. **Biographic Data**—information about individuals associated with a unique case, and not necessarily connected to identity data. Biographic data does not provide a history of an individual, only information related to a unique case.
4. **Property Data**—information about vehicles and property associated with crime.
5. **Case/Incident History**—information about the history of criminal incidents.

The intent of the CJIS Security Policy is to ensure the protection of the aforementioned CJI until such time as the information is either released to the public via authorized dissemination (e.g. within a court system or when presented in crime reports data), or is purged or destroyed in accordance with applicable record retention rules.

#### **4.1.1 Criminal History Record Information (CHRI)**

Criminal History Record Information (CHRI), sometimes informally referred to as “restricted data”, is a subset of CJI. Due to its comparatively sensitive nature, additional controls are required for the access, use and dissemination of CHRI. In addition to the dissemination restrictions outlined below, Title 28, Part 20, Code of Federal Regulations (CFR), defines CHRI and provides the regulatory guidance for dissemination of CHRI. While the CJIS Security Policy attempts to be architecturally independent, the III and the NCIC are specifically identified in Title 28, Part 20, CFR, and the NCIC Operating Manual, as associated with CHRI.

### **4.2 Access, Use and Dissemination of Criminal History Record Information (CHRI) and NCIC Hot File Information**

This section describes the requirements for the access, use and dissemination of CHRI and NCIC hot file information.

#### **4.2.1 Terminology**

Information obtained from the III is considered CHRI. Proper access to, and use and dissemination of, data from these files shall be consistent with the use and dissemination policies

concerning the III described in Title 28, Part 20, CFR, and the NCIC Operating Manual. The following files shall be protected as CHRI:

1. Gang File.
2. Known or Appropriately Suspected Terrorist File.
3. Convicted Persons on Supervised Release File.
4. Immigration Violator File (formerly the Deported Felon File).
5. National Sex Offender Registry File.
6. Historical Protection Order File of the NCIC.
7. Identity Theft File.

The remaining NCIC files are considered “hot files.”

## **4.2.2 Proper Access, Use, and Dissemination**

### **4.2.2.1 Proper Use of CHRI**

The III shall be accessed only for an authorized purpose. Further, CHRI shall only be used for an authorized purpose consistent with the purpose for which III was accessed. Dissemination to another agency is authorized if (a) the other agency is an Authorized Recipient of such information and is being serviced by the accessing agency, or (b) the other agency is performing personnel and appointment functions for criminal justice employment applicants.

### **4.2.2.2 Proper Use of Hot File Information**

#### **4.2.2.2.1 Use for Official Purposes**

NCIC hot files may be accessed for any authorized purpose consistent with the inquiring agency’s responsibility. Information obtained may be re-disseminated to (a) other government agencies or (b) private entities authorized by law to receive such information for any purpose consistent with their responsibilities.

#### **4.2.2.2.2 Access and Dissemination for Other Authorized Purposes**

NCIC hot files may be accessed for other purposes consistent with the resources of the inquiring agency; however, requests for bulk data are discouraged. Information derived from national hot file records for other than law enforcement purposes can be used by authorized criminal justice personnel only to confirm the status of a person or article (i.e., wanted or stolen). An inquiring agency is authorized to charge a nominal administrative fee for such service. The commercial dissemination of hot file information is prohibited.

#### **4.2.2.2.3 CSO Authority in Other Circumstances**

If no federal, state or local law or policy prohibition exists, the CSO may exercise discretion to approve or deny dissemination of hot file information.

### **4.2.3 Storage**

When CHRI is stored, agencies shall establish appropriate administrative, technical and physical safeguards to ensure the security and confidentiality of the information. These records shall be stored for extended periods only when they are key elements for the integrity and/or utility of case files and/or criminal record files. See section 5.9 for physical security controls.

### **4.2.4 Justification and Penalties**

#### **4.2.4.1 Justification**

In addition to the use of purpose codes and logging information, all users shall provide a reason for all III inquiries whenever requested by NCIC System Managers, CSAs, local agency administrators, or their representatives.

#### **4.2.4.2 Penalties**

Improper access, use or dissemination of CHRI and Hot File information is serious and may result in administrative sanctions including, but not limited to, termination of services and state and federal criminal penalties.

## **4.3 Personally Identifiable Information (PII)**

For the purposes of this document, PII is information which can be used to distinguish or trace an individual's identity, such as name, social security number, or biometric records, alone or when combined with other personal or identifying information which is linked or linkable to a specific individual, such as date and place of birth, or mother's maiden name. Any FBI CJIS provided data maintained by an agency, including but not limited to, education, financial transactions, medical history, and criminal or employment history may include PII. A criminal history record for example inherently contains PII as would an N-DEX case file.

PII shall be extracted from CJI for the purpose of official business only. Agencies shall develop policies, based on state and local privacy rules, to ensure appropriate controls are applied when handling PII extracted from CJI. Due to the expansive nature of PII, this policy does not specify auditing, logging, or personnel security requirements associated with the life cycle of PII.

## 5 POLICY AND IMPLEMENTATION

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The policy areas focus upon the data and services that the FBI CJIS Division exchanges and provides to the criminal justice community and its partners. Each policy area provides both strategic reasoning and tactical implementation requirements and standards.

While the major theme of the policy areas is concerned with electronic exchange directly with the FBI, it is understood that further dissemination of CJI to Authorized Recipients by various means (hard copy, e-mail, web posting, etc.) constitutes a significant portion of CJI exchanges. Regardless of its form, use, or method of dissemination, CJI requires protection throughout its life.

Not every consumer of FBI CJIS services will encounter all of the policy areas therefore the circumstances of applicability are based on individual agency/entity configurations and usage. Use cases within each of the policy areas will help users relate the policy to their own agency circumstances. The policy areas are:

- Policy Area 1—Information Exchange Agreements
- Policy Area 2—Security Awareness Training
- Policy Area 3—Incident Response
- Policy Area 4—Auditing and Accountability
- Policy Area 5—Access Control
- Policy Area 6—Identification and Authentication
- Policy Area 7—Configuration Management
- Policy Area 8—Media Protection
- Policy Area 9—Physical Protection
- Policy Area 10—Systems and Communications Protection and Information Integrity
- Policy Area 11—Formal Audits
- Policy Area 12—Personnel Security

## **5.1 Policy Area 1: Information Exchange Agreements**

The information shared through communication mediums shall be protected with appropriate security safeguards. The agreements established by entities sharing information across systems and communications mediums are vital to ensuring all parties fully understand and agree to a set of security standards.

### **5.1.1 Information Exchange**

Before exchanging CJI, agencies shall put formal agreements in place that specify security controls. The exchange of information may take several forms including electronic mail, instant messages, web services, facsimile, hard copy, and information systems sending, receiving and storing CJI.

Information exchange agreements outline the roles, responsibilities, and data ownership between agencies and any external parties. Information exchange agreements for agencies sharing CJI data that is sent to and/or received from the FBI CJIS shall specify the security controls and conditions described in this document.

Information exchange agreements shall be supported by documentation committing both parties to the terms of information exchange. As described in subsequent sections, different agreements and policies apply, depending on whether the parties involved are CJAs or NCJAs. See Appendix D for examples of Information Exchange Agreements.

There may be instances, on an ad-hoc basis, where CJI is authorized for further dissemination to Authorized Recipients not covered by an information exchange agreement with the releasing agency. In these instances the dissemination of CJI is considered to be secondary dissemination. See Section 5.1.3 for secondary dissemination guidance.

#### **5.1.1.1 Information Handling**

Procedures for handling and storage of information shall be established to protect that information from unauthorized disclosure, alteration or misuse. Using the requirements in this policy as a starting point, the procedures shall apply to the handling, processing, storing, and communication of CJI. These procedures apply to the exchange of CJI no matter the form of exchange.

The policies for information handling and protection also apply to using CJI shared with or received from FBI CJIS for noncriminal justice purposes. In general, a noncriminal justice purpose includes the use of criminal history records for purposes authorized by federal or state law other than purposes relating to the administration of criminal justice, including – but not limited to - employment suitability, licensing determinations, immigration and naturalization matters, and national security clearances.

#### **5.1.1.2 State and Federal Agency User Agreements**

Each CSA head or SIB Chief shall execute a signed written user agreement with the FBI CJIS Division stating their willingness to demonstrate conformity with this policy before accessing and participating in CJIS records information programs. This agreement shall include the standards and sanctions governing utilization of CJIS systems. As coordinated through the particular CSA or SIB Chief, each Interface Agency shall also allow the FBI to periodically test

the ability to penetrate the FBI's network through the external network connection or system per authorization of Department of Justice (DOJ) Order 2640.2F. All user agreements with the FBI CJIS Division shall be coordinated with the CSA head.

#### **5.1.1.3 Criminal Justice Agency User Agreements**

Any CJA receiving access to FBI CJIS data shall enter into a signed written agreement with the appropriate signatory authority of the CSA providing the access. The written agreement shall specify the FBI CJIS systems and services to which the agency will have access, and the FBI CJIS Division policies to which the agency must adhere. These agreements shall include:

1. Audit.
2. Dissemination.
3. Hit confirmation.
4. Logging.
5. Quality Assurance (QA).
6. Screening (Pre-Employment).
7. Security.
8. Timeliness.
9. Training.
10. Use of the system.
11. Validation.

#### **5.1.1.4 Inter-Agency and Management Control Agreements**

A NCJA (government) designated to perform criminal justice functions for a CJA shall be eligible for access to the CJI. Access shall be permitted when such designation is authorized pursuant to Executive Order, statute, regulation, or inter-agency agreement. The NCJA shall sign and execute a management control agreement (MCA) with the CJA, which stipulates management control of the criminal justice function remains solely with the CJA. The MCA may be a separate document or included with the language of an inter-agency agreement. An example of an NCJA (government) is a city IT department.

#### **5.1.1.5 Private Contractor User Agreements and CJIS Security Addendum**

The CJIS Security Addendum is a uniform addendum to an agreement between the government agency and a private contractor, approved by the Attorney General of the United States, which specifically authorizes access to criminal history record information, limits the use of the information to the purposes for which it is provided, ensures the security and confidentiality of the information is consistent with existing regulations and the CJIS Security Policy, provides for sanctions, and contains such other provisions as the Attorney General may require.

Private contractors who perform criminal justice functions shall meet the same training and certification criteria required by governmental agencies performing a similar function, and shall be subject to the same extent of audit review as are local user agencies. All private contractors who perform criminal justice functions shall acknowledge, via signing of the CJIS Security



Addendum Certification page, and abide by all aspects of the CJIS Security Addendum. The CJIS Security Addendum is presented in Appendix H. Modifications to the CJIS Security Addendum shall be enacted only by the FBI.

1. Private contractors designated to perform criminal justice functions for a CJA shall be eligible for access to CJI. Access shall be permitted pursuant to an agreement which specifically identifies the agency's purpose and scope of providing services for the administration of criminal justice. The agreement between the CJA and the private contractor shall incorporate the CJIS Security Addendum approved by the Director of the FBI, acting for the U.S. Attorney General, as referenced in Title 28 CFR 20.33 (a)(7).
2. Private contractors designated to perform criminal justice functions on behalf of a NCJA (government) shall be eligible for access to CJI. Access shall be permitted pursuant to an agreement which specifically identifies the agency's purpose and scope of providing services for the administration of criminal justice. The agreement between the NCJA and the private contractor shall incorporate the CJIS Security Addendum approved by the Director of the FBI, acting for the U.S. Attorney General, as referenced in Title 28 CFR 20.33 (a)(7).

#### **5.1.1.6 Agency User Agreements**

A NCJA (public) designated to request civil fingerprint-based background checks, with the full consent of the individual to whom a background check is taking place, for noncriminal justice functions, shall be eligible for access to CJI. Access shall be permitted when such designation is authorized pursuant to federal law or state statute approved by the U.S. Attorney General. An NCJA (public) receiving access to FBI CJIS data shall enter into a signed written agreement with the appropriate signatory authority of the CSA/SIB providing the access. An example of a NCJA (public) is a county school board.

A NCJA (private) designated to request civil fingerprint-based background checks, with the full consent of the individual to whom a background check is taking place, for noncriminal justice functions, shall be eligible for access to CJI. Access shall be permitted when such designation is authorized pursuant to federal law or state statute approved by the U.S. Attorney General. An NCJA (private) receiving access to FBI CJIS data shall enter into a signed written agreement with the appropriate signatory authority of the CSA/SIB providing the access. An example of a NCJA (private) is a local bank.

All NCJAs accessing CJI shall be subject to all pertinent areas of the CJIS Security Policy (see Appendix J for supplemental guidance). Each NCJA that directly accesses FBI CJI shall also allow the FBI to periodically test the ability to penetrate the FBI's network through the external network connection or system per authorization of Department of Justice (DOJ) Order 2640.2F.

#### **5.1.1.7 Security and Management Control Outsourcing Standard**

Channelers designated to request civil fingerprint-based background checks or noncriminal justice ancillary functions on behalf of a NCJA (public) or NCJA (private) for noncriminal justice functions shall be eligible for access to CJI. Access shall be permitted when such designation is authorized pursuant to federal law or state statute approved by the U.S. Attorney General. All Channelers accessing CJI shall be subject to the terms and conditions described in

the Compact Council Security and Management Control Outsourcing Standard. Each Channeler that directly accesses CJI shall also allow the FBI to conduct periodic penetration testing.

Channelers leveraging CJI to perform civil functions on behalf of an Authorized Recipient shall meet the same training and certification criteria required by governmental agencies performing a similar function, and shall be subject to the same extent of audit review as are local user agencies.

### **5.1.2 Monitoring, Review, and Delivery of Services**

As specified in the inter-agency agreements, MCAs, and contractual agreements with private contractors, the services, reports and records provided by the service provider shall be regularly monitored and reviewed. The CJA shall maintain sufficient overall control and visibility into all security aspects to include, but not limited to, identification of vulnerabilities and information security incident reporting/response. The incident reporting/response process used by the service provider shall conform to the incident reporting/response specifications provided in this policy.

#### **5.1.2.1 Managing Changes to Service Providers**

Any changes to services provided by a service provider shall be managed by the CJA. This includes provision of services, changes to existing services, and new services. Evaluation of the risks to the agency shall be undertaken based on the criticality of the data, system, and the impact of the change.

### **5.1.3 Secondary Dissemination**

If CHRI is released to another authorized agency, and that agency was not part of the releasing agency's primary information exchange agreement(s), the releasing agency shall log such dissemination.

### **5.1.4 References/Citations/Directives**

Appendix I contains all of the references used in this policy and may contain additional sources that apply to this section.

#### **Figure 2 - Information Exchange Agreements Implemented by a Local Police Department**

A local police department executed a Memorandum of Understanding (MOU) for the interface with their state CSA. The local police department also executed an MOU (which included an MCA) with the county information technology (IT) department for the day-to-day operations of their criminal-justice infrastructure. The county IT department, in turn, outsourced operations to a local vendor who signed the CJIS Security Addendum.

## **5.2 Policy Area 2: Security Awareness Training**

Basic security awareness training shall be required within six months of initial assignment, and biennially thereafter, for all personnel who have access to CJI. The CSO/SIB may accept the documentation of the completion of security awareness training from another agency. Accepting such documentation from another agency means that the accepting agency assumes the risk that the training may not meet a particular requirement or process required by federal, state, or local laws.

### **5.2.1 Awareness Topics**

A significant number of topics can be mentioned and briefly discussed in any awareness session or campaign. To help further the development and implementation of individual agency security awareness training programs the following baseline guidance is provided.

#### **5.2.1.1 All Personnel**

At a minimum, the following topics shall be addressed as baseline security awareness training for all authorized personnel with access to CJI:

1. Rules that describe responsibilities and expected behavior with regard to CJI usage.
2. Implications of noncompliance.
3. Incident response (Points of contact; Individual actions).
4. Media protection.
5. Visitor control and physical access to spaces—discuss applicable physical security policy and procedures, e.g., challenge strangers, report unusual activity.
6. Protect information subject to confidentiality concerns — hardcopy through destruction.
7. Proper handling and marking of CJI.
8. Threats, vulnerabilities, and risks associated with handling of CJI.
9. Dissemination and destruction.

#### **5.2.1.2 Personnel with Physical and Logical Access**

In addition to 5.2.1.1 above, the following topics, at a minimum, shall be addressed as baseline security awareness training for all authorized personnel with both physical and logical access to CJI:

1. Rules that describe responsibilities and expected behavior with regard to information system usage.
2. Password usage and management—including creation, frequency of changes, and protection.
3. Protection from viruses, worms, Trojan horses, and other malicious code.
4. Unknown e-mail/attachments.
5. Web usage—allowed versus prohibited; monitoring of user activity.

6. Spam.
7. Social engineering.
8. Physical Security—increases in risks to systems and data.
9. Media Protection.
10. Handheld device security issues—address both physical and wireless security issues.
11. Use of encryption and the transmission of sensitive/confidential information over the Internet—address agency policy, procedures, and technical contact for assistance.
12. Laptop security—address both physical and information security issues.
13. Personally owned equipment and software—state whether allowed or not (e.g., copyrights).
14. Access control issues—address least privilege and separation of duties.
15. Individual accountability—explain what this means in the agency.
16. Use of acknowledgement statements—passwords, access to systems and data, personal use and gain.
17. Desktop security—discuss use of screensavers, restricting visitors’ view of information on screen (mitigating “shoulder surfing”), battery backup devices, allowed access to systems.
18. Protect information subject to confidentiality concerns—in systems, archived, on backup media, and until destroyed.
19. Threats, vulnerabilities, and risks associated with accessing CJIS Service systems and services.

### **5.2.1.3 Personnel with Information Technology Roles**

In addition to 5.2.1.1 and 5.2.1.2 above, the following topics at a minimum shall be addressed as baseline security awareness training for all Information Technology personnel (system administrators, security administrators, network administrators, etc.):

1. Protection from viruses, worms, Trojan horses, and other malicious code—scanning, updating definitions.
2. Data backup and storage—centralized or decentralized approach.
3. Timely application of system patches—part of configuration management.
4. Access control measures.
5. Network infrastructure protection measures.

### **5.2.2 Security Training Records**

Records of individual basic security awareness training and specific information system security training shall be documented, kept current, and maintained by the CSO/SIB/Compact Officer. Maintenance of training records can be delegated to the local level.

### 5.2.3 References/Citations/Directives

Appendix I contains all of the references used in this policy and may contain additional sources that apply to this section.

#### **Figure 3 - Security Awareness Training Implemented by a Local Police Department**

A local police department with a staff of 20 sworn law-enforcement officers and 15 support personnel worked with a vendor to develop role-specific security-awareness training, and required all staff to complete this training upon assignment and every two years thereafter. The local police department scheduled the sworn law-enforcement training to coincide with their NCIC certification training. The vendor maintained the training records for the police department's entire staff, and provided reporting to the department to help it ensure compliance with the CJIS Security Policy.

## 5.3 Policy Area 3: Incident Response

There has been an increase in the number of accidental or malicious computer attacks against both government and private agencies, regardless of whether the systems are high or low profile. Agencies shall: (i) establish an operational incident handling capability for agency information systems that includes adequate preparation, detection, analysis, containment, recovery, and user response activities; (ii) track, document, and report incidents to appropriate agency officials and/or authorities.

ISOs have been identified as the POC on security-related issues for their respective agencies and shall ensure LASOs institute the CSA incident response reporting procedures at the local level. Appendix F contains a sample incident notification letter for use when communicating the details of an incident to the FBI CJIS ISO.

### 5.3.1 Reporting Information Security Events

The agency shall promptly report incident information to appropriate authorities. Information security events and weaknesses associated with information systems shall be communicated in a manner allowing timely corrective action to be taken. Formal event reporting and escalation procedures shall be in place. Wherever feasible, the agency shall employ automated mechanisms to assist in the reporting of security incidents. All employees, contractors and third party users shall be made aware of the procedures for reporting the different types of event and weakness that might have an impact on the security of agency assets and are required to report any information security events and weaknesses as quickly as possible to the designated point of contact.

#### 5.3.1.1 Reporting Structure and Responsibilities

##### 5.3.1.1.1 FBI CJIS Division Responsibilities

The FBI CJIS Division shall:

1. Manage and maintain the CJIS Division's Computer Security Incident Response Capability (CSIRC).
2. Serve as a central clearinghouse for all reported intrusion incidents, security alerts, bulletins, and other security-related material.
3. Ensure additional resources for all incidents affecting FBI CJIS Division controlled systems as needed.
4. Disseminate prompt advisories of system threats and operating system vulnerabilities to all CSOs and ISOs through the use of the [iso@leo.gov](mailto:iso@leo.gov) e-mail account, to include but not limited to: Product Security Bulletins, Virus Bulletins, and Security Clips.
5. Track all reported incidents and/or trends.
6. Monitor the resolution of all incidents.

##### 5.3.1.1.2 CSA ISO Responsibilities

The CSA ISO shall:

1. Assign individuals in each state, federal, and international law enforcement organization to be the primary point of contact for interfacing with the FBI CJIS Division concerning incident handling and response.
2. Identify individuals who are responsible for reporting incidents within their area of responsibility.
3. Collect incident information from those individuals for coordination and sharing among other organizations that may or may not be affected by the incident.
4. Develop, implement, and maintain internal incident response procedures and coordinate those procedures with other organizations that may or may not be affected.
5. Collect and disseminate all incident-related information received from the Department of Justice (DOJ), FBI CJIS Division, and other entities to the appropriate local law enforcement POCs within their area.
6. Act as a single POC for their jurisdictional area for requesting incident response assistance.

### **5.3.2 Management of Information Security Incidents**

A consistent and effective approach shall be applied to the management of information security incidents. Responsibilities and procedures shall be in place to handle information security events and weaknesses effectively once they have been reported.

#### **5.3.2.1 Incident Handling**

The agency shall implement an incident handling capability for security incidents that includes preparation, detection and analysis, containment, eradication, and recovery. Wherever feasible, the agency shall employ automated mechanisms to support the incident handling process.

Incident-related information can be obtained from a variety of sources including, but not limited to, audit monitoring, network monitoring, physical access monitoring, and user/administrator reports. The agency incorporates the lessons learned from ongoing incident handling activities into the incident response procedures and implements the procedures accordingly.

#### **5.3.2.2 Collection of Evidence**

Where a follow-up action against a person or agency after an information security incident involves legal action (either civil or criminal), evidence shall be collected, retained, and presented to conform to the rules for evidence laid down in the relevant jurisdiction(s).

### **5.3.3 Incident Response Training**

The agency shall ensure general incident response roles responsibilities are included as part of required security awareness training.

### **5.3.4 Incident Monitoring**

The agency shall track and document information system security incidents on an ongoing basis. The CSA ISO shall maintain completed security incident reporting forms until the subsequent

FBI triennial audit or until legal action (if warranted) is complete; whichever time-frame is greater.

### **5.3.5 References/Citations/Directives**

Appendix I contains all of the references used in this policy and may contain additional sources that apply to this section.

#### **Figure 4 - Incident Response Process Initiated by an Incident in a Local Police Department**

A state ISO received a notification from a local police department that suspicious network activity from a known botnet was detected on their network. The state ISO began the process of collecting all pertinent information about this incident, e.g. incident date/time, points-of-contact, systems affected, nature of the incident, actions taken, etc. and requested that the local police department confirm that their malware signatures were up to date. The state ISO contacted both the FBI CJIS ISO and state CSO to relay the preliminary details of this incident. The FBI CJIS ISO instructed the involved parties to continue their investigation and to submit an incident response form once all the information had been gathered. The FBI CJIS ISO contacted the lead for the FBI CSIRC to inform them that an incident response form was forthcoming. The state ISO gathered the remainder of the information from the local police department and submitted a completed incident response form to the FBI CJIS ISO who subsequently provided it to the FBI CSIRC. The FBI CSIRC notified the Department of Justice Computer Incident Response Team (DOJCIRT). The state ISO continued to monitor the situation, passing relevant details to the FBI CJIS ISO, ultimately determining that the botnet was eliminated from the local police department's infrastructure. Subsequent investigations determined that the botnet was restricted to the department's administrative infrastructure and thus no CJI was compromised.



## **5.4 Policy Area 4: Auditing and Accountability**

Agencies shall implement audit and accountability controls to increase the probability of authorized users conforming to a prescribed pattern of behavior. Agencies shall carefully assess the inventory of components that compose their information systems to determine which security controls are applicable to the various components.

Auditing controls are typically applied to the components of an information system that provide auditing capability (servers, etc.) and would not necessarily be applied to every user-level workstation within the agency. As technology advances, more powerful and diverse functionality can be found in such devices as personal digital assistants and cellular telephones, which may require the application of security controls in accordance with an agency assessment of risk.

### **5.4.1 Auditable Events and Content (Information Systems)**

The agency's information system shall generate audit records for defined events. These defined events include identifying significant events which need to be audited as relevant to the security of the information system. The agency shall specify which information system components carry out auditing activities. Auditing activity can affect information system performance and this issue must be considered as a separate factor during the acquisition of information systems.

The agency's information system shall produce, at the application and/or operating system level, audit records containing sufficient information to establish what events occurred, the sources of the events, and the outcomes of the events. The agency shall periodically review and update the list of agency-defined auditable events. In the event an agency does not use an automated system, manual recording of activities shall still take place.

#### **5.4.1.1 Events**

The following events shall be logged:

1. Successful and unsuccessful system log-on attempts.
2. Successful and unsuccessful attempts to access, create, write, delete or change permission on a user account, file, directory or other system resource.
3. Successful and unsuccessful attempts to change account passwords.
4. Successful and unsuccessful actions by privileged accounts.
5. Successful and unsuccessful attempts for users to access, modify, or destroy the audit log file.

##### **5.4.1.1.1 Content**

The following content shall be included with every audited event:

1. Date and time of the event.
2. The component of the information system (e.g., software component, hardware component) where the event occurred.
3. Type of event.

4. User/subject identity.
5. Outcome (success or failure) of the event.

#### **5.4.2 Response to Audit Processing Failures**

The agency's information system shall provide alerts to appropriate agency officials in the event of an audit processing failure. Audit processing failures include, for example: software/hardware errors, failures in the audit capturing mechanisms, and audit storage capacity being reached or exceeded.

#### **5.4.3 Audit Monitoring, Analysis, and Reporting**

The responsible management official shall designate an individual or position to review/analyze information system audit records for indications of inappropriate or unusual activity, investigate suspicious activity or suspected violations, to report findings to appropriate officials, and to take necessary actions. Audit review/analysis shall be conducted at a minimum once a week. The frequency of review/analysis should be increased when the volume of an agency's processing indicates an elevated need for audit review. The agency shall increase the level of audit monitoring and analysis activity within the information system whenever there is an indication of increased risk to agency operations, agency assets, or individuals based on law enforcement information, intelligence information, or other credible sources of information.

#### **5.4.4 Time Stamps**

The agency's information system shall provide time stamps for use in audit record generation. The time stamps shall include the date and time values generated by the internal system clocks in the audit records. The agency shall synchronize internal information system clocks on an annual basis.

#### **5.4.5 Protection of Audit Information**

The agency's information system shall protect audit information and audit tools from modification, deletion and unauthorized access.

#### **5.4.6 Audit Record Retention**

The agency shall retain audit records for at least 365 days. Once the minimum retention time period has passed, the agency shall continue to retain audit records until it is determined they are no longer needed for administrative, legal, audit, or other operational purposes. This includes, for example, retention and availability of audit records relative to Freedom of Information Act (FOIA) requests, subpoena, and law enforcement actions.

#### **5.4.7 Logging NCIC and III Transactions**

A log shall be maintained for a minimum of one (1) year on all NCIC and III transactions. The III portion of the log shall clearly identify both the operator and the authorized receiving agency. III logs shall also clearly identify the requester and the secondary recipient. The identification on the log shall take the form of a unique identifier that shall remain unique to the individual requester and to the secondary recipient throughout the minimum one year retention period.

#### **5.4.8 Reserved for Future Use**

#### **5.4.9 Reserved for Future Use**

#### **5.4.10 References/Citations/Directives**

Appendix I contains all of the references used in this policy and may contain additional sources that apply to this section.

#### **Figure 5 - Local Police Department's Use of Audit Logs**

A state CSO contacted a local police department regarding potentially inappropriate use of CHRI that was retrieved using the local department's ORI. The state CSO requested all relevant information from the police department to reconcile state NCIC and III logs against local police department logs. The police department provided the combination of their CJI processing application's logs with relevant operating system and network infrastructure logs to help verify the identity of the users conducting these queries. The review of these logs substantiated the CSO's suspicion.

## **5.5 Policy Area 5: Access Control**

Access control provides the planning and implementation of mechanisms to restrict reading, writing, processing and transmission of CJIS information and the modification of information systems, applications, services and communication configurations allowing access to CJIS information.

### **5.5.1 Account Management**

The agency shall manage information system accounts, including establishing, activating, modifying, reviewing, disabling, and removing accounts. The agency shall validate information system accounts at least annually and shall document the validation process. The validation and documentation of accounts can be delegated to local agencies.

Account management includes the identification of account types (i.e., individual, group, and system), establishment of conditions for group membership, and assignment of associated authorizations. The agency shall identify authorized users of the information system and specify access rights/privileges. The agency shall grant access to the information system based on:

1. Valid need-to-know/need-to-share that is determined by assigned official duties.
2. Satisfaction of all personnel security criteria.

The agency responsible for account creation shall be notified when:

1. A user's information system usage or need-to-know or need-to-share changes.
2. A user is terminated or transferred or associated accounts are removed, disabled, or otherwise secured.

### **5.5.2 Access Enforcement**

The information system shall enforce assigned authorizations for controlling access to the system and contained information. The information system controls shall restrict access to privileged functions (deployed in hardware, software, and firmware) and security-relevant information to explicitly authorized personnel.

Explicitly authorized personnel include, for example, security administrators, system and network administrators, and other privileged users with access to system control, monitoring, or administration functions (e.g., system administrators, information system security officers, maintainers, system programmers).

Access control policies (e.g., identity-based policies, role-based policies, rule-based policies) and associated access enforcement mechanisms (e.g., access control lists, access control matrices, cryptography) shall be employed by agencies to control access between users (or processes acting on behalf of users) and objects (e.g., devices, files, records, processes, programs, domains) in the information system.

#### **5.5.2.1 Least Privilege**

The agency shall approve individual access privileges and shall enforce physical and logical access restrictions associated with changes to the information system; and generate, retain, and review records reflecting all such changes. The agency shall enforce the most restrictive set of

rights/privileges or access needed by users for the performance of specified tasks. The agency shall implement least privilege based on specific duties, operations, or information systems as necessary to mitigate risk to CJI. This limits access to CJI to only authorized personnel with the need and the right to know.

Logs of access privilege changes shall be maintained for a minimum of one year or at least equal to the agency's record retention policy – whichever is greater.

#### **5.5.2.2 System Access Control**

Access control mechanisms to enable access to CJI shall be restricted by object (e.g., data set, volumes, files, records) including the ability to read, write, or delete the objects. Access controls shall be in place and operational for all IT systems to:

1. Prevent multiple concurrent active sessions for one user identification, for those applications accessing CJI, unless the agency grants authority based upon operational business needs. Agencies shall document the parameters of the operational business needs for multiple concurrent active sessions.
2. Ensure that only authorized personnel can add, change, or remove component devices, dial-up connections, and remove or alter programs.

#### **5.5.2.3 Access Control Criteria**

Agencies shall control access to CJI based on one or more of the following:

1. Job assignment or function (i.e., the role) of the user seeking access.
2. Physical location.
3. Logical location.
4. Network addresses (e.g., users from sites within a given agency may be permitted greater access than those from outside).
5. Time-of-day and day-of-week/month restrictions.

#### **5.5.2.4 Access Control Mechanisms**

When setting up access controls, agencies shall use one or more of the following mechanisms:

1. Access Control Lists (ACLs). ACLs are a register of users (including groups, machines, processes) who have been given permission to use a particular object (system resource) and the types of access they have been permitted.
2. Resource Restrictions. Access to specific functions is restricted by never allowing users to request information, functions, or other resources for which they do not have access. Three major types of resource restrictions are: menus, database views, and network devices.
3. Encryption. Encrypted information can only be decrypted, and therefore read, by those possessing the appropriate cryptographic key. While encryption can provide strong access control, it is accompanied by the need for strong key management. If encryption of stored information is employed as an access enforcement mechanism, the

cryptography used is Federal Information Processing Standards (FIPS) 140-2 (as amended) compliant (see section 5.10.1.2 for encryption requirements).

4. Application Level. In addition to controlling access at the information system level, access enforcement mechanisms are employed at the application level to provide increased information security for the agency.

### **5.5.3 Unsuccessful Login Attempts**

Where technically feasible, the system shall enforce a limit of no more than 5 consecutive invalid access attempts by a user (attempting to access CJI or systems with access to CJI). The system shall automatically lock the account/node for a 10 minute time period unless released by an administrator.

### **5.5.4 System Use Notification**

The information system shall display an approved system use notification message, before granting access, informing potential users of various usages and monitoring rules. The system use notification message shall, at a minimum, provide the following information:

1. The user is accessing a restricted information system.
2. System usage may be monitored, recorded, and subject to audit.
3. Unauthorized use of the system is prohibited and may be subject to criminal and/or civil penalties.
4. Use of the system indicates consent to monitoring and recording.

The system use notification message shall provide appropriate privacy and security notices (based on associated privacy and security policies or summaries) and remain on the screen until the user acknowledges the notification and takes explicit actions to log on to the information system.

Privacy and security policies shall be consistent with applicable laws, Executive Orders, directives, policies, regulations, standards, and guidance. System use notification messages can be implemented in the form of warning banners displayed when individuals log in to the information system. For publicly accessible systems: (i) the system use information is available and when appropriate, is displayed before granting access; (ii) any references to monitoring, recording, or auditing are in keeping with privacy accommodations for such systems that generally prohibit those activities; and (iii) the notice given to public users of the information system includes a description of the authorized uses of the system.

### **5.5.5 Session Lock**

The information system shall prevent further access to the system by initiating a session lock after a maximum of 30 minutes of inactivity, and the session lock remains in effect until the user reestablishes access using appropriate identification and authentication procedures. Users shall directly initiate session lock mechanisms to prevent inadvertent viewing when a device is unattended. A session lock is not a substitute for logging out of the information system. In the interest of officer safety, devices that are: (1) part of a police vehicle; or (2) used to perform dispatch functions and located within a physically secure location, are exempt from this requirement. Note: an example of a session lock is a screen saver with password.

### **5.5.6 Remote Access**

The agency shall authorize, monitor, and control all methods of remote access to the information system. Remote access is any temporary access to an agency's information system by a user (or an information system) communicating temporarily through an external, non-agency-controlled network (e.g., the Internet).

The agency shall employ automated mechanisms to facilitate the monitoring and control of remote access methods. The agency shall control all remote accesses through managed access control points. The agency may permit remote access for privileged functions only for compelling operational needs but shall document the rationale for such access in the security plan for the information system.

#### **5.5.6.1 Personally Owned Information Systems**

A personally owned information system shall not be authorized to access, process, store or transmit CJI unless the agency has established and documented the specific terms and conditions for personally owned information system usage.

This control does not apply to the use of personally owned information systems to access agency's information systems and information that are intended for public access (e.g., an agency's public website that contains purely public information).

#### **5.5.6.2 Publicly Accessible Computers**

Utilizing publicly accessible computers to access, process, store or transmit CJI is prohibited. Publicly accessible computers include but are not limited to: hotel business center computers, convention center computers, public library computers, public kiosk computers, etc.

### **5.5.7 Wireless Access Restrictions**

The agency shall: (i) establish usage restrictions and implementation guidance for wireless technologies; and (ii) authorize, monitor, control wireless access to the information system. Wireless technologies, in the simplest sense, enable one or more devices to communicate without physical connections—without requiring network or peripheral cabling.

Examples of wireless technologies include, but are not limited to: 802.11x, cellular networks, Bluetooth, satellite and microwave. Wireless technologies require at least the minimum security applied to wired technology and, based upon the specific technology, may require some additional security controls as described below.

#### **5.5.7.1 All 802.11x Wireless Protocols**

Agencies shall:

1. Perform validation testing to ensure rogue APs (Access Points) do not exist in the 802.11 Wireless Local Area Network (WLAN) and to fully understand the wireless network security posture.
2. Maintain a complete inventory of all Access Points (APs) and 802.11 wireless devices.

3. Place APs in secured areas to prevent unauthorized physical access and user manipulation.
4. Test AP range boundaries to determine the precise extent of the wireless coverage and design the AP wireless coverage to limit the coverage area to only what is needed for operational purposes.
5. Enable user authentication and encryption mechanisms for the management interface of the AP.
6. Ensure that all APs have strong administrative passwords and ensure that all passwords are changed in accordance with section 5.6.2.1.
7. Ensure the reset function on APs is used only when needed and is only invoked by authorized personnel. Restore the APs to the latest security settings, when the reset functions are used, to ensure the factory default settings are not utilized.
8. Change the default service set identifier (SSID) in the APs. Disable the broadcast SSID feature so that the client SSID must match that of the AP. Validate that the SSID character string does not contain any agency identifiable information (division, department, street, etc.) or services.
9. Enable all security features of the wireless product, including the cryptographic authentication, firewall, and other privacy features.
10. Ensure that encryption key sizes are at least 128-bits and the default shared keys are replaced by unique keys.
11. Ensure that the ad hoc mode has been disabled unless the environment is such that the risk has been assessed and is tolerable. Note: some products do not allow disabling this feature; use with caution or use different vendor.
12. Disable all nonessential management protocols on the APs and disable hypertext transfer protocol (HTTP) when not needed or protect HTTP access with authentication and encryption.
13. Enable logging (if supported) and review the logs on a recurring basis per local policy. At a minimum logs shall be reviewed monthly.
14. Segregate, virtually (e.g. virtual local area network (VLAN) and ACLs) or physically (e.g. firewalls), the wireless network from the operational wired infrastructure. Limit access between wireless networks and the wired network to only operational needs.
15. When disposing of access points that will no longer be used by the agency, clear access point configuration to prevent disclosure of network configuration, keys, passwords, etc.

#### **5.5.7.2 Legacy 802.11 Protocols**

Wired Equivalent Privacy (WEP) and Wi-Fi Protected Access (WPA) cryptographic algorithms, used by all pre-802.11i protocols, do not meet the requirements for FIPS 140-2 and are to be used only if additional security controls are employed.



Agencies shall follow the guidelines below regarding wireless implementation and cases where the WEP and WPA security features are used to provide wireless security in conjunction with the CJIS required minimum encryption specifications.

1. Deploy media access control (MAC) access control lists (ACL); however, MAC ACLs do not represent a strong defense mechanism by themselves because they are transmitted in the clear from WLAN clients to APs so they can be captured easily.
2. Enable WEP/WPA.
3. Ensure the default shared keys are replaced by more secure unique keys.
4. Enable utilization of key-mapping keys rather than default keys so that sessions are unique when using WEP.

### **5.5.7.3 Cellular**

Cellular telephones, smartphones (i.e. Blackberry, iPhones, etc.), personal digital assistants (PDA), and “aircards” are examples of cellular handheld devices or devices that employ cellular technology. Additionally, cellular handheld devices typically include Bluetooth, infrared, and other wireless protocols capable of joining infrastructure networks or creating dynamic ad hoc networks. Cellular devices are at risk due to a multitude of threats and consequently pose a risk to the enterprise.

Threats to cellular handheld devices stem mainly from their size, portability, and available wireless interfaces and associated services. Examples of threats to cellular handheld devices include:

1. Loss, theft, or disposal.
2. Unauthorized access.
3. Malware.
4. Spam.
5. Electronic eavesdropping.
6. Electronic tracking (threat to security of data and safety of law enforcement officer).
7. Cloning (not as prevalent with later generation cellular technologies).
8. Server-resident data.

#### **5.5.7.3.1 Cellular Risk Mitigations**

Organizations shall, at a minimum, ensure that cellular devices:

1. Apply available critical patches and upgrades to the operating system.
2. Are configured for local device authentication.
3. Use advanced authentication.
4. Encrypt all CJI resident on the device.
5. Erase cached information when session is terminated.
6. Employ personal firewalls.

7. Employ antivirus software.

#### **5.5.7.3.2 Voice Transmissions Over Cellular Devices**

Any cellular device used to transmit CJI via voice is exempt from the encryption and authentication requirements when an officer determines there is an immediate need for the CJI to further an investigation or situations affecting the safety of an officer or the general public.

#### **5.5.7.4 Bluetooth**

Bluetooth is an open standard for short-range radio frequency (RF) communication and is used primarily to establish wireless personal area networks (WPAN), commonly referred to as ad hoc networks or piconets. A piconet is composed of two or more Bluetooth devices in close physical proximity that operate on the same channel using the same frequency hopping sequence and can scale to include up to seven active slave devices and up to 255 inactive slave devices. Bluetooth voice and data transfer technology has been integrated into many types of business and consumer devices, including cellular phones, personal digital assistants (PDA), laptops, automobiles, printers, and headsets.

Bluetooth does not provide end-to-end, audit, or non-repudiation security services. If such services are needed, they shall be provided through additional, higher-layer means in addition to the Bluetooth specification and 802.11 standards.

The cryptographic algorithms employed by the Bluetooth standard are not FIPS approved. When communications require FIPS-approved cryptographic protection, this can be achieved by employing application-level FIPS-approved encryption over the native Bluetooth encryption.

Agencies shall:

1. Provide users with a list of precautionary measures they should take to better protect handheld Bluetooth devices from theft. The organization and its employees should be responsible for its wireless technology components because theft of those components could lead to malicious activities against the organization's information system resource.
2. Maintain a complete inventory of all Bluetooth-enabled wireless devices and addresses (BD\_ADDRs). A complete inventory of Bluetooth-enabled wireless devices can be referenced when conducting an audit that searches for unauthorized use of wireless technologies.
3. Change the default setting of the Bluetooth device to reflect the organization's security policy. Because default settings are generally not secure, a careful review of those settings should be performed to ensure that they comply with the organization's security policy.
4. Set Bluetooth devices to the lowest necessary and sufficient power level so that transmissions remain within the secure perimeter of the organization. Setting Bluetooth devices to the lowest necessary and sufficient power level ensures a secure range of access to authorized users. The use of Class 1 devices should be avoided due to their extended range (approximately 100 meters).
5. Choose personal identification number (PIN) codes that are sufficiently random and long. Avoid static and weak PINs, such as all zeroes. PIN codes should be random so that they cannot be easily reproduced by malicious users. Longer PIN codes are more resistant to

brute force attacks. For Bluetooth v2.0 (or earlier) devices, an eight-character alphanumeric PIN shall be used.

6. For v2.1 devices using Secure Simple Pairing, avoid using the “Just Works” model. The “Just Works” model does not provide protection against man-in-the-middle (MITM) attacks. Devices that only support Just Works should not be procured if similarly qualified devices that support one of the association models (i.e. Numeric Comparison, Out of Band, or Passkey Entry) are available.
7. Bluetooth devices should be configured by default as, and remain, undiscoverable except as needed for pairing. Bluetooth interfaces should be configured as non-discoverable, which prevents visibility to other Bluetooth devices except when discovery is specifically needed. Also, the default self-identifying or discoverable names provided on Bluetooth devices should be changed to anonymous unidentifiable names.
8. Invoke link encryption for all Bluetooth connections regardless of how needless encryption may seem (i.e. no Security Mode 1). Link encryption should be used to secure all data transmissions during a Bluetooth connection; otherwise, transmitted data is vulnerable to eavesdropping.
9. If multi-hop wireless communication is being utilized, ensure that encryption is enabled on every link in the communication chain. Every link should be secured because one unsecured link results in compromising the entire communication chain.
10. Ensure device mutual authentication is performed for all accesses. Mutual authentication is required to provide verification that all devices on the network are legitimate.
11. Enable encryption for all broadcast transmission (Encryption Mode 3). Broadcast transmissions secured by link encryption provide a layer of security that protects these transmissions from user interception for malicious purposes.
12. Configure encryption key sizes to the maximum allowable. Using maximum allowable key sizes provides protection from brute force attacks.
13. Establish a “minimum key size” for any negotiation process. Establishing minimum key sizes ensures that all keys are long enough to be resistant to brute force attacks. See Section 5.10.1.2 for minimum key encryption standards.
14. Use Security Mode 3 in order to provide link-level security prior to link establishment.
15. Users do not accept transmissions of any kind from unknown or suspicious devices. These types of transmissions include messages, files, and images. With the increase in the number of Bluetooth enabled devices, it is important that users only establish connections with other trusted devices and only accept content from these trusted devices.

### **5.5.8 References/Citations/Directives**

Appendix I contains all of the references used in this policy and may contain additional sources that apply to this section.

### **Figure 6 - A Local Police Department's Access Controls**

A local police department purchased a new computer-assisted dispatch (CAD) system that integrated with their state CSA's CJI interfaces. In doing so, the police department employed least-privilege practices to ensure that its employees were only given those privileges needed to perform their jobs, and as such, excluding IT administrators, employees had only non-administrative privileges on all equipment they used. The police department also used ACLs in the operating systems to control access to the CAD client's executables. The CAD system used internal role-based access controls to ensure only those users that needed access to CJI were given it. The police department performed annual audits of user accounts on all systems under their control including remote access mechanisms, operating systems, and the CAD system to ensure all accounts were in valid states. The police department implemented authentication-failure account lockouts, system use notification via login banners, and screen-saver passwords on all equipment that processes CJI.

## **5.6 Policy Area 6: Identification and Authentication**

The agency shall identify information system users and processes acting on behalf of users and authenticate the identities of those users or processes as a prerequisite to allowing access to agency information systems or services.

### **5.6.1 Identification Policy and Procedures**

Each person who is authorized to store, process, and/or transmit CJI shall be uniquely identified. A unique identification shall also be required for all persons who administer and maintain the system(s) that access CJI or networks leveraged for CJI transit. The unique identification can take the form of a full name, badge number, serial number, or other unique alphanumeric identifier. Agencies shall require users to identify themselves uniquely before the user is allowed to perform any actions on the system. Agencies shall ensure that all user IDs belong to currently authorized users. Identification data shall be kept current by adding new users and disabling and/or deleting former users.

#### **5.6.1.1 Use of Originating Agency Identifiers in Transactions and Information Exchanges**

An FBI authorized originating agency identifier (ORI) shall be used in each transaction on CJIS systems in order to identify the sending agency and to ensure the proper level of access for each transaction. The original identifier between the requesting agency and the CSA/SIB/Channeler shall be the ORI, and other agency identifiers, such as user identification or personal identifier, an access device mnemonic, or the Internet Protocol (IP) address.

Agencies may act as a servicing agency and perform transactions on behalf of authorized agencies requesting the service. Servicing agencies performing inquiry transactions on behalf of another agency may do so using the requesting agency's ORI. Servicing agencies may also use their own ORI to perform inquiry transactions on behalf of a requesting agency if the means and procedures are in place to provide an audit trail for the current specified retention period. Because the agency performing the transaction may not necessarily be the same as the agency requesting the transaction, the CSA/SIB/Channeler shall ensure that the ORI for each transaction can be traced, via audit trail, to the specific agency which is requesting the transaction.

Audit trails can be used to identify the requesting agency if there is a reason to inquire into the details surrounding why an agency ran an inquiry on a subject. Agencies assigned a P (limited access) ORI shall not use the full access ORI of another agency to conduct an inquiry transaction.

### **5.6.2 Authentication Policy and Procedures**

Authentication refers to mechanisms or processes that verify users are valid once they are uniquely identified. The CSA/SIB may develop an authentication strategy which centralizes oversight but decentralizes the establishment and daily administration of the security measures for access to CJI.

Each individual's identity shall be authenticated at either the local agency, CSA, SIB or Channeler level. The authentication strategy shall be part of the agency's audit for policy compliance. The FBI CJIS Division shall identify and authenticate all individuals who establish

direct web-based interactive sessions with FBI CJIS Services. The FBI CJIS Division shall authenticate the ORI of all message-based sessions between the FBI CJIS Division and its customer agencies but will not further authenticate the user nor capture the unique identifier for the originating operator because this function is performed at the local agency, CSA, SIB or Channeler level.

#### **5.6.2.1 Standard Authentication (Password)**

Agencies shall follow the secure password attributes, below, to authenticate an individual's unique ID. Passwords shall:

1. Be a minimum length of eight (8) characters on all systems.
2. Not be a dictionary word or proper name.
3. Not be the same as the Userid.
4. Expire within a maximum of 90 calendar days.
5. Not be identical to the previous ten (10) passwords.
6. Not be transmitted in the clear outside the secure location.
7. Not be displayed when entered.

#### **5.6.2.2 Advanced Authentication**

Advanced Authentication (AA) provides for additional security to the typical user identification and authentication of login ID and password, such as: biometric systems, user-based public key infrastructure (PKI), smart cards, software tokens, hardware tokens, paper (inert) tokens, or "Risk-based Authentication" that includes a software token element comprised of a number of factors, such as network information, user information, positive device identification (i.e. device forensics, user pattern analysis and user binding), user profiling, and high-risk challenge/response questions.

##### **5.6.2.2.1 Advanced Authentication Policy and Rationale**

The requirement to use or not use AA is dependent upon the physical, personnel and technical security controls associated with the user location. For example, AA shall not be required for users requesting access to CJI from within the perimeter of a physically secure location (Section 5.9), when the technical security controls have been met (Sections 5.5 and 5.10). Conversely, if the technical security controls have not been met AA shall be required even if the request for CJI originates from within a physically secure location. Section 5.6.2.2.2 provides agencies with a decision tree to help guide AA decisions.

INTERIM COMPLIANCE:

1. For interim compliance, users accessing CJI from devices associated with, and located within, a police vehicle are exempt from the AA requirement until September 30th 2013 if the information system being used has not been procured or upgraded anytime after September 30th, 2005. For the purposes of this policy, a police vehicle is defined as an enclosed criminal justice conveyance with the capability to comply, during operational periods, with Section 5.9.1.3.

2. Internet Protocol Security (IPSec) does not meet the 2011 requirements for advanced authentication; however, agencies that have funded/implemented IPSec in order to meet the AA requirements of CJIS Security Policy v.4.5 may continue to utilize IPSec for AA until 2013. Examples:
  - a. A police officer runs a query for CJI from his/her laptop mounted in a police vehicle. The police officer leverages a cellular network as the transmission medium; authenticates the device using IPSec key exchange; and tunnels across the cellular network using the IPSec virtual private network (VPN). IPSec was funded and installed in order to meet the AA requirements of CJIS Security Policy version 4.5. AA requirements are waived until 2013.
  - b. A detective accesses CJI from various locations while investigating a crime scene. The detective uses an agency managed laptop with IPSec installed and leverages a cellular network as the transmission medium. IPSec was funded and installed in order to meet the AA requirements of CJIS Security Policy version 4.5. AA requirements are waived until 2013.

**EXCEPTION:**

AA shall be required when the requested service has built AA into its processes and requires a user to provide AA before granting access. **EXAMPLES:**

- a. A user, irrespective of his/her location, accesses the LEO website. The LEO has AA built into its services and requires AA prior to granting access. AA is required.
- b. A user, irrespective of their location, accesses a State's portal through which access to CJI is facilitated. The State Portal has AA built into its processes and requires AA prior to granting access. AA is required.

**5.6.2.2.2 Advanced Authentication Decision Tree**

The following AA Decision Tree, coupled with figures 8 and 9 below, assist decision makers in determining whether or not AA is required.

1. Can request's originating location be determined physically?

If either (a) or (b) below are true the answer to the above question is "yes". Proceed to question 2.

- a. The IP address is attributed to a physical structure; or
- b. The mnemonic is attributed to a specific device assigned to a specific location that is a physical structure.

If neither (a) or (b) above are true then the answer is "no". Skip to question number 4.

2. Does request originate from within a physically secure location (that is not a police vehicle) as described in section 5.9.1?

If either (a) or (b) below are true the answer to the above question is "yes". Proceed to question 3.

- a. The IP address is attributed to a physically secure location; or
- b. If a mnemonic is used it is attributed to a specific device assigned to a specific physically secure location.

If neither (a) or (b) above are true then the answer is “no”. Decision tree completed. AA required.

3. Are all required technical controls implemented at this location or at the controlling agency?

If either (a) or (b) below are true the answer to the above question is “yes”. Decision tree completed. AA requirement waived.

- a. Appropriate technical controls listed in sections 5.5 and 5.10 are implemented; or
- b. The controlling agency (i.e. parent agency or agency leveraged as conduit to FBI CJIS data) extends its wide area network controls down to the requesting agency and the extended controls provide assurance equal or greater to the controls listed in sections 5.5 and 5.10.

If neither (a) or (b) above are true then the answer is “no”. Decision tree completed. AA required.

4. Does request originate from an agency-managed user device?

If either (a) or (b) below are true the answer to the above question is “yes”. Proceed to question 5.

- a. The static IP address or MAC address can be traced to registered device; or
- b. Certificates are issued to agency managed devices only and certificate exchange is allowed only between authentication server and agency issued devices.

If neither (a) or (b) above are true then the answer is “no”. Decision tree completed. AA required.

5. Is the agency managed user device associated with a law enforcement conveyance?

If any of the (a), (b), or (c) statements below is true the answer to the above question is “yes”. Proceed to question 6.

- a. The static IP address or MAC address is associated with a device associated with a law enforcement conveyance; or
- b. The certificate presented is associated with a device associated with a law enforcement conveyance; or
- c. The mnemonic presented is associated with a specific device assigned and that device is attributed to a law enforcement conveyance.

If none of the (a), (b), or (c) statements above are true then the answer is “no”. Skip to question number 7.



6. Has there been an acquisition or upgrade since 2005?

If any of the (a), (b), (c), or (d) statements below are true the answer to the above question is “yes”. Proceed to question number 7.

- a. The “green-screen” MDTs have been replaced with laptops or other mobile devices; or
- b. An upgrade of technology exceeding 25% of the cost of the system being upgraded has taken place; or
- c. Any upgrade to the system encryption module has taken place; or
- d. Any upgrade to the system that is not replacing like technology has taken place.

If none of the (a), (b), (c), or (d) statements above are true then the answer is “no”. Decision tree completed. AA requirement waived.

7. Was IPSec implemented to meet the requirements of Policy Version 4.5?

If either (a) or (b) below are true the answer to the above question is “yes”. Decision tree completed. AA requirement is waived.

- a. The budget acquisition of IPSec was completed prior to January 1<sup>st</sup>, 2009 and IPSec was subsequently implemented; or
- b. Implementation of IPSec was completed prior to January 1<sup>st</sup>, 2009.

If neither (a) or (b) above are true then the answer is “no”. Decision tree completed. AA required.

### **5.6.3 Identifier and Authenticator Management**

The agency shall establish identifier and authenticator management processes.

#### **5.6.3.1 Identifier Management**

In order to manage user identifiers, agencies shall:

1. Uniquely identify each user.
2. Verify the identity of each user.
3. Receive authorization to issue a user identifier from an appropriate agency official.
4. Issue the user identifier to the intended party.
5. Disable the user identifier after a specified period of inactivity.
6. Archive user identifiers.

#### **5.6.3.2 Authenticator Management**

In order to manage information system authenticators, agencies shall:

1. Define initial authenticator content.

2. Establish administrative procedures for initial authenticator distribution, for lost/compromised, or damaged authenticators, and for revoking authenticators.
3. Change default authenticators upon information system installation.
4. Change/refresh authenticators periodically.

Information system authenticators include, for example, tokens, user-based PKI certificates, biometrics, passwords, and key cards. Users shall take reasonable measures to safeguard authenticators including maintaining possession of their individual authenticators, not loaning or sharing authenticators with others, and immediately reporting lost or compromised authenticators.

#### **5.6.4 Assertions**

Identity providers can be leveraged to identify individuals and assert the individual's identity to a service or to a trusted broker who will in-turn assert the identity to a service. Assertion mechanisms used to communicate the results of a remote authentication to other parties shall be:

1. Digitally signed by a trusted entity (e.g., the identity provider).
2. Obtained directly from a trusted entity (e.g. trusted broker) using a protocol where the trusted entity authenticates to the relying party using a secure protocol (e.g. transport layer security [TLS]) that cryptographically authenticates the verifier and protects the assertion.

Assertions generated by a verifier shall expire after 12 hours and shall not be accepted thereafter by the relying party.

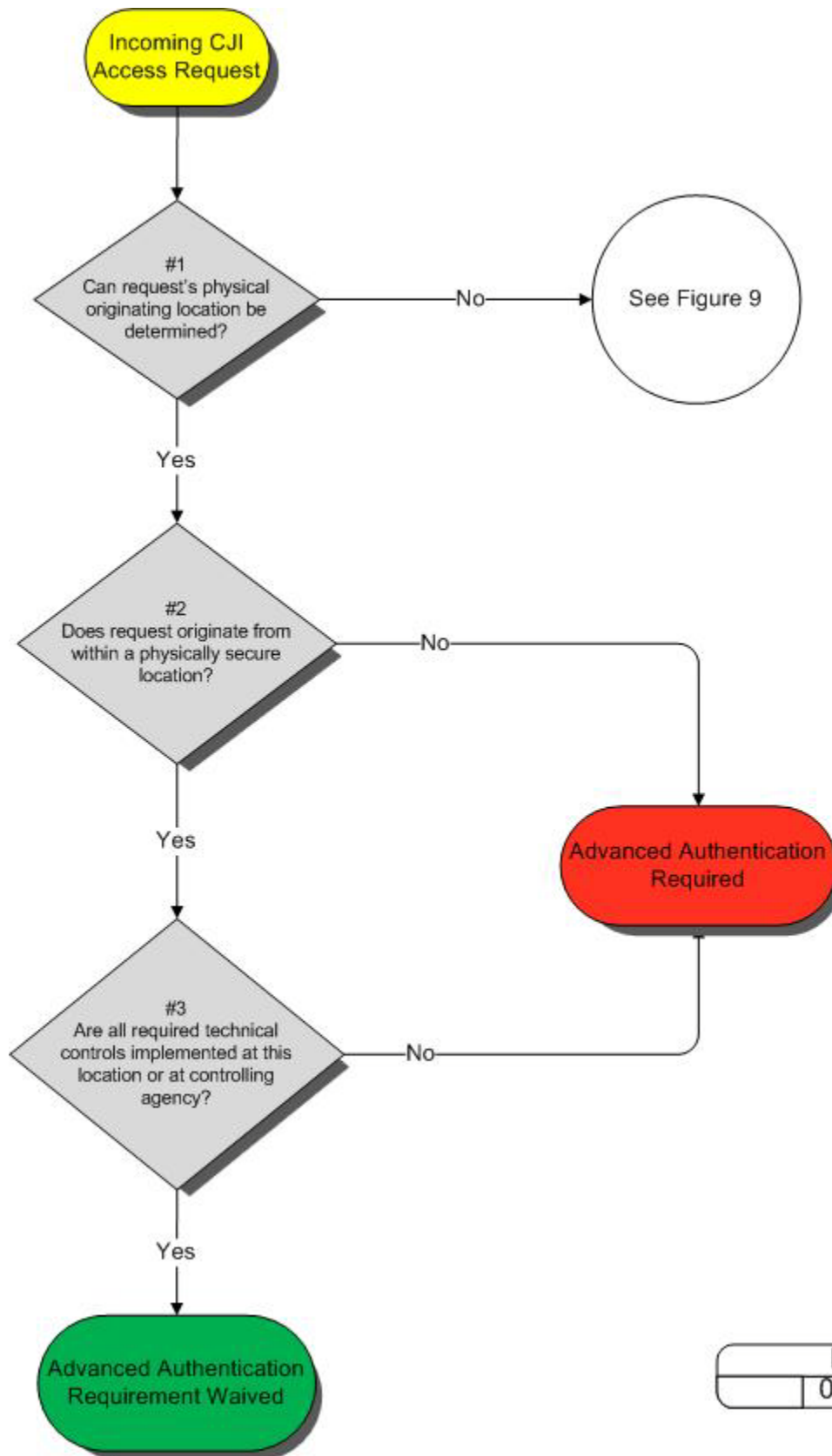
#### **5.6.5 References/Citations/Directives**

Appendix C contains all of the references used in this policy and may contain additional sources that apply to this section.

#### **Figure 7 - A Local Police Department's Authentication Controls**

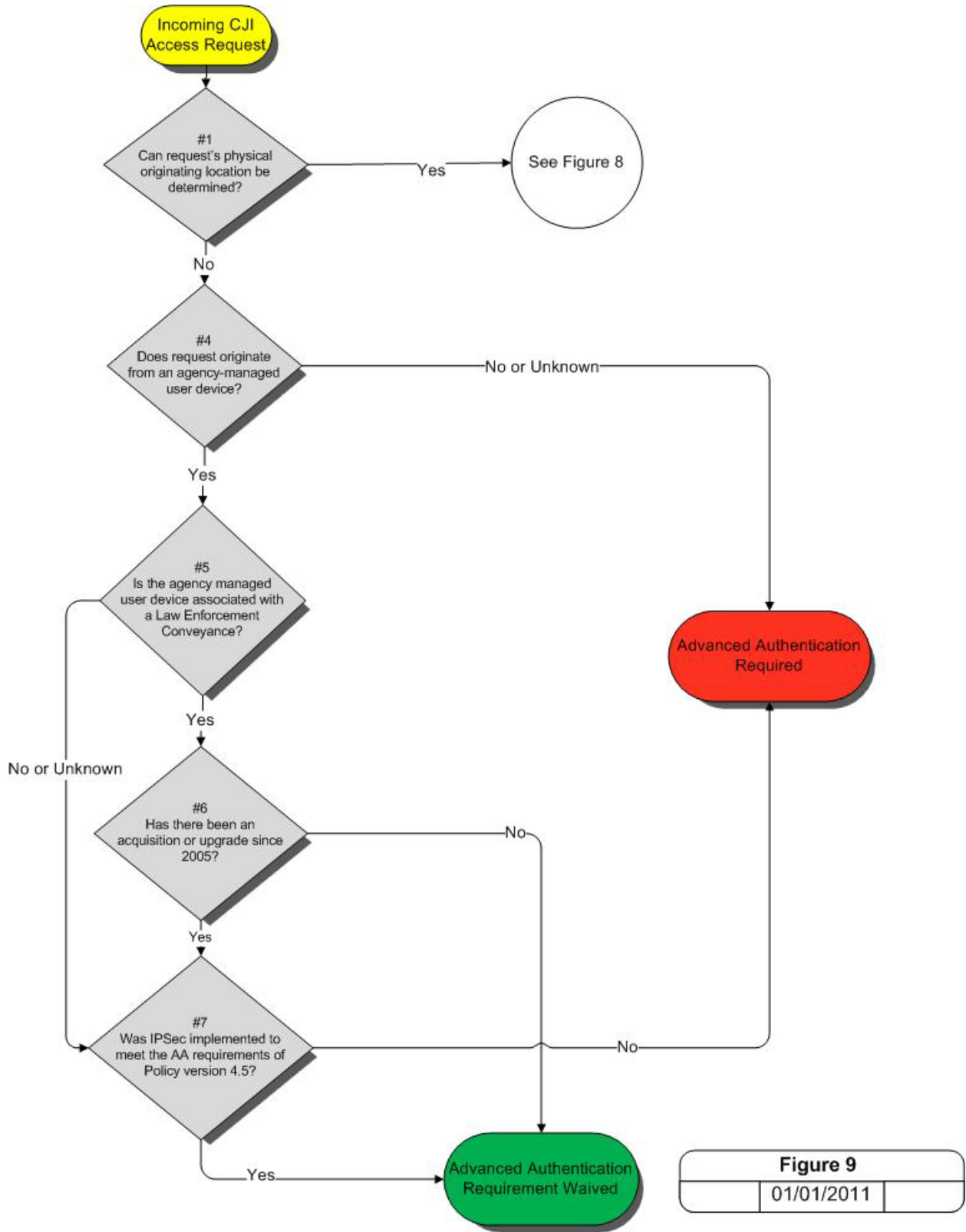
During the course of an investigation, a detective accessed CJI from a hotel room using an agency issued mobile broadband card. To gain access, the detective first established the remote session via a secure virtual private network (VPN) tunnel (satisfying the requirement for encryption), then was challenged to enter both password and the value from a hardware token (satisfying the requirement for advanced authentication). Once the detective's credentials were validated, his identity was asserted by the infrastructure to all authorized applications needed to complete his investigation.

**Figure 8 - Authentication Decision for Known Location**



<b>Figure 8</b>		
	01/01/2011	

**Figure 9 - Authentication Decision for Unknown Location**



<b>Figure 9</b>		
	01/01/2011	

## **5.7 Policy Area 7: Configuration Management**

### **5.7.1 Access Restrictions for Changes**

Planned or unplanned changes to the hardware, software, and/or firmware components of the information system can have significant effects on the overall security of the system. The goal is to allow only qualified and authorized individuals access to information system components for purposes of initiating changes, including upgrades, and modifications. Section 5.5, Access Control, describes agency requirements for control of privileges and restrictions.

#### **5.7.1.1 Least Functionality**

The agency shall configure the application, service, or information system to provide only essential capabilities and shall specifically prohibit and/or restrict the use of specified functions, ports, protocols, and/or services.

#### **5.7.1.2 Network Diagram**

The agency shall ensure that a complete topological drawing depicting the interconnectivity of the agency network, to criminal justice information, systems and services is maintained in a current status. See Appendix C for sample network diagrams.

The network topological drawing shall include the following:

1. All communications paths, circuits, and other components used for the interconnection, beginning with the agency-owned system(s) and traversing through all interconnected systems to the agency end-point.
2. The logical location of all components (e.g., firewalls, routers, switches, hubs, servers, encryption devices, and computer workstations). Individual workstations (clients) do not have to be shown; the number of clients is sufficient.
3. “For Official Use Only” (FOUO) markings.
4. The agency name and date (day, month, and year) drawing was created or updated.

### **5.7.2 Security of Configuration Documentation**

The system configuration documentation often contains sensitive details (e.g. descriptions of applications, processes, procedures, data structures, authorization processes, data flow, etc.) Agencies shall protect the system documentation from unauthorized access consistent with the provisions described in section 5.5 Access Control.

### **5.7.3 References/Citations/Directives**

Appendix I contains all of the references used in this policy and may contain additional sources that apply to this section.

**Figure 10 - A Local Police Department's Configuration Management Controls**

A local police department decided to update their CAD system, and in doing so tracked all changes made to their infrastructure in a configuration management journal, updated their network topology documents to include all new components in their architecture, then marked all documentation as FOUO and stored them securely.

## **5.8 Policy Area 8: Media Protection**

Media protection policy and procedures shall be documented and implemented to ensure that access to electronic and physical media in all forms is restricted to authorized individuals. Procedures shall be defined for securely handling, transporting and storing media.

### **5.8.1 Media Storage and Access**

The agency shall securely store electronic and physical media within physically secure locations or controlled areas. The agency shall restrict access to electronic and physical media to authorized individuals. If physical and personnel restrictions are not feasible then the data shall be encrypted per section 5.10.1.2.

### **5.8.2 Media Transport**

The agency shall protect and control electronic and physical media during transport outside of controlled areas and restrict the activities associated with transport of such media to authorized personnel.

#### **5.8.2.1 Electronic Media in Transit**

“Electronic media” means electronic storage media including memory devices in laptops and computers (hard drives) and any removable, transportable digital memory media, such as magnetic tape or disk, optical disk, flash drives, external hard drives, or digital memory card.

Controls shall be in place to protect electronic media containing CJI while in transport (physically moved from one location to another) to help prevent compromise of the data. Encryption, as defined in section 5.10.1.2 of this policy, is the optimal control during transport; however, if encryption of the data isn’t possible then each agency shall institute other controls to ensure the security of the data.

#### **5.8.2.2 Physical Media in Transit**

The controls and security measures in this document also apply to CJI in physical (printed documents, printed imagery, etc.) form. Physical media shall be protected at the same level as the information would be protected in electronic form.

### **5.8.3 Electronic Media Sanitization and Disposal**

The agency shall sanitize, that is, overwrite at least three times or degauss electronic media prior to disposal or release for reuse by unauthorized individuals. Inoperable electronic media shall be destroyed (cut up, shredded, etc.). The agency shall maintain written documentation of the steps taken to sanitize or destroy electronic media. Agencies shall ensure the sanitization or destruction is witnessed or carried out by authorized personnel.

### **5.8.4 Disposal of Physical Media**

Physical media shall be securely disposed of when no longer required, using formal procedures. Formal procedures for the secure disposal or destruction of physical media shall minimize the risk of sensitive information compromise by unauthorized individuals. Physical media shall be

destroyed by shredding or incineration. Agencies shall ensure the disposal or destruction is witnessed or carried out by authorized personnel.

### **5.8.5 References/Citations/Directives**

Appendix I contains all of the references used in this policy and may contain additional sources that apply to this section.

#### **Figure 11 - A Local Police Department's Media Management Policies**

A local police department implemented a replacement CAD system that integrated to their state's CSA and was authorized to process CJI. The police department contracted with an off-site media manager to store backups of their data in the contractor's vaults, but the contractor was not authorized to process or store CJI. To ensure the confidentiality of the police department's data while outside its perimeter, they encrypted all data going to the contractor with Advanced Encryption Standard (AES)-256. The police department rotated and reused media through the contractor's vaults periodically, and when it required destruction, the police department incinerated the media to irreversibly destroy any data on it.



## **5.9 Policy Area 9: Physical Protection**

Physical protection policy and procedures shall be documented and implemented to ensure CJI and information system hardware, software, and media are physically protected through access control measures.

### **5.9.1 Physically Secure Location**

A physically secure location is a facility or an area, a room, or a group of rooms within a facility with both the physical and personnel security controls sufficient to protect CJI and associated information systems. The physically secure location is subject to criminal justice agency management control; SIB control; FBI CJIS Security addendum; or a combination thereof. Sections 5.9.1.1 – 5.9.1.9 describe the physical controls required in order to be considered a physically secure location, while section 5.12 describes the minimum personnel security controls required for unescorted access to a physically secure location.

For interim compliance, and for the sole purpose of meeting the advanced authentication policy, a police vehicle shall be considered a physically secure location until September 30<sup>th</sup> 2013. For the purposes of this policy, a police vehicle is defined as an enclosed criminal justice conveyance with the capability to comply, during operational periods, with section 5.9.1.3.

#### **5.9.1.1 Security Perimeter**

The perimeter of physically secure location shall be prominently posted and separated from non-secure locations by physical controls. Security perimeters shall be defined, controlled and secured in a manner acceptable to the CSA or SIB.

#### **5.9.1.2 Physical Access Authorizations**

The agency shall develop and keep current a list of personnel with authorized access to the physically secure location (except for those areas within the permanent facility officially designated as publicly accessible) or shall issue credentials to authorized personnel.

#### **5.9.1.3 Physical Access Control**

The agency shall control all physical access points (except for those areas within the facility officially designated as publicly accessible) and shall verify individual access authorizations before granting access.

#### **5.9.1.4 Access Control for Transmission Medium**

The agency shall control physical access to information system distribution and transmission lines within the physically secure location.

#### **5.9.1.5 Access Control for Display Medium**

The agency shall control physical access to information system devices that display CJI and shall position information system devices in such a way as to prevent unauthorized individuals from accessing and viewing CJI.

#### **5.9.1.6 Monitoring Physical Access**

The agency shall monitor physical access to the information system to detect and respond to physical security incidents.

#### **5.9.1.7 Visitor Control**

The agency shall control physical access by authenticating visitors before authorizing escorted access to the physically secure location (except for those areas designated as publicly accessible). The agency shall escort visitors at all times and monitor visitor activity.

#### **5.9.1.8 Access Records**

The agency shall maintain visitor access records to the physically secure location (except for those areas officially designated as publicly accessible) that includes:

1. Name and agency of the visitor.
2. Signature of the visitor.
3. Form of identification.
4. Date of access.
5. Time of entry and departure.
6. Purpose of visit.
7. Name and agency of person visited.

The visitor access records shall be maintained for a minimum of one year. Designated officials within the agency shall review the visitor access records frequently for accuracy and completeness.

#### **5.9.1.9 Delivery and Removal**

The agency shall authorize and control information system-related items entering and exiting the physically secure location.

### **5.9.2 Controlled Area**

If an agency cannot meet all of the controls required for establishing a physically secure location, but has an operational need to access or store CJI, the agency shall designate an area, a room, or a storage container, as a “controlled area” for the purpose of day-to-day CJI access or storage. The agency shall, at a minimum:

1. Limit access to the controlled area during CJI processing times to only those personnel authorized by the agency to access or view CJI.
2. Lock the area, room, or storage container when unattended.
3. Position information system devices and documents containing CJI in such a way as to prevent unauthorized individuals from access and view.
4. Follow the encryption requirements found in section 5.10.1.2 for electronic storage (i.e. data “at rest”) of CJI.

### 5.9.3 References/Citations/Directives

Appendix I contains all of the references used in this policy and may contain additional sources that apply to this section.

#### Figure 12 - A Local Police Department's Physical Protection Measures

A local police department implemented a replacement CAD system that was authorized to process CJI over an encrypted VPN tunnel to the state's CSA. The police department established a physically separated wing within their precinct separated by locked doors, walls, and a monitored security system within which CJI was processed by dispatchers, officers, and detectives. Only those persons with the appropriate authorizations were permitted within this wing unless accompanied by such a person. Within this secure wing the police department further segregated the back-office information systems' infrastructure within a separately controlled area restricted only to those authorized administrative personnel with a need to enter.

## **5.10 Policy Area 10: System and Communications Protection and Information Integrity**

Examples of systems and communications safeguards range from boundary and transmission protection to securing an agency's virtualized environment. In addition, applications, services, or information systems must have the capability to ensure system integrity through the detection and protection against unauthorized changes to software and information. This section details the policy for protecting systems and communications infrastructures.

### **5.10.1 Information Flow Enforcement**

The network infrastructure shall control the flow of information between interconnected systems. Information flow control regulates where information is allowed to travel within an information system and between information systems (as opposed to who is allowed to access the information) and without explicit regard to subsequent accesses to that information. In other words, controlling how data moves from one place to the next in a secure manner. Examples of controls that are better expressed as flow control than access control (see section 5.5) are:

1. Prevent CJI from being transmitted unencrypted across the public network.
2. Block outside traffic that claims to be from within the agency.
3. Do not pass any web requests to the public network that are not from the internal web proxy.

Specific examples of flow control enforcement can be found in boundary protection devices (e.g. proxies, gateways, guards, encrypted tunnels, firewalls, and routers) that employ rule sets or establish configuration settings that restrict information system services or provide a packet filtering capability.

#### **5.10.1.1 Boundary Protection**

The agency shall:

1. Control access to networks processing CJI.
2. Monitor and control communications at the external boundary of the information system and at key internal boundaries within the system.
3. Ensure any connections to the Internet, other external networks, or information systems occur through controlled interfaces (e.g. proxies, gateways, routers, firewalls, encrypted tunnels). See Section 5.10.4.4 for guidance on personal firewalls.
4. Employ tools and techniques to monitor network events, detect attacks, and provide identification of unauthorized use.
5. Ensure the operational failure of the boundary protection mechanisms do not result in any unauthorized release of information outside of the information system boundary (i.e. the device shall "fail closed" vs. "fail open").
6. Allocate publicly accessible information system components (e.g. public Web servers) to separate sub networks with separate, network interfaces. Publicly accessible information

systems residing on a virtual host shall follow the guidance in section 5.10.3.2 to achieve separation.

#### **5.10.1.2 Encryption**

1. Encryption shall be a minimum of 128 bit.
2. When CJI is transmitted outside the boundary of the physically secure location, the data shall be immediately protected via cryptographic mechanisms (encryption).

EXCEPTIONS: See sections 5.5.7.3.2 and 5.10.2.

3. When CJI is at rest (i.e. stored electronically) outside the boundary of the physically secure location, the data shall be protected via cryptographic mechanisms (encryption).
4. When encryption is employed, the cryptographic module used shall be certified to meet FIPS 140-2 standards.

Note 1: Subsequent versions of approved cryptographic modules that are under current review for FIPS 140-2 compliancy can be used in the interim until certification is complete.

Note 2: While FIPS 197 (Advanced Encryption Standard) certification is desirable, a FIPS 197 certification alone is insufficient as the certification is for the algorithm only vs. the FIPS 140-2 standard which certifies the packaging of an implementation.

5. For agencies using public key infrastructure technology, the agency shall develop and implement a certificate policy and certification practice statement for the issuance of public key certificates used in the information system. Registration to receive a public key certificate shall:
  - a) Include authorization by a supervisor or a responsible official.
  - b) Be accomplished by a secure process that verifies the identity of the certificate holder.
  - c) Ensure the certificate is issued to the intended party.

#### **5.10.1.3 Intrusion Detection Tools and Techniques**

The agency shall implement network-based and/or host-based intrusion detection tools.

The CSA/SIB shall, in addition:

1. Monitor inbound and outbound communications for unusual or unauthorized activities.
2. Send individual intrusion detection logs to a central logging facility where correlation and analysis will be accomplished as a system wide intrusion detection effort.
3. Employ automated tools to support near-real-time analysis of events in support of detecting system-level attacks.

#### **5.10.1.4 Voice Over Internet Protocol**

Appropriate agency officials must explicitly authorize the use of Voice over Internet Protocol (VoIP). Agencies using the VoIP protocol shall:

1. Establish usage restrictions and implementation guidance for VoIP technologies.
2. Document, monitor and control the use of VoIP within the agency.

### **5.10.2 Facsimile Transmission of CJI**

CJI transmitted via facsimile is exempt from encryption requirements.

### **5.10.3 Partitioning and Virtualization**

As resources grow scarce, agencies are increasing the centralization of applications, services, and system administration. Advanced software now provides the ability to create virtual machines that allows agencies to reduce the amount of hardware needed. Although the concepts of partitioning and virtualization have existed for a while, the need for securing the partitions and virtualized machines has evolved due to the increasing amount of distributed processing and federated information sources now available across the Internet.

#### **5.10.3.1 Partitioning**

The application, service, or information system shall separate user functionality (including user interface services) from information system management functionality.

The application, service, or information system shall physically or logically separate user interface services (e.g. public web pages) from information storage and management services (e.g. database management). Separation may be accomplished through the use of one or more of the following:

1. Different computers.
2. Different central processing units.
3. Different instances of the operating system.
4. Different network addresses.
5. Other methods approved by the FBI CJIS ISO.

#### **5.10.3.2 Virtualization**

Virtualization refers to a methodology of dividing the resources of a computer (hardware and software) into multiple execution environments. Virtualized environments are authorized for criminal justice and noncriminal justice activities. In addition to the security controls described in this policy, the following additional controls shall be implemented in a virtual environment:

1. Isolate the host from the virtual machine. In other words, virtual machine users cannot access host files, firmware, etc.
2. Maintain audit logs for all virtual machines and hosts and store the logs outside the hosts' virtual environment.
3. Virtual Machines that are Internet facing (web servers, portal servers, etc.) shall be physically separate from Virtual Machines that process CJI internally.
4. Device drivers that are "critical" shall be contained within a separate guest.

The following are additional technical security control best practices and should be implemented wherever feasible:

1. Encrypt network traffic between the virtual machine and host.
2. Implement IDS and IPS monitoring within the virtual machine environment.
3. Virtually firewall each virtual machine from each other (or physically firewall each virtual machine from each other with an application layer firewall) and ensure that only allowed protocols will transact.
4. Segregate the administrative duties for the host.

Appendix G provides some reference and additional background information on virtualization.

## **5.10.4 System and Information Integrity Policy and Procedures**

### **5.10.4.1 Patch Management**

The agency shall identify applications, services, and information systems containing software or components affected by recently announced software flaws and potential vulnerabilities resulting from those flaws.

The agency (or the software developer/vendor in the case of software developed and maintained by a vendor/contractor) shall develop and implement a local policy that ensures prompt installation of newly released security relevant patches, service packs and hot fixes. Local policies should include such items as:

1. Testing of appropriate patches before installation.
2. Rollback capabilities when installing patches, updates, etc.
3. Automatic updates without individual user intervention.
4. Centralized patch management.

Patch requirements discovered during security assessments, continuous monitoring or incident response activities shall also be addressed expeditiously.

### **5.10.4.2 Malicious Code Protection**

The agency shall implement malicious code protection that includes automatic updates for all systems with Internet access. Agencies with systems not connected to the Internet shall implement local procedures to ensure malicious code protection is kept current (i.e. most recent update available).

The agency shall employ virus protection mechanisms to detect and eradicate malicious code (e.g., viruses, worms, Trojan horses) at critical points throughout the network and on all workstations, servers and mobile computing devices on the network. The agency shall ensure malicious code protection is enabled on all of the aforementioned critical points and information systems and resident scanning is employed.

### **5.10.4.3 Spam and Spyware Protection**

The agency shall implement spam and spyware protection.

The agency shall:

1. Employ spam protection mechanisms at critical information system entry points (e.g. firewalls, electronic mail servers, remote-access servers).
2. Employ spyware protection at workstations, servers and/or mobile computing devices on the network.
3. Use the spam and spyware protection mechanisms to detect and take appropriate action on unsolicited messages and spyware/adware, respectively, transported by electronic mail, electronic mail attachments, Internet accesses, removable media (e.g. diskettes or compact disks) or other removable media as defined in this policy document.

#### **5.10.4.4 Personal Firewall**

A personal firewall shall be employed on all devices that are mobile by design (i.e. laptops, handhelds, personal digital assistants, etc.). For the purpose of this policy, a personal firewall is an application that controls network traffic to and from a computer, permitting or denying communications based on policy. At a minimum, the personal firewall shall perform the following activities:

1. Manage program access to the Internet.
2. Block unsolicited requests to connect to the PC.
3. Filter incoming traffic by IP address or protocol.
4. Filter incoming traffic by destination ports.
5. Maintain an IP traffic log.

#### **5.10.4.5 Security Alerts and Advisories**

The agency shall:

1. Receive information system security alerts/advisories on a regular basis.
2. Issue alerts/advisories to appropriate personnel.
3. Document the types of actions to be taken in response to security alerts/advisories.
4. Take appropriate actions in response.
5. Employ automated mechanisms to make security alert and advisory information available throughout the agency as appropriate.

#### **5.10.4.6 Information Input Restrictions**

The agency shall restrict the information input to any connection to FBI CJIS services to authorized personnel only.

Restrictions on personnel authorized to input information to the information system may extend beyond the typical access controls employed by the system and include limitations based on specific operational/project responsibilities.



### **5.10.5 References/Citations/Directives**

Appendix I contains all of the references used in this policy and may contain additional sources that apply to this section.

#### **Figure 13 - A Local Police Department's Information Systems & Communications Protections**

A local police department implemented a replacement CAD system within a physically secure location that was authorized to process CJJ using a FIPS 140-2 encrypted VPN tunnel over the Internet to the state's CSA. In addition to the policies, physical and personnel controls already in place, the police department employed firewalls both at their border and at key points within their network, intrusion detection systems, a patch-management strategy that included automatic patch updates where possible, virus scanners, spam and spyware detection mechanisms that update signatures automatically, and subscribed to various security alert mailing lists and addressed vulnerabilities raised through the alerts as needed.

## **5.11 Policy Area 11: Formal Audits**

Formal audits are conducted to ensure compliance with applicable statutes, regulations and policies.

### **5.11.1 Audits by the FBI CJIS Division**

#### **5.11.1.1 Triennial Compliance Audits by the FBI CJIS Division**

The FBI CJIS Division is authorized to conduct audits, once every three (3) years as a minimum, to assess agency compliance with applicable statutes, regulations and policies. The CJIS Audit Unit (CAU) shall conduct a triennial audit of each CSA in order to verify compliance with applicable statutes, regulations and policies. This audit shall include a sample of CJAs and, in coordination with the SIB, the NCJAs. Audits may be conducted on a more frequent basis if the audit reveals that an agency has not complied with applicable statutes, regulations and policies. The FBI CJIS Division shall also have the authority to conduct unannounced security inspections and scheduled audits of Contractor facilities.

#### **5.11.1.2 Triennial Security Audits by the FBI CJIS Division**

The FBI CJIS Division is authorized to conduct security audits of the CSA and SIB networks and systems, once every three (3) years as a minimum, to assess agency compliance with the CJIS Security Policy. This audit shall include a sample of CJAs and NCJAs. Audits may be conducted on a more frequent basis if the audit reveals that an agency has not complied with the CJIS Security Policy.

### **5.11.2 Audits by the CSA**

Each CSA shall:

1. At a minimum, triennially audit all CJAs and NCJAs which have direct access to the state system in order to ensure compliance with applicable statutes, regulations and policies.
2. In coordination with the SIB, establish a process to periodically audit all NCJAs, with access to CJ, in order to ensure compliance with applicable statutes, regulations and policies.
3. Have the authority to conduct unannounced security inspections and scheduled audits of Contractor facilities.

### **5.11.3 Special Security Inquiries and Audits**

All agencies having access to CJ shall permit an inspection team to conduct an appropriate inquiry and audit of any alleged security violations. The inspection team shall be appointed by the APB and shall include at least one representative of the CJIS Division. All results of the inquiry and audit shall be reported to the APB with appropriate recommendations.

### **5.11.4 References/Citations/Directives**

Appendix I contains all of the references used in this policy and may contain additional sources that apply to this section.

**Figure 14 - The Audit of a Local Police Department**

A local police department implemented a replacement CAD system that integrated to their state's CSA and was authorized to process CJI. Shortly after the implementation, their state's CSA conducted an audit of their policies, procedures, and systems that process CJI. The police department supplied all architectural and policy documentation, including detailed network diagrams, to the auditors in order to assist them in the evaluation. The auditors discovered a deficiency in the police department's systems and marked them "out" in this aspect of the FBI CJIS Security Policy. The police department quickly addressed the deficiency and took corrective action, notifying the auditors of their actions.

## **5.12 Policy Area 12: Personnel Security**

Having proper security measures against the insider threat is a critical component for the CJIS Security Policy. This section's security terms and requirements apply to all personnel who have access to unencrypted CJI including those individuals with only physical or logical access to devices that store, process or transmit unencrypted CJI.

### **5.12.1 Personnel Security Policy and Procedures**

#### **5.12.1.1 Minimum Screening Requirements for Individuals Requiring Access to CJI:**

1. To verify identification, a state of residency and national fingerprint-based record checks shall be conducted within 30 days of assignment for all personnel who have direct access to CJI and those who have direct responsibility to configure and maintain computer systems and networks with direct access to CJI. When appropriate, the screening shall be consistent with: (i) 5 CFR 731.106; (ii) Office of Personnel Management policy, regulations, and guidance; and (iii) agency policy, regulations, and guidance. (See Appendix J for applicable guidance regarding noncriminal justice agencies performing adjudication of civil fingerprint submissions.) Federal entities bypassing state repositories in compliance with federal law may not be required to conduct a state fingerprint-based record check.
2. All requests for access shall be made as specified by the CSO. The CSO, or their designee, is authorized to approve access to CJI. All CSO designees shall be from an authorized criminal justice agency.
3. If a felony conviction of any kind exists, the hiring authority in the Interface Agency shall deny access to CJI. However, the hiring authority may ask for a review by the CSO in extenuating circumstances where the severity of the offense and the time that has passed would support a possible variance.
4. If a record of any other kind exists, access to CJI shall not be granted until the CSO or his/her designee reviews the matter to determine if access is appropriate.
5. If the person appears to be a fugitive or has an arrest history without conviction, the CSO or his/her designee shall review the matter to determine if access to CJI is appropriate.
6. If the person is employed by a NCJA, the CSO or his/her designee, and, if applicable, the appropriate board maintaining management control, shall review the matter to determine if CJI access is appropriate. This same procedure applies if this person is found to be a fugitive or has an arrest history without conviction.
7. If the person already has access to CJI and is subsequently arrested and or convicted, continued access to CJI shall be determined by the CSO. This does not implicitly grant hiring/firing authority with the CSA, only the authority to grant access to CJI.
8. If the CSO or his/her designee determines that access to CJI by the person would not be in the public interest, access shall be denied and the person's appointing authority shall be notified in writing of the access denial.

9. Support personnel, contractors, and custodial workers with access to physically secure locations or controlled areas (during CJI processing) shall be subject to a state and national fingerprint-based record check unless these individuals are escorted by authorized personnel at all times.

It is recommended individual background re-investigations be conducted every five years unless Rap Back is implemented.

#### **5.12.1.2 Personnel Screening for Contractors and Vendors**

In addition to meeting the requirements in paragraph 5.12.1.1, contractors and vendors shall meet the following requirements:

1. Prior to granting access to CJI, the CGA on whose behalf the Contractor is retained shall verify identification via a state of residency and national fingerprint-based record check.
2. If a record of any kind is found, the CGA shall be formally notified and system access shall be delayed pending review of the criminal history record information. The CGA shall in turn notify the Contractor-appointed Security Officer.
3. When identification of the applicant with a criminal history has been established by fingerprint comparison, the CGA or the CJA (if the CGA does not have the authority to view CHRI) shall review the matter.
4. A Contractor employee found to have a criminal record consisting of felony conviction(s) shall be disqualified.
5. Applicants shall also be disqualified on the basis of confirmations that arrest warrants are outstanding for such applicants.
6. The CGA shall maintain a list of personnel who have been authorized access to CJI and shall, upon request, provide a current copy of the access list to the CSO.

Applicants with a record of misdemeanor offense(s) may be granted access if the CSO determines the nature or severity of the misdemeanor offense(s) do not warrant disqualification. The CGA may request the CSO to review a denial of access determination.

#### **5.12.2 Personnel Termination**

The agency, upon termination of individual employment, shall immediately terminate access to CJI.

#### **5.12.3 Personnel Transfer**

The agency shall review CJI access authorizations when personnel are reassigned or transferred to other positions within the agency and initiate appropriate actions such as closing and establishing accounts and changing system access authorizations.

#### **5.12.4 Personnel Sanctions**

The agency shall employ a formal sanctions process for personnel failing to comply with established information security policies and procedures.

### **5.12.5 References/Citations/Directives**

Appendix I contains all of the references used in this policy and may contain additional sources that apply to this section.

#### **Figure 15 - A Local Police Department's Personnel Security Controls**

A local police department implemented a replacement CAD system that integrated to their state's CSA and was authorized to process CJI. In addition to the physical and technical controls already in place, the police department implemented a variety of personnel security controls to reduce the insider threat. The police department used background screening consistent with the FBI CJIS Security Policy to vet those with unescorted access to areas in which CJI is processed, including the IT administrators employed by a contractor and all janitorial staff. The police department established sanctions against any vetted person found to be in violation of stated policies. The police department re-evaluated each person's suitability for access to CJI every five years.

## APPENDIX A TERMS AND DEFINITIONS

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**Access to Criminal Justice Information** — The physical or logical (electronic) ability, right or privilege to view, modify or make use of Criminal Justice Information.

**Administration of Criminal Justice** — The detection, apprehension, detention, pretrial release, post-trial release, prosecution, adjudication, correctional supervision, or rehabilitation of accused persons or criminal offenders. It also includes criminal identification activities; the collection, storage, and dissemination of criminal history record information; and criminal justice employment. In addition, administration of criminal justice includes “crime prevention programs” to the extent access to criminal history record information is limited to law enforcement agencies for law enforcement programs (e.g. record checks of individuals who participate in Neighborhood Watch or “safe house” programs) and the result of such checks will not be disseminated outside the law enforcement agency.

**Agency Coordinator (AC)** — A staff member of the Contracting Government Agency who manages the agreement between the Contractor and agency.

**Agency Liaison (AL)** — Coordinator of activities between the criminal justice agency and the noncriminal justice agency when responsibility for a criminal justice system has been delegated by a criminal justice agency to a noncriminal justice agency, which has in turn entered into an agreement with a contractor. The agency liaison shall, inter alia, monitor compliance with system security requirements. In instances in which the noncriminal justice agency's authority is directly from the CJIS systems agency, there is no requirement for the appointment of an agency liaison.

**Authorized User/Personnel** — An individual, or group of individuals, who have been appropriately vetted through a national fingerprint-based record check and have been granted access to CJI data.

**Authorized Recipient** — (1) A criminal justice agency or federal agency authorized to receive CHRI pursuant to federal statute or executive order; (2) A nongovernmental entity authorized by federal statute or executive order to receive CHRI for noncriminal justice purposes; or (3) A government agency authorized by federal statute or executive order, or state statute which has been approved by the United States Attorney General to receive CHRI for noncriminal justice purposes.

**Availability** — The degree to which information, a system, subsystem, or equipment is operable and in a useable state; frequently represented as a proportion of time the element is in a functioning condition.

**Biographic Data** — Information collected about individuals associated with a unique case, and not necessarily connected to identity data. Biographic Data does not provide a history of an individual, only information related to a unique case.

**Biometric Data** — When applied to CJI, it is used to identify individuals, and includes the following types: finger prints, palm prints, DNA, iris, and facial recognition.

**Case / Incident History** — All relevant information gathered about an individual, organization, incident, or combination thereof, arranged so as to serve as an organized record to provide

analytic value for a criminal justice organization. In regards to CJI, it is the information about the history of criminal incidents.

**Channeler** — An FBI approved contractor, who has entered into an agreement with an Authorized Recipient(s), to receive noncriminal justice applicant fingerprint submissions and collect the associated fees. The Channeler ensures fingerprint submissions are properly and adequately completed, electronically forwards fingerprint submissions to the FBI's CJIS Division for national noncriminal justice criminal history record check, and receives electronic record check results for dissemination to Authorized Recipients. A Channeler is essentially an "expediter" rather than a user of criminal history record check results.

**CJIS Advisory Policy Board (APB)** — The governing organization within the FBI CJIS Advisory Process composed of representatives from criminal justice and national security agencies within the United States. The APB reviews policy, technical, and operational issues relative to CJIS Division programs and makes subsequent recommendations to the Director of the FBI.

**CJIS Audit Unit (CAU)** — The organization within the FBI CJIS Division responsible to perform audits of CSAs to verify compliance with the CJIS Security Policy.

**CJIS Security Policy** — The FBI CJIS Security Policy document as published by the FBI CJIS ISO; the document containing this glossary.

**CJIS Systems Agency (CSA)** — A duly authorized state, federal, international, tribal, or territorial criminal justice agency on the CJIS network providing statewide (or equivalent) service to its criminal justice users with respect to the CJIS data from various systems managed by the FBI CJIS Division. There shall be only one CSA per state or territory. In federal agencies, the CSA may be the interface or switch to other federal agencies connecting to the FBI CJIS systems.

**CJIS Systems Agency Information Security Officer (CSA ISO)** — The appointed FBI CJIS Division personnel responsible to coordinate information security efforts at all CJIS interface agencies.

**CJIS Systems Officer (CSO)** — An individual located within the CJIS Systems Agency responsible for the administration of the CJIS network on behalf for the CJIS Systems Agency.

**Compact Council** — The entity created by the National Crime Prevention and Privacy Compact of 1998 that has the authority to promulgate rules and procedures governing the use of the III system for noncriminal justice purposes.

**Compact Officers** — The leadership of the Compact Council, oversees the infrastructure established by the National Crime Prevention and Privacy Compact Act of 1998, which is used by ratifying states to exchange criminal records for noncriminal justice purposes. Their primary responsibilities are to promulgate rules and procedures for the effective and appropriate use of the III system.

**Computer Security Incident Response Capability (CSIRC)** — A collection of personnel, systems, and processes that are used to efficiently and quickly manage a centralized response to any sort of computer security incident which may occur.

**Confidentiality** — The concept of ensuring that information is observable only to those who have been granted authorization to do so.



**Contractor** — A private business, agency or individual which has entered into an agreement for the administration of criminal justice or noncriminal justice functions with a Criminal Justice Agency or a Noncriminal Justice Agency. Also, a private business approved by the FBI CJIS Division to contract with Noncriminal Justice Agencies to perform noncriminal justice functions associated with civil fingerprint submission for hiring purposes.

**Contracting Government Agency (CGA)** — The government agency, whether a Criminal Justice Agency or a Noncriminal Justice Agency, which enters into an agreement with a private contractor.

**Crime Reports Data** — The data collected through the Uniform Crime Reporting program and reported upon annually by the FBI CJIS division used to analyze the crime statistics for the United States.

**Criminal History Record Information (CHRI)** — A subset of CJ. Any notations or other written or electronic evidence of an arrest, detention, complaint, indictment, information or other formal criminal charge relating to an identifiable person that includes identifying information regarding the individual as well as the disposition of any charges.

**Criminal Justice Agency (CJA)** — The courts, a governmental agency, or any subunit of a governmental agency which performs the administration of criminal justice pursuant to a statute or executive order and which allocates a substantial part of its annual budget to the administration of criminal justice. State and federal Inspectors General Offices are included.

**Criminal Justice Agency User Agreement** — A terms-of-service agreement that must be signed prior to accessing CJ. This agreement is required by each CJA and spells out user's responsibilities, the forms and methods of acceptable use, penalties for their violation, disclaimers, and so on.

**Criminal Justice Conveyance** — A criminal justice conveyance is any mobile vehicle used for the purposes of criminal justice activities with the capability to comply, during operational periods, with the requirements of section 5.9.1.3.

**Criminal Justice Information (CJI)** — Criminal Justice Information is the abstract term used to refer to all of the FBI CJIS provided data necessary for law enforcement agencies to perform their mission and enforce the laws, including but not limited to: biometric, identity history, person, organization, property, and case/incident history data. In addition, CJI refers to the FBI CJIS-provided data necessary for civil agencies to perform their mission; including, but not limited to data used to make hiring decisions.

**Criminal Justice Information Services Division (FBI CJIS or CJIS)** — The FBI division responsible for the collection, warehousing, and timely dissemination of relevant CJI to the FBI and to qualified law enforcement, criminal justice, civilian, academic, employment, and licensing agencies.

**Data** — See Information and CJI.

**Degauss** — Neutralize a magnetic field to erase information from a magnetic disk or other storage device. In the field of information technology, degauss has become synonymous with erasing information whether or not the medium is magnetic. In the event the device to be degaussed is not magnetic (e.g. solid state drive, USB storage device), steps other than magnetic degaussing may be required to render the information irretrievable from the device.

**Department of Justice (DoJ)** — The Department within the U.S. Government responsible to enforce the law and defend the interests of the United States according to the law, to ensure public safety against threats foreign and domestic, to provide federal leadership in preventing and controlling crime, to seek just punishment for those guilty of unlawful behavior, and to ensure fair and impartial administration of justice for all Americans.

**Direct Access** — (1) Having the authority to access systems managed by the FBI CJIS Division, whether by manual or automated methods, not requiring the assistance of, or intervention by, any other party or agency (28 CFR, Chapter 1, Part 20). (2) Having the authority to query or update national databases maintained by the FBI CJIS Division including national queries and updates automatically or manually generated by the CSA.

**Dissemination** — The transmission/distribution of CJI to Authorized Recipients within an agency.

**Federal Bureau of Investigation (FBI)** — The agency within the DOJ responsible to protect and defend the United States against terrorist and foreign intelligence threats, to uphold and enforce the criminal laws of the United States, and to provide leadership and criminal justice services to federal, state, municipal, and international agencies and partners.

**FBI CJIS Information Security Officer (FBI CJIS ISO)** — The FBI personnel responsible for the maintenance and dissemination of the FBI CJIS Security Policy; the liaison between the FBI and the CSA's ISOs and other relevant security points-of-contact (POCs); the provider of technical guidance as to the intent and implementation of technical policy issues; the POC for computer incident notification which also disseminates security alerts to the CSOs and ISOs.

**Federal Information Security Management Act (FISMA)** — The Federal Information Security Management Act of 2002, a US Federal law that established information security standards for the protection of economic and national security interests of the United States. It requires each federal agency to develop, document, and implement an agency-wide program to provide information security for the information and information systems that support the operations and assets of the agency, including those provided or managed by another agency, contractor, or other source.

**For Official Use Only (FOUO)** — A caveat applied to unclassified sensitive information that may be exempt from mandatory release to the public under the Freedom of Information Act (FOIA), 5 U.S.C 522. In general, information marked FOUO shall not be disclosed to anybody except Government (Federal, State, tribal, or local) employees or contractors with a need to know.

**Guest Operating System** — An operating system that has emulated hardware presented to it by a host operating system. Also referred to as the virtualized operating system.

**Host Operating System** — In the context of virtualization, the operating system that interfaces with the actual hardware and arbitrates between it and the guest operating systems. It is also referred to as a hypervisor.

**Hypervisor** — See Host Operating System.

**Identity History Data** — Textual data that corresponds with an individual's biometric data, providing a history of criminal and/or civil events for the identified individual.

**Information** — See data and CJI.

**Information Exchange Agreement** — An agreement that codifies the rules by which two parties engage in the sharing of information. These agreements typically include language which establishes some general duty-of-care over the other party's information, whether and how it can be further disseminated, penalties for violations, the laws governing the agreement (which establishes venue), procedures for the handling of shared information at the termination of the agreement, and so on. This document will ensure consistency with applicable federal laws, directives, policies, regulations, standards and guidance.

**Information Security Officer (ISO)** — Typically a member of an organization who has the responsibility to establish and maintain information security policy, assesses threats and vulnerabilities, performs risk and control assessments, oversees the governance of security operations, and establishes information security training and awareness programs. The ISO also usually interfaces with security operations to manage implementation details and with auditors to verify compliance to established policies.

**Information System** — A system of people, data, and processes, whether manual or automated, established for the purpose of managing information.

**Integrated Automated Fingerprint Identification System (IAFIS)** — The national fingerprint and criminal history system maintained by the FBI CJIS Division that provides the law enforcement community with automated fingerprint search capabilities, latent searching capability, electronic image storage, and electronic exchange of fingerprints and responses.

**Integrity** — The perceived consistency of expected outcomes, actions, values, and methods of an individual or organization. As it relates to data, it is the concept that data is preserved in a consistent and correct state for its intended use.

**Interconnection Security Agreement (ISA)** — An agreement much like an Information Exchange Agreement as mentioned above, but concentrating more on formalizing the technical and security requirements pertaining to some sort of interface between the parties' information systems.

**Interface Agency** — A legacy term used to describe agencies with direct connections to the CSA. This term is now used predominantly in a common way to describe any sub-agency of a CSA or SIB that leverages the CSA or SIB as a conduit to FBI CJIS information.

**Interstate Identification Index (III)** — The CJIS service that manages automated submission and requests for CHRI that is warehoused subsequent to the submission of fingerprint information. Subsequent requests are directed to the originating State as needed.

**Law Enforcement Online (LEO)** — A secure, Internet-based communications portal provided by the FBI CJIS Division for use by law enforcement, first responders, criminal justice professionals, and anti-terrorism and intelligence agencies around the globe. Its primary purpose is to provide a platform on which various law enforcement agencies can collaborate on FOUO matters.

**Local Agency Security Officer (LASO)** — The primary Information Security contact between a local law enforcement agency and the CSA under which this agency interfaces with the FBI CJIS Division. The LASO actively represents their agency in all matters pertaining to Information Security, disseminates Information Security alerts and other material to their constituents, maintains Information Security documentation (including system configuration

data), assists with Information Security audits of hardware and procedures, and keeps the CSA informed as to any Information Security needs and problems.

**Management Control Agreement (MCA)** — An agreement between parties that wish to share or pool resources that codifies precisely who has administrative control over, versus overall management and legal responsibility for, assets covered under the agreement. An MCA must ensure the CJA's authority remains with regard to all aspects of section 3.2.2. The MCA usually results in the CJA having ultimate authority over the CJI supporting infrastructure administered by the NCJA.

**National Crime Information Center (NCIC)** — An information system which stores CJI which can be queried by appropriate Federal, state, and local law enforcement and other criminal justice agencies.

**National Instant Criminal Background Check System (NICS)** — A system mandated by the Brady Handgun Violence Prevention Act of 1993 that is used by Federal Firearms Licensees (FFLs) to instantly determine via telephone or other electronic means whether the transfer of a firearm would be in violation of Section 922 (g) or (n) of Title 18, United States Code, or state law, by evaluating the prospective buyer's criminal history.

**National Institute of Standards and Technology (NIST)** — Founded in 1901, NIST is a non-regulatory federal agency within the U.S. Department of Commerce whose mission is to promote U.S. innovation and industrial competitiveness by advancing measurement science, standards, and technology in ways that enhance economic and national security.

**Noncriminal Justice Agency (NCJA)** — A governmental agency, or any subunit thereof, that provides services primarily for purposes other than the administration of criminal justice. Examples of services include, but not limited to, employment suitability, licensing determinations, immigration and naturalization matters, and national security clearances.

**NCJA (Government)** — A Federal, state, local, or tribal governmental agency or any subunit thereof whose charter does not include the responsibility to administer criminal justice, but may have a need to process CJI. An example would be the central IT organization within a state government that administers equipment on behalf of a state law-enforcement agency.

**NCJA (Private)** — A private agency or subunit thereof whose charter does not include the responsibility to administer criminal justice, but may have a need to process CJI. An example would include a local bank.

**NCJA (Public)** — A public agency or sub-unit thereof whose charter does not include the responsibility to administer criminal justice, but may have a need to process CJI. An example would include a county school board which uses CHRI to assist in employee hiring decisions.

**Noncriminal Justice Purpose** — The uses of criminal history records for purposes authorized by federal or state law other than purposes relating to the administration of criminal justice, including employment suitability, licensing determinations, immigration and naturalization matters, and national security clearances.

**Office of Management and Budget (OMB)** — The agency within the Executive Branch of the Federal government responsible to oversee the preparation of the federal budget, to assist in the supervision of other Executive Branch agencies, and to oversee and coordinate the Presidential Administration's procurement, financial management, information, and regulatory policies.

**Outsourcing** — The process of delegating in-house operations to a third-party. For instance, when the administration of criminal justice functions (network operations, dispatch functions, system administration operations, etc.) are performed for the criminal justice agency by a city or county information technology department or are contracted to be performed by a vendor.

**Outsourcing Standard** — National Crime Prevention and Privacy Compact Council's Outsourcing Standard. The Compact Council's uniform standards and processes for the interstate and Federal-State exchange of criminal history records for noncriminal justice purposes.

**Physically Secure Location** — A facility or an area, a room, or a group of rooms, within a facility with both the physical and personnel security controls sufficient to protect CJI and associated information systems. For interim compliance, a police vehicle shall be considered a physically secure location until September 30<sup>th</sup>, 2013. For the purposes of this policy, a police vehicle is defined as an enclosed criminal justice conveyance with the capability to comply, during operational periods, with section 5.9.1.3.

**Personal Firewall** — An application which controls network traffic to and from a computer, permitting or denying communications based on a security policy.

**Personally Identifiable Information (PII)** — PII is information which can be used to distinguish or trace an individual's identity, such as name, social security number, or biometric records, alone or when combined with other personal or identifying information which is linked or linkable to a specific individual, such as date and place of birth, or mother's maiden name.

**Property Data** — Information about vehicles and property associated with a crime.

**Rap Back** — An IAFIS service that allows authorized agencies to receive notification of subsequent criminal activity reported to the FBI committed by persons of interest.

**Repository Manager** — The designated manager of the agency having oversight responsibility for a CSA's fingerprint identification services. If both state fingerprint identification services and CJIS systems control are managed within the same state agency, the repository manager and CSO may be the same person.

**Secondary Dissemination** — The promulgation of CJI from a releasing agency to an authorized recipient agency when the recipient agency has not been previously identified in a formal information exchange agreement.

**Security Addendum (SA)** — A uniform addendum to an agreement between the government agency and a private contractor, approved by the Attorney General of the United States, which specifically authorizes access to criminal history record information, limits the use of the information to the purposes for which it is provided, ensures the security and confidentiality of the information consistent with existing regulations and the CJIS Security Policy, provides for sanctions, and contains such other provisions as the Attorney General may require.

**Sensitive But Unclassified (SBU)** — Designation of information in the United States federal government that, though unclassified, often requires strict controls over its distribution. SBU is a broad category of information that includes material covered by such designations as For Official Use Only (FOUO), Law Enforcement Sensitive (LES), Sensitive Homeland Security Information, Security Sensitive Information (SSI), Critical Infrastructure Information (CII), etc. Some categories of SBU information have authority in statute or regulation (e.g. SSI, CII) while

others, including FOUO, do not. As of May 9, 2008, the more appropriate terminology to use is Controlled Unclassified Information (CUI).

**Service** — The organized system of apparatus, appliances, personnel, etc, that supply some tangible benefit to the consumers of this service. In the context of CJI, this usually refers to one of the applications that can be used to process CJI.

**Shredder** — A device used for shredding documents, often as a security measure to prevent unapproved persons from reading them. Strip-cut shredders, also known as straight-cut or spaghetti-cut, slice the paper into long, thin strips but are not considered secure. Cross-cut shredders provide more security by cutting paper vertically and horizontally into confetti-like pieces.

**Social Engineering** — The act of manipulation people into performing actions or divulging confidential information. While similar to a confidence trick or simple fraud, the term typically applies to trickery or deception for the purpose of information gathering, fraud, or computer system access; in most cases the attacker never comes face-to-face with the victim.

**Software Patch** — A piece of software designed to fix problems with, or update, a computer program or its supporting data. This includes fixing security vulnerabilities and other bugs and improving the usability or performance. Though meant to fix problems, poorly designed patches can sometimes introduce new problems. As such, patches should be installed in a test environment prior to being installed in a live, operational system. Patches often can be found in multiple locations but should be retrieved only from sources agreed upon through organizational policy.

**State and Federal Agency User Agreement** — A written agreement that each CSA or SIB Chief shall execute with the FBI CJIS Division stating their willingness to demonstrate conformance with the FBI CJIS Security Policy prior to the establishment of connectivity between organizations. This agreement includes the standards and sanctions governing use of CJIS systems, as well as verbiage to allow the FBI to periodically audit the CSA as well as to allow the FBI to penetration test its own network from the CSA's interfaces to it.

**State Compact Officer** — The representative of a state that is party to the National Crime Prevention and Privacy Compact, and is the chief administrator of the state's criminal history record repository or a designee of the chief administrator who is a regular full-time employee of the repository.

**State Identification Bureau (SIB)** — The state agency with the responsibility for the state's fingerprint identification services.

**State Identification Bureau (SIB) Chief** — The SIB Chief is the designated manager of state's SIB. If both state fingerprint identification services and CJIS systems control are managed within the same state agency, the SIB Chief and CSO may be the same person.

**System** — Refer to connections to the FBI's criminal justice information repositories and the equipment used to establish said connections. In the context of CJI, this usually refers to applications and all interconnecting infrastructure required to use those applications that process CJI.

**Terminal Agency Coordinator (TAC)** — Serves as the point-of-contact at the local agency for matters relating to CJIS information access. A TAC administers CJIS systems programs within the local agency and oversees the agency's compliance with CJIS systems policies.

**Virtualization** — Refers to a methodology of dividing the resources of a computer (hardware and software) into multiple execution environments, by applying one or more concepts or technologies such as hardware and software partitioning, time-sharing, partial or complete machine simulation or emulation allowing multiple operating systems, or images, to run concurrently on the same hardware.

## APPENDIX B ACRONYMS

Acronym	Term
AA	Advanced Authentication
AC	Agency Coordinator
ACL	Access Control List
AES	Advanced Encryption Standard
AP	Access Point
APB	Advisory Policy Board
BD-ADDR	Bluetooth-Enabled Wireless Devices and Addresses
CAD	Computer-Assisted Dispatch
CAU	CJIS Audit Unit
CFR	Code of Federal Regulations
CGA	Contracting Government Agency
CHRI	Criminal History Record Information
CJA	Criminal Justice Agency
CJI	Criminal Justice Information
CJIS	Criminal Justice Information Services
ConOps	Concept of Operations
CSA	CJIS Systems Agency
CSIRC	Computer Security Incident Response Capability
CSO	CJIS Systems Officer
DAA	Designated Approving Authority
DoJ	Department of Justice
DoJCERT	DoJ Computer Emergency Response Team



FBI	Federal Bureau of Investigation
FIPS	Federal Information Processing Standards
FISMA	Federal Information Security Management Act
FOIA	Freedom of Information Act
FOUO	For Official Use Only
HTTP	Hypertext Transfer Protocol
IAFIS	Integrated Automated Fingerprint Identification System
IDS	Intrusion Detection System
III	Interstate Identification Index
IP	Internet Protocol
IPS	Intrusion Prevention System
IPSEC	Internet Protocol Security
ISA	Interconnection Security Agreement
ISO	Information Security Officer
IT	Information Technology
LASO	Local Agency Security Officer
LEO	Law Enforcement Online
MAC	Media Access Control
MCA	Management Control Agreement
MITM	Man-in-the-Middle
MOU	Memorandum of Understanding
NCIC	National Crime Information Center
NCJA	Noncriminal Justice Agency
NICS	National Instant Criminal Background Check System
NIST	National Institute of Standards and Technology

OMB	Office of Management and Budget
ORI	Originating Agency Identifier
PDA	Personal Digital Assistant
PII	Personally Identifiable Information
PIN	Personal Identification Number
PKI	Public Key Infrastructure
POC	Point-of-Contact
QA	Quality Assurance
RF	Radio Frequency
SA	Security Addendum
SCO	State Compact Officer
SIB	State Identification Bureau
SIG	Special Interest Group
SP	Special Publication
SSID	Service Set Identifier
TAC	Terminal Agency Coordinator
TLS	Transport Layer Security
VLAN	Virtual Local Area Network
VoIP	Voice Over Internet Protocol
VPN	Virtual Private Network
WEP	Wired Equivalent Privacy
WLAN	Wireless Local Area Network
WPA	Wi-Fi Protected Access

## **APPENDIX C NETWORK TOPOLOGY DIAGRAMS**

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Network diagrams, i.e. topological drawings, are an essential part of solid network security. Through graphical illustration, a comprehensive network diagram provides the “big picture” – enabling network managers to quickly ascertain the interconnecting nodes of a network for a multitude of purposes, including troubleshooting and optimization. Network diagrams are integral to demonstrating the manner in which each agency ensures criminal justice data is afforded appropriate technical security protections and is protected during transit and at rest.

The following diagrams, labeled Appendix C.1-A through C.1-E, are examples for agencies to utilize during the development, maintenance, and update stages of their own network diagrams. By using these example drawings as a guideline, agencies can form the foundation for ensuring compliance with Section 5.7.1.2 of the CJIS Security Policy.

The purpose for including the following diagrams in this policy is to aid agencies in their understanding of diagram expectations and should not be construed as a mandated method for network topologies. It should also be noted that agencies are not required to use the identical icons depicted in the example diagrams and should not construe any depiction of a particular vendor product as an endorsement of that product by the FBI CJIS Division.

Appendix C.1-A is a conceptual overview of the various types of agencies that can be involved in handling of CJIS data, and illustrates several ways in which these interconnections might occur. This diagram is not intended to demonstrate the level of detail required for any given agency’s documentation, but it provides the reader with some additional context through which to digest the following diagrams. Take particular note of the types of network interfaces in use between agencies, in some cases dedicated circuits with encryption mechanisms, and in other cases VPNs over the Internet. This diagram attempts to show the level of diversity possible within the law enforcement community. These diagrams in no way constitute a standard for network engineering, but rather, for the expected quality of documentation.

The next four topology diagrams are of two separate types: those for strictly conceptual agencies, C.1-B through C.1-D, and one documenting an actual municipal law-enforcement agency’s equipment, C.1-E. For C.1-B through C.1-D, the details identifying specific “moving parts” in the diagrams by manufacturer and model are omitted, but it is expected that any agencies producing such documentation will provide diagrams with full manufacturer and model detail for each element of the diagram as is demonstrated in C.1-E. Note that the quantities of clients should be documented in order to assist the auditor in understanding the scale of assets and information being protected.

Appendix C.1-B depicts a conceptual state law enforcement agency’s network topology and demonstrates a number of common technologies that are in use throughout the law enforcement community (some of which are compulsory per CJIS policy, and some of which are optional) including Mobile Broadband cards, VPNs, Firewalls, Intrusion Detection Devices, VLANs, and so forth. Note that although most state agencies will likely have highly-available configurations, the example diagram shown omits these complexities and only shows the “major moving parts” for clarity but please note the policy requires the logical location of all components be shown. The level of detail depicted should provide the reader with a pattern to model future documentation from, but should not be taken as network engineering guidance.

Appendix C.1-C depicts a conceptual county law enforcement agency. A number of common technologies are presented merely to reflect the diversity in the community, including proprietary Packet-over-RF infrastructures and advanced authentication techniques, and to demonstrate the fact that agencies can act as proxies for other agencies.

Appendix C.1-D depicts a conceptual municipal law enforcement agency, presumably a small one that lacks any precinct-to-patrol data communications. This represents one of the smallest designs that could be assembled that, assuming all other details are properly considered, would meet the criteria for Section 5.7.1.2. This diagram helps to demonstrate the diversity in size that agencies handling criminal justice data exhibit.

Appendix C.1-E depicts an actual municipal police force's topology, and demonstrates the level of detail suitable to assist an auditor. It also shows a few more common technologies in use, namely thin-client computing, advanced authentication services, and so on.

Figure C-1-A Overview: Conceptual Connections Between Various Agencies

### Overview: Conceptual Connections Between Various Agencies

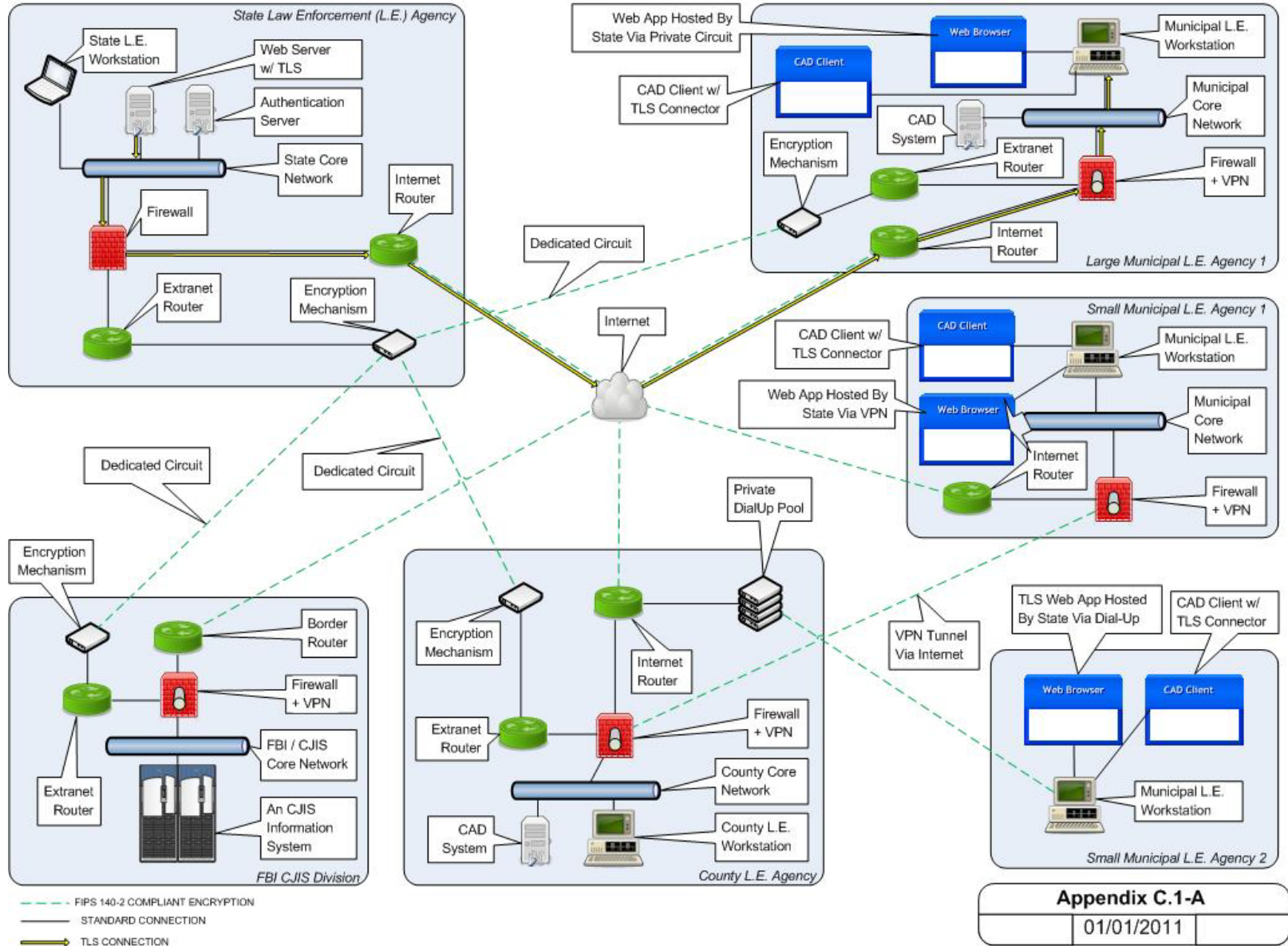
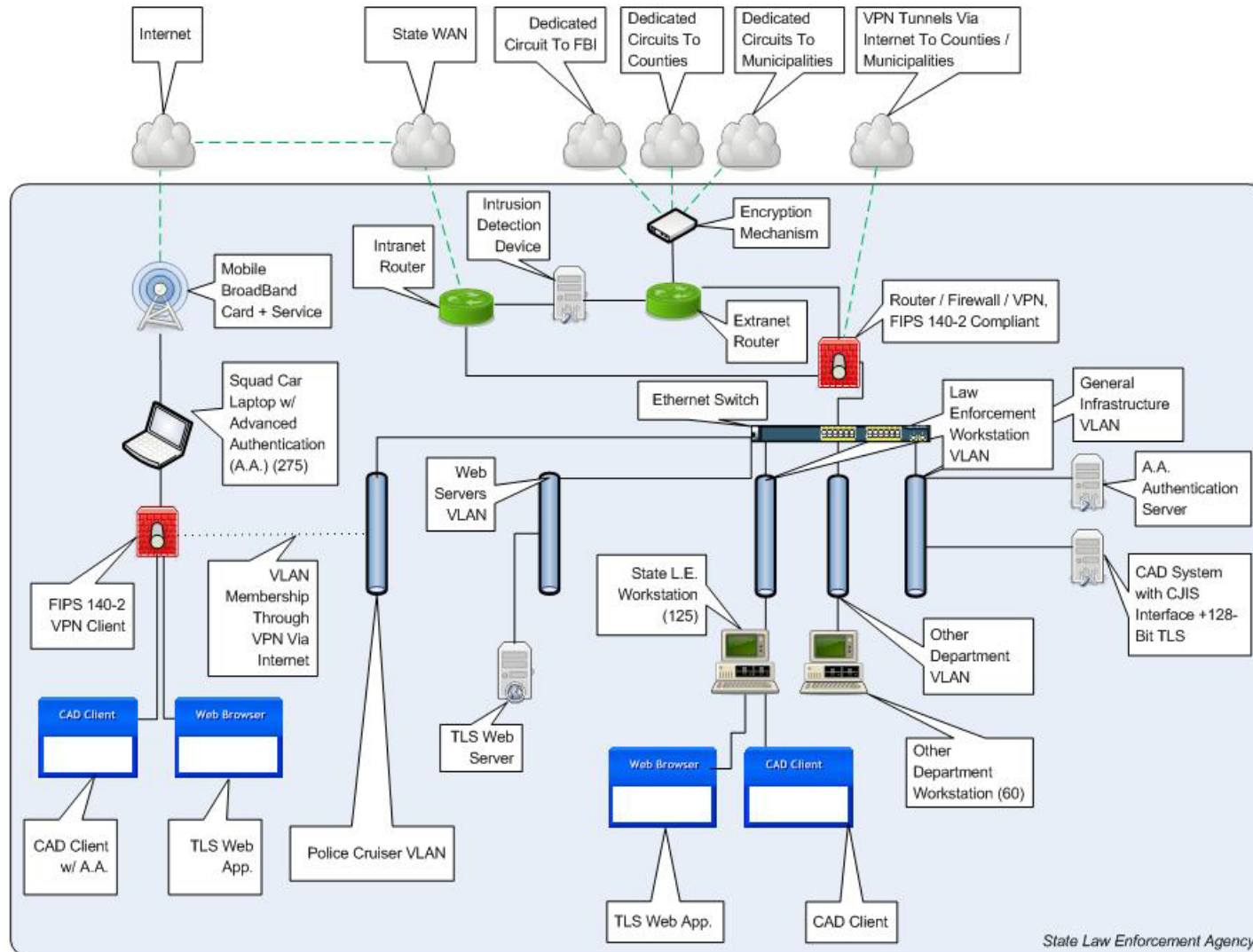


Figure C-1-B Conceptual Topology Diagram for a State Law Enforcement Agency

### Conceptual Topology Diagram For A State Law Enforcement Agency



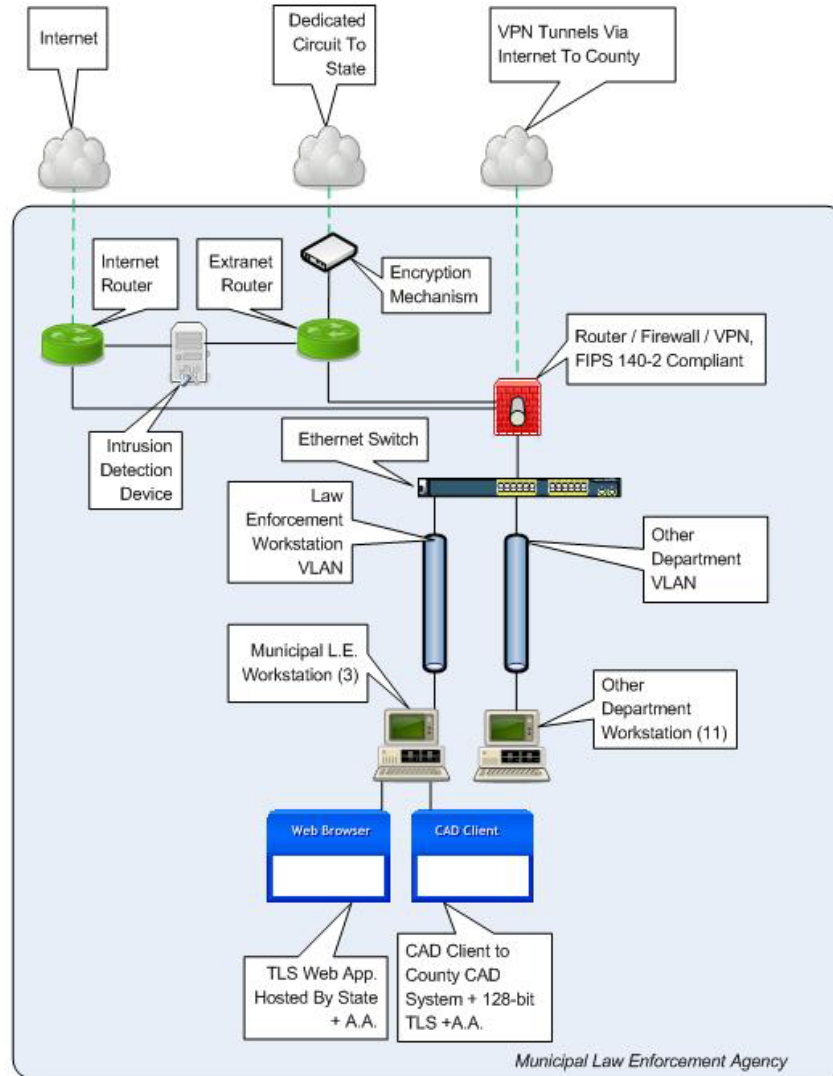
--- FIPS 140-2 COMPLIANT ENCRYPTION  
 ——— STANDARD CONNECTION

**Appendix C.1-B**  
 01/01/2011



Figure C-1-D Conceptual Topology Diagram for a Municipal Law Enforcement Agency

### Conceptual Topology Diagram For A Municipal Law Enforcement Agency



--- FIPS 140-2 COMPLIANT ENCRYPTION  
 ——— STANDARD CONNECTION

<b>Appendix C.1-D</b>		
	01/01/2011	



# APPENDIX D SAMPLE INFORMATION EXCHANGE AGREEMENTS

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## D-1. CJIS User Agreement

### CRIMINAL JUSTICE INFORMATION SERVICES (CJIS) SYSTEMS USER AGREEMENT

The FBI CJIS Division provides state-of-the-art identification and information services to the local, state, tribal, federal, and international criminal justice communities, as well as the noncriminal justice community, for licensing and employment purposes. These services are administered and maintained by the FBI CJIS Division and managed in cooperation with the CJIS Systems Agency (CSA) and its administrator for CJIS data, the CJIS Systems Officer (CSO). The CJIS Systems include, but are not limited to: the Interstate Identification Index (III); National Crime Information Center (NCIC); Uniform Crime Reporting (UCR), whether summary or incident-based reporting to the National Incident-Based Reporting System; Fingerprint Identification Record System; Law Enforcement National Data Exchange (N-DEX); Law Enforcement Online; and the National Instant Criminal Background Check System (NICS).

The FBI CJIS Division provides the following services to its users, as applicable:

1. Operational, technical, and investigative assistance.
2. Telecommunication lines to state, federal, and regulatory interfaces.
3. Legal and legislative review of matters pertaining to all CJIS Systems.
4. Timely information on all aspects of all CJIS Systems and other related programs by means of operating manuals, code manuals, technical and operational updates, various newsletters, information letters, frequently asked questions, and other relevant documents.
5. Training assistance and up-to-date materials provided to each CSO, NICS Point of Contact (POC), state Compact Officer, State Administrator, Information Security Officer (ISO), and other appropriate personnel.
6. Ongoing assistance to Systems' users through meetings and briefings with the CSOs, State Administrators, Compact Officers, ISOs, and NICS State POCs to discuss operational and policy issues.
7. Advisory Process through which authorized users have input as to the policies and procedures governing the operation of CJIS programs.

8. National Crime Prevention and Privacy Compact Administrative Office through which states and other authorized users may submit issues concerning the noncriminal justice use of the III System.
9. Annual NICS Users Conference.
10. Audit.
11. Staff research assistance.

## **PART 1**

The purpose behind a designated CSO is to unify responsibility for Systems user discipline and to ensure adherence to established procedures and policies within each signatory state/territory/tribal agency and by each federal user. This agreement outlines the responsibilities of each CSO as they relate to all CJIS Systems and other related CJIS administered programs. These individuals are ultimately responsible for planning necessary hardware, software, funding, and training for access to all CJIS Systems.

To ensure continued access as set forth above, the CSA agrees to adhere to all applicable CJIS policies including, but not limited to, the following:

1. The signatory state/tribal agency will provide fingerprints that meet submission criteria for all qualifying arrests. In addition, states/tribal agencies will make their records available for interstate exchange for criminal justice and other authorized purposes unless restricted by state/tribal law, and, where applicable, continue to move toward participation in the III and, upon ratification of the National Crime Prevention and Privacy Compact, the National Fingerprint File.
2. Appropriate and reasonable quality assurance procedures; e.g., hit confirmation, audits for record timeliness, and validation, must be in place to ensure that only complete, accurate, and valid information is maintained in the CJIS Systems.
3. Biannual file synchronization of information entered into the III by participating states.
4. Security - Each agency is responsible for appropriate security measures as applicable to physical security of terminals and telecommunication lines; personnel security to include background screening requirements; technical security to protect against unauthorized use; data security to include III use, dissemination, and logging; and security of criminal history records. Additionally, each CSO must ensure that all agencies establish an

information security structure that provides for an ISO and complies with the CJIS Security Policy.

5. Audit - Each agency shall be responsible for complying with all audit requirements for use of CJIS Systems. Each CSO is responsible for completing a triennial audit of all agencies with access to CJIS Systems through the CSO's lines.
6. Training - Each agency shall be responsible for training requirements, including compliance with operator training mandates.
7. Integrity of the Systems - Each agency shall be responsible for maintaining the integrity of the system in accordance with FBI CJIS Division/state/federal/tribal policies to ensure only authorized terminal access; only authorized transaction submission; and proper handling and dissemination of CJIS data. Each agency shall also be responsible for computer security incident reporting as required by the *CJIS Security Policy*.

The following documents are incorporated by reference and made part of this agreement for CSA users:

1. Bylaws for the CJIS Advisory Policy Board and Working Groups.
2. CJIS Security Policy.
3. Interstate Identification Index Operational and Technical Manual, National Fingerprint File Operations Plan, NCIC 2000 Operating Manual, UCR Handbook-NIBRS Edition, and National Incident-Based Reporting System Volumes 1, 2, and 4.
4. National Crime Prevention and Privacy Compact, 42 United States Code (U.S.C.) §14616.
5. NCIC Standards and UCR Standards, as recommended by the CJIS Advisory Policy Board.
6. The National Fingerprint File Qualification Requirements.
7. Title 28, Code of Federal Regulations, Parts 20 and 25, §50.12, and Chapter IX.
8. Electronic Fingerprint Transmission Specifications.

9. Other relevant documents, to include: NCIC Technical and Operational Updates, CJIS Information Letters, NICS User Manual, NICS Interface Control Document.
10. Applicable federal, state, and tribal laws and regulations.

## **PART 2**

Additionally, there are authorized federal regulatory recipients and other authorized users that provide electronic fingerprint submissions through a CJIS Wide Area Network (WAN) connection (or other approved form of electronic connection) to the CJIS Division that are required to comply with the following CJIS policies:

1. The authorized user will provide fingerprints that meet submission criteria and apply appropriate and reasonable quality assurance procedures.
2. Security - Each agency is responsible for appropriate security measures as applicable to physical security of communication equipment; personnel security to include background screening requirements; technical security to protect against unauthorized use; and security of criminal history records.
3. Audit - Each authorized user shall be responsible for complying with all audit requirements for CJIS Systems. Additionally, each authorized user is subject to a triennial audit by the CJIS Division Audit staff.
4. Training - Each authorized user receiving criminal history record information shall be responsible for training requirements, including compliance with proper handling of criminal history records.

The following documents are incorporated by reference and made part of this agreement for non-CSA authorized users:

1. CJIS Security Policy.
2. National Crime Prevention and Privacy Compact, 42 U.S.C. §14616.
3. Title 28, Code of Federal Regulations, Parts 20 and 25, § 50.12, and Chapter IX.
4. Other relevant documents, to include CJIS Information Letters.

5. Applicable federal, state, and tribal laws and regulations.

## **GENERAL PROVISIONS**

### Funding:

Unless otherwise agreed in writing, each party shall bear its own costs in relation to this agreement. Expenditures will be subject to federal and state budgetary processes and availability of funds pursuant to applicable laws and regulations. The parties expressly acknowledge that this in no way implies that Congress will appropriate funds for such expenditures.

### Termination:

1. All activities of the parties under this agreement will be carried out in accordance to the above-described provisions.
2. This agreement may be amended or terminated by the mutual written consent of the parties authorized representatives.
3. Either party may terminate this agreement upon 30-days written notification to the other party. Such notice will be the subject of immediate consultation by the parties to decide upon the appropriate course of action. In the event of such termination, the following rules apply:
  - a. The parties will continue participation, financial or otherwise, up to the effective date of termination.
  - b. Each party will pay the costs it incurs as a result of termination.
  - c. All information and rights therein received under the provisions of this agreement prior to the termination will be retained by the parties, subject to the provisions of this agreement.

## **ACKNOWLEDGMENT AND CERTIFICATION**

As a CSO or CJIS WAN Official (or other CJIS authorized official), I hereby acknowledge the duties and responsibilities as set out in this agreement. I acknowledge that these duties and responsibilities have been developed and approved by CJIS Systems users to ensure the reliability, confidentiality, completeness, and accuracy of all information contained in, or obtained by means of, the CJIS Systems. I further acknowledge that failure to comply with these duties and responsibilities may result in the imposition of sanctions against the offending state/agency; other federal, tribal, state, and local criminal justice users; and approved noncriminal justice users with System access, whether direct or indirect. The Director of the FBI (or the National Crime Prevention and Privacy Compact Council), may approve sanctions to include the termination of CJIS services.

I hereby certify that I am familiar with all applicable documents that are made part of this agreement and to all applicable federal and state laws and regulations relevant to the receipt and dissemination of documents provided through the CJIS Systems.

This agreement is a formal expression of the purpose and intent of both parties and is effective when signed. It may be amended by the deletion or modification of any provision contained therein, or by the addition of new provisions, after written concurrence of both parties. The "Acknowledgment and Certification" is being executed by the CSO or CJIS WAN Official (or other CJIS authorized official) in both an individual and representative capacity. Accordingly, this agreement will remain in effect after the CSO or CJIS WAN Official (or other CJIS authorized official) vacates his/her position or until it is affirmatively amended or rescinded in writing. This agreement does not confer, grant, or authorize any rights, privileges, or obligations to any third party.

**SYSTEMS USER AGREEMENT**

Please execute either Part 1 or Part 2

**PART 1**

\_\_\_\_\_ Date: \_\_\_\_\_  
CJIS Systems Officer  
\_\_\_\_\_  
Printed Name/Title

CONCURRENCE OF CSA HEAD:  
\_\_\_\_\_ Date: \_\_\_\_\_  
CSA Head  
\_\_\_\_\_  
Printed Name/Title

**PART 2**

\_\_\_\_\_ Date: \_\_\_\_\_  
CJIS WAN Official (or other CJIS Authorized Official)  
\_\_\_\_\_  
Printed Name/Title

CONCURRENCE OF CJIS WAN AGENCY HEAD:  
\_\_\_\_\_ Date: \_\_\_\_\_  
CJIS WAN Agency Head  
\_\_\_\_\_  
Printed Name/Title

**FBI CJIS DIVISION:**

\_\_\_\_\_

Date: \_\_\_\_\_

Daniel D. Roberts  
Assistant Director  
FBI CJIS Division

\* The FBI Designated Federal Officer should be notified when a CSO or other CJIS WAN/authorized Official vacates his/her position. The name and telephone number of the Acting CSO or other CJIS WAN/authorized Official, and when known, the name and telephone number of the new CSO or other CJIS WAN/authorized Official, should be provided. Revised: 05/03/2006



**D-2. Management Control Agreement**

**Management Control Agreement**

Pursuant to the CJIS Security Policy Version 5, Sections 3.2.2 and 5.1, it is agreed that with respect to administration of that portion of computer systems and network infrastructure interfacing directly or indirectly with the state network (Network Name) for the interstate exchange of criminal history/criminal justice information, the (Criminal Justice Agency) shall have the authority, via managed control, to set and enforce:

- (1) Priorities.
- (2) Standards for the selection, supervision, and termination of personnel.
- (3) Policy governing operation of justice systems, computers, access devices, circuits, hubs, routers, firewalls, and any other components, including encryption, that comprise and support a telecommunications network and related criminal justice systems to include but not limited to criminal history record/criminal justice information, insofar as the equipment is used to process or transmit criminal justice systems information guaranteeing the priority, integrity, and availability of service needed by the criminal justice community.
- (4) Restriction of unauthorized personnel from access or use of equipment accessing the State network.
- (5) Compliance with all rules and regulations of the (Criminal Justice Agency) Policies and CJIS Security Policy in the operation of all information received.

“Responsibility for management of security control shall remain with the criminal justice agency.” CJIS Security Policy Version 5.0, Section 3.2.

This agreement covers the overall supervision of all (Criminal Justice Agency) systems, applications, equipment, systems design, programming, and operational procedures associated with the development, implementation, and maintenance of any (Criminal Justice Agency) system to include NCIC Programs that may be subsequently designed and/or implemented within the (Criminal Justice Agency).

\_\_\_\_\_  
John Smith, CIO  
Any State Department of Administration

\_\_\_\_\_  
Date

\_\_\_\_\_  
Joan Brown, CIO  
(Criminal Justice Agency)

\_\_\_\_\_  
Date

**D-3. Noncriminal Justice Agency Agreement & Memorandum of Understanding**

MEMORANDUM OF UNDERSTANDING

BETWEEN

THE FEDERAL BUREAU OF INVESTIGATION

AND

**(Insert Name of Requesting Organization)**

FOR

THE ESTABLISHMENT AND ACCOMMODATION OF  
THIRD-PARTY CONNECTIVITY TO THE  
CRIMINAL JUSTICE INFORMATION SERVICES DIVISION'S WIDE AREA NETWORK

1. **PURPOSE:** This Memorandum of Understanding (MOU) between the Federal Bureau of Investigation (FBI) and **(insert requesting organization's name)**, hereinafter referred to as the "parties," memorializes each party's responsibilities with regard to establishing connectivity to records services accessible via the Wide Area Network (WAN) of the FBI's Criminal Justice Information Services (CJIS) Division.

2. **BACKGROUND:** The requesting organization, **(insert requesting organization's name)**, being approved for access to systems of records accessible via the CJIS WAN, desires connectivity to the CJIS WAN or via a secure Virtual Private Network (VPN) Connection (Internet) to the CJIS WAN. The CJIS Division has created a framework for accommodating such requests based on the type of connection.

In preparing for such non-CJIS-funded connectivity to the CJIS WAN, the parties plan to acquire, configure, and place needed communications equipment at suitable sites and to make electronic connections to the appropriate systems of records via the CJIS WAN.

To ensure that there is a clear understanding between the parties regarding their respective roles in this process, this MOU memorializes each party's responsibilities regarding the development, operation, and maintenance of third-party connectivity to the CJIS WAN. Unless otherwise contained in an associated contract, the enclosed terms apply. If there is a conflict between terms and provisions contained in both the contract and this MOU, the contract will prevail.

3. **AUTHORITY:** The FBI is entering into this MOU under the authority provided by Title 28, United States Code (U.S.C.), Section 534; 42 U.S.C. § 14616; and/or Title 28, Code of Federal Regulations, Part 906.

4. **SCOPE:**

a. The CJIS Division agrees to:

i. Provide the requesting organization with a "CJIS WAN Third-Party Connectivity Package" that will detail connectivity requirements and options compatible with the CJIS Division's WAN architecture upon receipt of a signed nondisclosure statement.

ii. Configure the requesting organization's connection termination equipment suite at Clarksburg, West Virginia, and prepare it for deployment or shipment under the CJIS WAN option. In the Secure VPN arrangement only, the third party will develop, configure, manage, and maintain its network connectivity to its preferred service provider.

iii. Work with the requesting organization to install the connection termination equipment suite and verify connectivity.

iv. Perform installation and/or routine maintenance on the requesting organization's third-party dedicated CJIS WAN connection termination equipment after coordinating with the requesting organization's designated point of contact (POC) and during a time when the CJIS Division's technical personnel are near the requesting organization's site.

v. Perform periodic monitoring and troubleshooting of the requesting organization's CJIS WAN connection termination equipment. Software patches will be maintained on the dedicated CJIS WAN connected network equipment only. Under the Secure VPN option, no availability or data thru-put rates will be guaranteed.

vi. Provide 24 hours a day, 7 days a week uninterrupted monitoring from the CJIS Division's Network Operations Center.

vii. Provide information regarding potential hardware end-of-life replacement cycles to the requesting organization for its budgeting purposes.

viii. Maintain third-party dedicated CJIS WAN connection termination equipment as if in the CJIS Division's operational environment.

ix. Update the appropriate software on the requesting organization's dedicated connection termination equipment connected to the CJIS WAN (i.e., Cisco Internetwork Operating System, SafeNet frame relay encryptor firmware, etc.) pursuant to the requesting organization's authorized maintenance contracts.

x. Provide a POC and telephone number for MOU-related issues.

b. The **(insert requesting organization's name)** agrees to:

i. Coordinate requests for third-party connectivity to the CJIS WAN or the Secure VPN with the CJIS Division's POC.

ii. Purchase hardware and software that are compatible with the CJIS WAN.

iii. Pay for the telecommunications infrastructure that supports its connection to the CJIS WAN or Secure VPN.

iv. Maintain telecommunication infrastructure in support of Secure VPN connectivity.

v. Provide any/all hardware and software replacements and upgrades as mutually agreed to by the parties.

vi. Pay for all telecommunication requirements related to its connectivity.

vii. Provide required information for dedicated service relating to Data Link Connection Identifiers, Circuit Identifier, Permanent Virtual Circuit Identifiers,

Local Exchange Carrier Identifier, POC, location, etc., as determined by the parties.

viii. Transport the CJIS WAN connection termination equipment suite to the CJIS Division for configuration and preparation for deployment under the dedicated service option.

ix. Provide registered Internet Protocol information to be used by the requesting organization's system to the CJIS Division.

x. Provide the CJIS Division with six months advance notice or stated amount of time for testing activities (i.e., disaster recovery exercises).

xi. Provide the CJIS Division with applicable equipment maintenance contract numbers and level of service verifications needed to perform software upgrades on connection termination equipment.

xii. Provide the CJIS Division with applicable software upgrade and patch images (or information allowing the CJIS Division to access such images).

xiii. Transport only official, authorized traffic over the Secure VPN.

xiv. Provide a POC and telephone number for MOU-related issues.

5. **FUNDING:** There are no reimbursable expenses associated with this level of support. Each party will fund its own activities unless otherwise agreed to in writing. This MOU is not an obligation or commitment of funds, nor a basis for transfer of funds, but rather is a basic statement of understanding between the parties hereto of the nature of the relationship for the connectivity efforts. Unless otherwise agreed to in writing, each party shall bear its own costs in relation to this MOU. Expenditures by each party will be subject to its budgetary processes and to the availability of funds and resources pursuant to applicable laws, regulations, and policies. The parties expressly acknowledge that the above language in no way implies that Congress will appropriate funds for such expenditures.

6. **SETTLEMENT OF DISPUTES:** Disagreements between the parties arising under or relating to this MOU will be resolved only by consultation between the parties and will not be referred to any other person or entity for settlement.

7. SECURITY: It is the intent of the parties that the actions carried out under this MOU will be conducted at the unclassified level. No classified information will be provided or generated under this MOU.

8. AMENDMENT, TERMINATION, ENTRY INTO FORCE, AND DURATION:

a. All activities of the parties under this MOU will be carried out in accordance with the above-described provisions.

b. This MOU may be amended or terminated by the mutual written consent of the parties' authorized representatives.

c. Either party may terminate this MOU upon 30-days written notification to the other party. Such notice will be the subject of immediate consultation by the parties to decide upon the appropriate course of action. In the event of such termination, the following rules apply:

i. The parties will continue participation, financial or otherwise, up to the effective date of the termination.

ii. Each party will pay the costs it incurs as a result of the termination.

iii. All information and rights therein received under the provisions of this MOU prior to the termination will be retained by the parties, subject to the provisions of this MOU.

9. FORCE AND EFFECT: This MOU, which consists of nine numbered sections, will enter into effect upon signature of the parties and will remain in effect until terminated. The parties should review the contents of this MOU annually to determine whether there is a need for the deletion, addition, or amendment of any provision. This MOU is not intended, and should not be construed, to create any right or benefit, substantive or procedural, enforceable at law or otherwise by any third party against the parties, their parent agencies, the United States, or the officers, employees, agents, or other associated personnel thereof.

The foregoing represents the understandings reached between the parties.

FOR THE FEDERAL BUREAU OF INVESTIGATION

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DANIEL D. ROBERTS

Assistant Director

Criminal Justice Information Services Division

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Date

FOR THE (insert requesting organization name)

---

Date

#### **D-4. Interagency Connection Agreement**

### **CRIMINAL JUSTICE INFORMATION SERVICES (CJIS) Wide Area Network (WAN) USER AGREEMENT BY INTERIM REMOTE LATENT USERS**

The responsibility of the FBI CJIS Division is to provide state-of-the-art identification and information services to the local, state, federal, and international criminal justice communities, as well as the civil community for licensing and employment purposes. The data provided by the information systems administered and maintained by the FBI CJIS Division are routed to and managed in cooperation with the designated interface agency official. This information includes, but is not limited to, the Interstate Identification Index (III), National Crime Information Center (NCIC), Uniform Crime Reporting (UCR)/National Incident-Based Reporting System (NIBRS), and the Integrated Automated Fingerprint Identification System (IAFIS) programs.

In order to fulfill this responsibility, the FBI CJIS Division provides the following services to its users:

- Operational, technical, and investigative assistance;
- Telecommunications lines to local, state, federal and authorized interfaces;
- Legal and legislative review of matters pertaining to IAFIS, CJIS WAN and other related services;
- Timely information on all aspects of IAFIS, CJIS WAN, and other related programs by means of technical and operational updates, various newsletters, and other relative documents;
- Shared management through the CJIS Advisory Process and the Compact Council;
- Training assistance and up-to-date materials provided to each designated agency official, and;
- Audit.



The concept behind a designated interface agency official is to unify responsibility for system user discipline and ensure adherence to system procedures and policies within each interface agency. These individuals are ultimately responsible for planning necessary hardware, software, funding, training, and the administration of policy and procedures including security and integrity for complete access to CJIS related systems and CJIS WAN related data services by authorized agencies.

The following documents and procedures are incorporated by reference and made part of this agreement:

- *CJIS Security Policy*;
- *Title 28, Code of Federal Regulations, Part 20*;
- Computer Incident Response Capability (CIRC);
- Applicable federal and state laws and regulations.

To ensure continued access as set forth above, the designated interface agency agrees to adhere to all CJIS policies, including, but not limited to, the following:

1. The signatory criminal agency will provide fingerprints for all qualifying arrests either via electronic submission or fingerprint card that meet submission criteria. In addition, the agency will make their records available for interstate exchange for criminal justice and other authorized purposes.
2. The signatory civil agency with legislative authority will provide all qualifying fingerprints via electronic submission or fingerprint card that meet submission criteria.
3. Appropriate and reasonable quality assurance procedures must be in place to ensure that only complete, accurate, and valid information is maintained in the system.
4. Security - Each agency is responsible for appropriate security measures as applicable to physical security of terminals and telecommunications lines; Interim Distributed Imaging System (IDIS) equipment shall remain stand-

alone devices and be used only for authorized purposes; personnel security to meet background screening requirements; technical security to protect against unauthorized use; data security, dissemination, and logging for audit purposes; and actual security of criminal history records. Additionally, each agency must establish an information security structure that provides for an Information Security Officer (ISO) or a security point of contact.

5. Audit - Each agency shall be responsible for complying with the appropriate audit requirements.
6. Training - Each agency shall be responsible for training requirements, including compliance with training mandates.
7. Integrity of the system shall be in accordance with FBI CJIS Division and interface agency policies. Computer incident reporting shall be implemented.

Until states are able to provide remote latent connectivity to their respective latent communities via a state WAN connection, the CJIS Division may provide direct connectivity to IAFIS via a dial-up connection or through the Combined DNA Index System (CODIS) and/or National Integrated Ballistics Information Network (NIBIN) connections. When a state implements a latent management system and is able to provide intrastate connectivity and subsequent forwarding to IAFIS, this agreement may be terminated. Such termination notice will be provided in writing by either the FBI or the state CJIS Systems Agency.

It is the responsibility of the local remote latent user to develop or acquire an IAFIS compatible workstation. These workstations may use the software provided by the FBI or develop their own software, provided it is IAFIS compliant.

The CJIS Division will provide the approved modem and encryptors required for each dial-up connection to IAFIS. The CJIS Communication Technologies Unit will configure and test the encryptors before they are provided to the user. Users requesting remote latent connectivity through an existing CODIS and/or NIBIN connection must receive verification from the FBI that there are a sufficient number of Ethernet ports on the router to accommodate the request.

If at any time search limits are imposed by the CJIS Division, these individual agency connections will be counted toward the total state allotment.





## APPENDIX E SECURITY FORUMS AND ORGANIZATIONAL ENTITIES

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Online Security Forums / Organizational Entities
AntiOnline
Black Hat
CIO.com
CSO Online
CyberSpeak Podcast
FBI Criminal Justice Information Services Division (CJIS)
Forrester Security Forum
Forum of Incident Response and Security Teams (FIRST)
Information Security Forum (ISF)
Information Systems Audit and Control Association (ISACA)
Information Systems Security Association (ISSA)
Infosyssec
International Organization for Standardization (ISO)
International Information Systems Security Certification Consortium, Inc. (ISC) <sup>2</sup>
Metasploit
Microsoft Developer Network (MSDN) Information Security
National Institute of Standards and Technology (NIST)
Open Web Application Security Project (OWASP)
SANS (SysAdmin, Audit, Network, Security) Institute
SC Magazine
Schneier.com
Security Focus
The Register
US Computer Emergency Response Team (CERT)
US DoJ Computer Crime and Intellectual Property Section (CCIPS)

# APPENDIX F IT SECURITY INCIDENT RESPONSE FORM

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(Sample Form)

FBI CJIS DIVISION

INFORMATION SECURITY OFFICER (ISO)

COMPUTER SECURITY INCIDENT RESPONSE CAPABILITY (CSIRC)

REPORTING FORM

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DATE OF REPORT: \_\_\_\_\_ (mm/dd/yyyy)

DATE OF INCIDENT: \_\_\_\_\_ (mm/dd/yyyy)

POINT(S) OF CONTACT: \_\_\_\_\_ PHONE/EXT/E-MAIL: \_\_\_\_\_

LOCATION(S) OF INCIDENT: \_\_\_\_\_

SYSTEM(S) AFFECTED: \_\_\_\_\_

METHOD OF DETECTION: \_\_\_\_\_

NATURE OF INCIDENT: \_\_\_\_\_

INCIDENT DESCRIPTION: \_\_\_\_\_

ACTIONS TAKEN/RESOLUTION: \_\_\_\_\_

## **Copies To:**

**George White**

(FBI CJIS Division ISO)

1000 Custer Hollow Road

Clarksburg, WV 26306-0102

(304) 625-5849

**george.white@leo.gov**

or

**iso@leo.gov**

**Rob Richter**

(FBI CJIS CSIRC POC)

1000 Custer Hollow Road/Module D-2

Clarksburg, WV 26306-0102

(304) 625-5044

**john.richter@leo.gov**

or

**iso@leo.gov**

## APPENDIX G VIRTUALIZATION

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This appendix documents security considerations for implementing and operating virtual environments that process, store, and/or transmit Criminal Justice Information.

The FBI CJIS ISO has fielded several inquiries from various states requesting guidance on implementing virtual environments within their data centers. With the proliferation of virtual environments across industry in general there is a realistic expectation that FBI CJIS Auditors will encounter virtual environments during the upcoming year. Criminal Justice Agencies (CJAs) and Noncriminal Justice Agencies (NCJAs) alike need to understand and appreciate the foundation of security protection measures required for virtual environments.

From Microsoft's Introduction to Windows Server 2008

<http://www.microsoft.com/windowsserver2008/en/us/hyperv.aspx>:

*“Server virtualization, also known as hardware virtualization, is a hot topic in the IT world because of the potential for serious economic benefits. Server virtualization enables multiple operating systems to run on a single physical machine as virtual machines (VMs). With server virtualization, you can consolidate workloads across multiple underutilized server machines onto a smaller number of machines. Fewer physical machines can lead to reduced costs through lower hardware, energy, and management overhead, plus the creation of a more dynamic IT infrastructure.”*

From a trade publication, kernelthread.com

<http://www.kernelthread.com/publications/virtualization/>:

*“Virtualization is a framework or methodology of dividing the resources of a computer into multiple execution environments, by applying one or more concepts or technologies such as hardware and software partitioning, time-sharing, partial or complete machine simulation, emulation, quality of service, and many others.”*

From an Open Source Software developer

<http://www.kallasoft.com/pc-hardware-virtualization-basics/>:

*“Virtualization refers to virtualizing hardware in software, allowing multiple operating systems, or images, to run concurrently on the same hardware. There are two main types of virtualization software:*

- *“Type-1 Hypervisor, which runs ‘bare-metal’ (on top of the hardware)*
- *“Type-2 Hypervisor which requires a separate application to run within an operating system*

*“Type1 hypervisors usually offer the best in efficiency, while Type-2 hypervisors allow for greater support of hardware that can be provided by the operating system. For the developer, power user, and small business IT professionals, virtualization offers the same basic idea of collapsing multiple physical boxes into one. For instance, a small business can run a web server and an Exchange server without the need for two boxes. Developers and power users can use the ability to contain different development environments without the need to modify their main operating system. Big businesses can also benefit from virtualization by allowing*

*software maintenance to be run and tested on a separate image on hardware without having to take down the main production system.”*

Industry leaders and niche developers are bringing more products to market every day. The following article excerpts, all posted during September 2008, on [www.virtualization.com](http://www.virtualization.com) are examples of industry offerings.

*“Microsoft and Novell partnered together for joint virtualization solution. Microsoft and Novell are announcing the availability of a joint virtualization solution optimized for customers running mixed-source environments. The joint offering includes SUSE Linux Enterprise Server configured and tested as an optimized guest operating system running on Windows Server 2008 Hyper-V, and is fully supported by both companies’ channel partners. The offering provides customers with the first complete, fully supported and optimized virtualization solution to span Windows and Linux environments.”*

*“Sun Microsystems today announce the availability of Sun xVM Server software and Sun xVM Ops Center 2.0, key components in its strategy. Sun also announced the addition of comprehensive services and support for Sun xVM Server software and xVM Ops Center 2.0 to its virtualization suite of services. Additionally, Sun launched xVMserver.org, a new open source community, where developers can download the first source code bundle for Sun xVM Server software and contribute to the direction and development of the product.”*

*“NetEx, specialist in high-speed data transport over TCP, today announced Virtual HyperIP bandwidth optimization solutions for VMware environments that deliver a threefold to tenfold increase in data replication performance. Virtual HyperIP is a software-based Data Transport Optimizer that operates on the VMware ESX server and boost the performance of storage replication applications from vendors such as EMC, NetApp, Symantec, IBM, Data Domain, and FalconStor. Virtual HyperIP mitigates TCP performance issues that are common when moving data over wide-area network (WAN) connections because of bandwidth restrictions, latency due to distance and/or router hop counts, packet loss and network errors. Like the company’s award-winning appliance-based HyperIP, Virtual HyperIP eliminates these issues with an innovative software design developed specifically to accelerate traffic over an IP based network.”*

From several sources, particularly:

<http://www.windowsecurity.com/articles/security-virtualization.html>

<http://csrc.nist.gov/publications/drafts/6--=64rev2/draft-sp800-64-Revision2.pdf>

Virtualization provides several benefits:

- Make better use of under-utilized servers by consolidating to fewer machines saving on hardware, environmental costs, management, and administration of the server infrastructure.
- Legacy applications unable to run on newer hardware and/or operating systems can be loaded into a virtual environment – replicating the legacy environment.



- Provides for isolated portions of a server where trusted and untrusted applications can be ran simultaneously – enabling hot standbys for failover.
- Enables existing operating systems to run on shared memory multiprocessors.
- System migration, backup, and recovery are easier and more manageable.

Virtualization also introduces several vulnerabilities:

- Host Dependent.
- If the host machine has a problem then all the VMs could potentially terminate.
- Compromise of the host makes it possible to take down the client servers hosted on the primary host machine.
- If the virtual network is compromised then the client is also compromised.
- Client share and host share can be exploited on both instances. Potentially this can lead to files being copied to the share that fill up the drive.

These vulnerabilities can be mitigated by the following factors:

- Apply “least privilege” technique to reduce the attack surface area of the virtual environment and access to the physical environment.
- Configuration and patch management of the virtual machine and host, i.e. Keep operating systems and application patches up to date on both virtual machines and hosts.
- Install the minimum applications needed on host machines.
- Practice isolation from host and virtual machine.
- Install and keep updated antivirus on virtual machines and the host.
- Segregation of administrative duties for host and versions.
- Audit logging as well as exporting and storing the logs outside the virtual environment.
- Encrypting network traffic between the virtual machine and host IDS and IPS monitoring.
- Firewall each virtual machine from each other and ensure that only allowed protocols will transact.

## **APPENDIX H SECURITY ADDENDUM**

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The following pages contain the legal authority, purpose, and genesis of the Criminal Justice Information Services Security Addendum (H2-H4); the Security Addendum itself (H5-H6); and the Security Addendum Certification page (H7).

**FEDERAL BUREAU OF INVESTIGATION  
CRIMINAL JUSTICE INFORMATION SERVICES  
SECURITY ADDENDUM**

**Legal Authority for and Purpose and Genesis of the  
Security Addendum**

Traditionally, law enforcement and other criminal justice agencies have been responsible for the confidentiality of their information. Accordingly, until mid-1999, the Code of Federal Regulations Title 28, Part 20, subpart C, and the National Crime Information Center (NCIC) policy paper approved December 6, 1982, required that the management and exchange of criminal justice information be performed by a criminal justice agency or, in certain circumstances, by a noncriminal justice agency under the management control of a criminal justice agency.

In light of the increasing desire of governmental agencies to contract with private entities to perform administration of criminal justice functions, the FBI sought and obtained approval from the United States Department of Justice (DOJ) to permit such privatization of traditional law enforcement functions under certain controlled circumstances. In the Federal Register of May 10, 1999, the FBI published a Notice of Proposed Rulemaking, announcing as follows:

1. Access to CHRI [Criminal History Record Information] and Related Information, Subject to Appropriate Controls, by a Private Contractor Pursuant to a Specific Agreement with an Authorized Governmental Agency To Perform an Administration of Criminal Justice Function (Privatization). Section 534 of title 28 of the United States Code authorizes the Attorney General to exchange identification, criminal identification, crime, and other records for the official use of authorized officials of the federal government, the states, cities, and penal and other institutions. This statute also provides, however, that such exchanges are subject to cancellation if dissemination is made outside the receiving departments or related agencies. Agencies authorized access to CHRI traditionally have been hesitant to disclose that information, even in furtherance of authorized criminal justice functions, to anyone other than actual agency employees lest such disclosure be viewed as unauthorized. In recent years, however, governmental agencies seeking greater efficiency and economy have become increasingly interested in obtaining support services for the administration of criminal justice from the private sector. With the concurrence of the FBI's Criminal Justice Information Services (CJIS) Advisory Policy Board, the DOJ has concluded that disclosures to private persons and entities providing support services for criminal justice agencies may, when subject to appropriate controls, properly be viewed as permissible disclosures for purposes of compliance with 28 U.S.C. 534.

We are therefore proposing to revise 28 CFR 20.33(a)(7) to provide express authority for such arrangements. The proposed authority is similar to the authority that already exists in 28 CFR 20.21(b)(3) for state and local CHRI systems. Provision of CHRI under this authority would only be permitted pursuant to a specific agreement with an authorized governmental

agency for the purpose of providing services for the administration of criminal justice. The agreement would be required to incorporate a security addendum approved by the Director of the FBI (acting for the Attorney General). The security addendum would specifically authorize access to CHRI, limit the use of the information to the specific purposes for which it is being provided, ensure the security and confidentiality of the information consistent with applicable laws and regulations, provide for sanctions, and contain such other provisions as the Director of the FBI (acting for the Attorney General) may require. The security addendum, buttressed by ongoing audit programs of both the FBI and the sponsoring governmental agency, will provide an appropriate balance between the benefits of privatization, protection of individual privacy interests, and preservation of the security of the FBI's CHRI systems.

The FBI will develop a security addendum to be made available to interested governmental agencies. We anticipate that the security addendum will include physical and personnel security constraints historically required by NCIC security practices and other programmatic requirements, together with personal integrity and electronic security provisions comparable to those in NCIC User Agreements between the FBI and criminal justice agencies, and in existing Management Control Agreements between criminal justice agencies and noncriminal justice governmental entities. The security addendum will make clear that access to CHRI will be limited to those officers and employees of the private contractor or its subcontractor who require the information to properly perform services for the sponsoring governmental agency, and that the service provider may not access, modify, use, or disseminate such information for inconsistent or unauthorized purposes.

Consistent with such intent, Title 28 of the Code of Federal Regulations (C.F.R.) was amended to read:

§ 20.33 Dissemination of criminal history record information.

- a) Criminal history record information contained in the Interstate Identification Index (III) System and the Fingerprint Identification Records System (FIRS) may be made available:
  - 1) To criminal justice agencies for criminal justice purposes, which purposes include the screening of employees or applicants for employment hired by criminal justice agencies.
  - 2) To noncriminal justice governmental agencies performing criminal justice dispatching functions or data processing/information services for criminal justice agencies; and
  - 3) To private contractors pursuant to a specific agreement with an agency identified in paragraphs (a)(1) or (a)(6) of this section and for the purpose of providing services for the administration of criminal justice pursuant to that agreement. The agreement must incorporate a security addendum approved by the Attorney General of the United

States, which shall specifically authorize access to criminal history record information, limit the use of the information to the purposes for which it is provided, ensure the security and confidentiality of the information consistent with these regulations, provide for sanctions, and contain such other provisions as the Attorney General may require. The power and authority of the Attorney General hereunder shall be exercised by the FBI Director (or the Director's designee).

This Security Addendum, appended to and incorporated by reference in a government-private sector contract entered into for such purpose, is intended to insure that the benefits of privatization are not attained with any accompanying degradation in the security of the national system of criminal records accessed by the contracting private party. This Security Addendum addresses both concerns for personal integrity and electronic security which have been addressed in previously executed user agreements and management control agreements.

A government agency may privatize functions traditionally performed by criminal justice agencies (or noncriminal justice agencies acting under a management control agreement), subject to the terms of this Security Addendum. If privatized, access by a private contractor's personnel to NCIC data and other CJIS information is restricted to only that necessary to perform the privatized tasks consistent with the government agency's function and the focus of the contract. If privatized the contractor may not access, modify, use or disseminate such data in any manner not expressly authorized by the government agency in consultation with the FBI.

**FEDERAL BUREAU OF INVESTIGATION**  
**CRIMINAL JUSTICE INFORMATION SERVICES**  
**SECURITY ADDENDUM**

The goal of this document is to augment the CJIS Security Policy to ensure adequate security is provided for criminal justice systems while (1) under the control or management of a private entity or (2) connectivity to FBI CJIS Systems has been provided to a private entity (contractor). Adequate security is defined in Office of Management and Budget Circular A-130 as “security commensurate with the risk and magnitude of harm resulting from the loss, misuse, or unauthorized access to or modification of information.”

The intent of this Security Addendum is to require that the Contractor maintain a security program consistent with federal and state laws, regulations, and standards (including the CJIS Security Policy in effect when the contract is executed), as well as with policies and standards established by the Criminal Justice Information Services (CJIS) Advisory Policy Board (APB).

This Security Addendum identifies the duties and responsibilities with respect to the installation and maintenance of adequate internal controls within the contractual relationship so that the security and integrity of the FBI's information resources are not compromised. The security program shall include consideration of personnel security, site security, system security, and data security, and technical security.

The provisions of this Security Addendum apply to all personnel, systems, networks and support facilities supporting and/or acting on behalf of the government agency.

1.00 Definitions

1.01 Contracting Government Agency (CGA) - the government agency, whether a Criminal Justice Agency or a Noncriminal Justice Agency, which enters into an agreement with a private contractor subject to this Security Addendum.

1.02 Contractor - a private business, organization or individual which has entered into an agreement for the administration of criminal justice with a Criminal Justice Agency or a Noncriminal Justice Agency.

2.00 Responsibilities of the Contracting Government Agency.

2.01 The CGA will ensure that each Contractor employee receives a copy of the Security Addendum and the CJIS Security Policy and executes an acknowledgment of such receipt and the contents of the Security Addendum. The signed acknowledgments shall remain in the possession of the CGA and available for audit purposes.

3.00 Responsibilities of the Contractor.

3.01 The Contractor will maintain a security program consistent with federal and state laws, regulations, and standards (including the CJIS Security Policy in effect when the contract is executed), as well as with policies and standards established by the Criminal Justice Information Services (CJIS) Advisory Policy Board (APB).

4.00 Security Violations.

4.01 The CGA must report security violations to the CJIS Systems Officer (CSO) and the Director, FBI, along with indications of actions taken by the CGA and Contractor.

- 4.02 Security violations can justify termination of the appended agreement.
- 4.03 Upon notification, the FBI reserves the right to:
- a. Investigate or decline to investigate any report of unauthorized use;
  - b. Suspend or terminate access and services, including telecommunications links. The FBI will provide the CSO with timely written notice of the suspension. Access and services will be reinstated only after satisfactory assurances have been provided to the FBI by the CJA and Contractor. Upon termination, the Contractor's records containing CHRI must be deleted or returned to the CGA.
- 5.00 Audit
- 5.01 The FBI is authorized to perform a final audit of the Contractor's systems after termination of the Security Addendum.
- 6.00 Scope and Authority
- 6.01 This Security Addendum does not confer, grant, or authorize any rights, privileges, or obligations on any persons other than the Contractor, CGA, CJA (where applicable), CSA, and FBI.
- 6.02 The following documents are incorporated by reference and made part of this agreement: (1) the Security Addendum; (2) the NCIC 2000 Operating Manual; (3) the CJIS Security Policy; and (4) Title 28, Code of Federal Regulations, Part 20. The parties are also subject to applicable federal and state laws and regulations.
- 6.03 The terms set forth in this document do not constitute the sole understanding by and between the parties hereto; rather they augment the provisions of the CJIS Security Policy to provide a minimum basis for the security of the system and contained information and it is understood that there may be terms and conditions of the appended Agreement which impose more stringent requirements upon the Contractor.
- 6.04 This Security Addendum may only be modified by the FBI, and may not be modified by the parties to the appended Agreement without the consent of the FBI.
- 6.05 All notices and correspondence shall be forwarded by First Class mail to:

Assistant Director  
Criminal Justice Information Services Division, FBI  
1000 Custer Hollow Road  
Clarksburg, West Virginia 26306

**FEDERAL BUREAU OF INVESTIGATION  
CRIMINAL JUSTICE INFORMATION SERVICES  
SECURITY ADDENDUM**

**CERTIFICATION**

I hereby certify that I am familiar with the contents of (1) the Security Addendum, including its legal authority and purpose; (2) the NCIC 2000 Operating Manual; (3) the CJIS Security Policy; and (4) Title 28, Code of Federal Regulations, Part 20, and agree to be bound by their provisions.

I recognize that criminal history record information and related data, by its very nature, is sensitive and has potential for great harm if misused. I acknowledge that access to criminal history record information and related data is therefore limited to the purpose(s) for which a government agency has entered into the contract incorporating this Security Addendum. I understand that misuse of the system by, among other things: accessing it without authorization; accessing it by exceeding authorization; accessing it for an improper purpose; using, disseminating or re-disseminating information received as a result of this contract for a purpose other than that envisioned by the contract, may subject me to administrative and criminal penalties. I understand that accessing the system for an appropriate purpose and then using, disseminating or re-disseminating the information received for another purpose other than execution of the contract also constitutes misuse. I further understand that the occurrence of misuse does not depend upon whether or not I receive additional compensation for such authorized activity. Such exposure for misuse includes, but is not limited to, suspension or loss of employment and prosecution for state and federal crimes.

\_\_\_\_\_  
Printed Name/Signature of Contractor Employee

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed Name/Signature of Contractor Representative

\_\_\_\_\_  
Date

\_\_\_\_\_  
Organization and Title of Contractor Representative



## APPENDIX I REFERENCES

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White House Memo entitled “Designation and Sharing of Controlled Unclassified Information (CUI), May 9, 2008

[CJIS RA] *CJIS Security Policy Risk Assessment Report*; August 2008; For Official Use Only; Prepared by: Noblis; Prepared for: U.S. Department of Justice, Federal Bureau of Investigation, Criminal Justice Information Services Division, 1000 Custer Hollow Road, Clarksburg, WV 26306

[FBI SA 8/2006] *Federal Bureau of Investigation, Criminal Justice Information Services, Security Addendum*; 8/2006; Assistant Director, Criminal Justice Information Services, FBI, 1000 Custer Hollow Road, Clarksburg, West Virginia 26306

[FISMA] *Federal Information Security Management Act of 2002*; House of Representatives Bill 2458, Title III–Information Security

[FIPS 199] *Standards for Security Categorization of Federal Information and Information Systems*; Federal Information Processing Standards Publication, FIPS PUB 199; February 2004

[FIPS 200] *Minimum Security Requirements for Federal Information and Information Systems*; Federal Information Processing Standards Publication, FIPS PUB 200; March 2006

[FIPS 201] *Personal Identity Verification for Federal Employees and Contractors*; Federal Information Processing Standards Publication, FIPS PUB 201-1

[NIST SP 800–14] *Generally Accepted Principles and Practices for Securing Information Technology Systems*; NIST Special Publication 800–14

[NIST SP 800–25] *Federal Agency Use of Public Key Technology for Digital Signatures and Authentication*; NIST Special Publication 800–25

[NIST SP 800–30] *Risk Management Guide for Information Technology Systems*; NIST Special Publication 800–36

[NIST SP 800–32] *Introduction to Public Key Technology and the Federal PKI Infrastructure*; NIST Special Publication 800–32

[NIST SP 800–34] *Contingency Planning Guide for Information Technology Systems*; NIST Special Publication 800–34

[NIST SP 800–35] *Guide to Information Technology Security Services*; NIST Special Publication 800–35

[NIST SP 800–36] *Guide to Selecting Information Technology Security Products*; NIST Special Publication 800–36

[NIST SP 800–39] *Managing Risk from Information Systems, An Organizational Perspective*; NIST Special Publication 800–39

[NIST SP 800–40] *Procedures for Handling Security Patches*; NIST Special Publication 800–40

[NIST SP 800–44] *Guidelines on Securing Public Web Servers*; NIST Special Publication 800–44

- [NIST SP 800–45] *Guidelines on Electronic Mail Security*; NIST Special Publication 800–45, Version 2
- [NIST SP 800–46] *Security for Telecommuting and Broadband Communications*; NIST Special Publication 800–46
- [NIST SP 800–48] *Wireless Network Security: 802.11, Bluetooth, and Handheld Devices*; NIST Special Publication 800–48
- [NIST SP 800–52] *Guidelines on the Selection and Use of Transport Layer Security*; NIST Special Publication 800–52
- [NIST SP 800–53] *Recommended Security Controls for Federal Information Systems*; NIST Special Publication 800–53, Revision 2
- [NIST SP 800–53A] *Guide for Assessing the Security Controls in Federal Information Systems, Building Effective Security Assessment Plans*; NIST Special Publication 800–53A
- [NIST SP 800–60] *Guide for Mapping Types of Information and Information Systems to Security Categories*; NIST Special Publication 800–60, Revision 1, DRAFT
- [NIST SP 800–63–1] *Electronic Authentication Guideline*; NIST Special Publication 800–63–1; DRAFT
- [NIST SP 800–64] NIST Special Publication 800–64
- [NIST SP 800–66] *An Introductory Resource Guide for Implementing the Health Insurance Portability and Accountability Act (HIPAA)*; NIST Special Publication 800–66
- [NIST SP 800–68] *Guidance for Securing Microsoft Windows XP Systems for IT Professionals: A NIST Security Configuration Checklist*; NIST Special Publication 800–68
- [NIST SP 800–70] *Security Configuration Checklists Program for IT Products*; NIST Special Publication 800–70
- [NIST SP 800–72] *Guidelines on PDA Forensics*; NIST Special Publication 800–72
- [NIST SP 800–73] *Integrated Circuit Card for Personal Identification Verification*; NIST Special Publication 800–73; Revision 1
- [NIST SP 800–76] *Biometric Data Specification for Personal Identity Verification*; NIST Special Publication 800–76
- [NIST SP 800–77] *Guide to IPsec VPNs*; NIST Special Publication 800–77
- [NIST SP 800–78] *Cryptographic Algorithms and Key Sizes for Personal Identity Verification*; NIST Special Publication 800–78
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- [NIST SP 800–87] *Codes for the Identification of Federal and Federally Assisted Agencies*; NIST Special Publication 800–87
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- [OMB M–06–15] *Safeguarding Personally Identifiable Information*; OMB Memo 06–15; May 22, 2006
- [OMB M–06–16] *Protection of Sensitive Agency Information*; OMB Memo 06–16; June 23, 2006
- [OMB M–06–19] *Reporting Incidents Involving Personally Identifiable Information and Incorporating the Cost for Security in Agency Information Technology Investments*; OMB Memo 06–19; July 12, 2006
- [OMB M–07–16] *Safeguarding Against and Responding to the Breach of Personally Identifiable Information*; OMB Memo 07–16; May 22, 2007
- [Surviving Security] *Surviving Security: How to Integrate People, Process, and Technology*; Second Edition; 2004
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- [USC Title 44, Section 3506] *Federal Information Policy*; 01/02/2006; United States Code, Title 44 - Public Printing and Documents; Chapter 35 - Coordination of Federal Information Policy; Subchapter I - Federal Information Policy, Section 3506

## APPENDIX J NONCRIMINAL JUSTICE AGENCY SUPPLEMENTAL GUIDANCE

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This supplemental guidance for noncriminal justice agencies (NCJA) is provided specifically for those whose only access to FBI CJIS data is authorized by legislative enactment or federal executive order to request civil fingerprint-based background checks for licensing, employment, or other noncriminal justice purposes, via their State Identification Bureau and/or Channeling agency. This guidance does not apply to criminal justice agencies covered under an active user agreement with the FBI CJIS Division for direct connectivity to the FBI CJIS Division via the FBI CJIS Wide Area Network. Examples of the target audience for this supplemental guidance include school boards, banks, medical boards, gaming commissions, alcohol and tobacco control boards, social services agencies, pharmacy boards, etc. The information below identifies the sections of the CJIS Security Policy most closely related to the NCJA's limited scope of interaction with CJI.

1. The following CJIS Security Policy sections comprise the minimum standard requirements in all situations:
  - a. 3.2.9 – Local Agency Security Officer (LASO)
  - b. 5.1.1.6 – Agency User Agreements
  - c. 5.1.1.7 – Security and Management Control Outsourcing Standard\*
  - d. 5.1.3 – Secondary Dissemination
  - e. 5.2.1.1 – Security Awareness Training
  - f. 5.3 – Incident Response
  - g. 5.4.6 – Audit Record Retention
  - h. 5.8 – Media Protection
  - i. 5.9.2 – Controlled Area
  - j. 5.11 – Formal Audits \*\*
  - k. 5.12 – Personnel Security\*\*\*

\* Note: Outsourcing Standard applies when contracting with channeling or outsourcing agency.

\*\*Note: States shall periodically conduct audits of NCJAs. The FBI CJIS Division shall triennially conduct audits of a sampling of NCJAs.

\*\*\* Note: See the National Crime Prevention and Privacy Compact Council's Outsourcing Standard for Contractor background check requirements.

2. Agencies located within states having passed legislation authorizing or requiring civil fingerprint-based background checks for personnel with access to criminal history record information for the purposes of licensing or employment shall follow the guidance in section 5.12. Agencies located within states without this authorization or

requirement are exempted from the fingerprint-based background check requirement until such time as appropriate legislation has been written into law.

3. When receiving CJI via encrypted e-mail or downloading from a web-site and subsequently storing the information as an encrypted electronic image Authorized Recipients should, in addition to all of the aforementioned sections, focus on compliance with policy sections:
  - a. 5.5.2.4 – Access Control – Encryption
  - b. 5.6 – Identification and Authentication (web-site access)
  - c. 5.10.1.2 – System and Communications Protection – Encryption
  
4. When receiving CJI via e-mail or retrieving CJI from a website and subsequently storing the CJI electronically, Authorized Recipients should, in addition to 1.a–1.k above, focus on compliance with policy sections:
  - a. 5.5.2.4 – Access Control – Encryption
  - b. 5.6 – Identification and Authentication
  - c. 5.7 – Configuration Management
  - d. 5.10 – System and Communications Protection and Information Integrity
  
5. If an NCJA further disseminates CJI via encrypted e-mail to Authorized Recipients, located outside the NCJA’s designated controlled area, the NCJA should, in addition to 1.a–3.c above, focus on compliance with policy sections:
  - a. 5.7 – Configuration Management
  - b. 5.10 – System and Communications Protection and Information Integrity
  
6. If an NCJA further disseminates CJI via secure website posting to Authorized Recipients, located outside the NCJA’s designated controlled area, the NCJA should focus on all sections outlined in 1.a-4.d above.

## APPENDIX K CRIMINAL JUSTICE AGENCY SUPPLEMENTAL GUIDANCE

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This supplemental guidance is directed toward those criminal justice agencies that have historically not been subject to audit under the CJIS Security Policy guidelines. The target audience typically gains access to CJI via fax, hardcopy distribution or voice calls; does not have the capability to query state or national databases for criminal justice information; and, may have been assigned an originating agency identifier (ORI) but is dependent on other agencies to run queries on their behalf. This guidance does not apply to criminal justice agencies covered under an active information exchange agreement with another agency for direct or indirect connectivity to the state CSA – in other words those agencies traditionally identified as “terminal agencies”. The information below identifies the sections of the CJIS Security Policy the target audience will most often encounter:

1. The following CJIS Security Policy sections comprise the minimum standard requirements in all situations:
  - a. 3.2.9 – Local Agency Security Officer (LASO)
  - b. 5.1.1.3 – Criminal Justice Agency User Agreements
  - c. 5.1.3 – Secondary Dissemination
  - d. 5.2.1.1 – Security Awareness Training
  - e. 5.3 – Incident Response
  - f. 5.4.6 – Audit Record Retention
  - g. 5.8 – Media Protection
  - h. 5.9 – Physical Security
  - i. 5.10.2 – Facsimile Transmission of CJI
  - j. 5.11 – Formal Audits\*
  - k. 5.12 – Personnel Security

\*Note: States shall triennially audit all CJAs

2. When receiving CJI via encrypted e-mail or downloading from a web-site and subsequently storing the information as an encrypted electronic image Authorized Recipients should, in addition to all of the aforementioned sections, focus on complying with policy sections:
  - a. 5.5.2.4 – Access Control – Encryption
  - b. 5.6 – Identification and Authentication
  - c. 5.10.1.2 – System and Communications Protection – Encryption

3. When receiving CJI via e-mail or retrieving CJI from a website and subsequently storing the CJI electronically, Authorized Recipients should, in addition to 1.a–1.k above, focus on complying with policy sections:
  - a. 5.5.2.4 – Access Control – Encryption
  - b. 5.6 – Identification and Authentication
  - c. 5.7 – Configuration Management
  - d. 5.10 – System and Communications Protection and Information Integrity