IJIS Institute

PRE-RFP TOOLKIT

3rd Edition | May 2013

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

PREFACE

This is the third edition of the toolkit. All sections have been updated since the last version was updated in 2006.

- The first edition of the toolkit was developed by members of the former integrated justice Industry Working Group (IWG)[1]—now, the IJIS Institute[2]—and at the request of and in partnership with the integrated justice practitioners' group, the Justice Information Sharing Practitioners (JISP).
- The second addition was developed by members of the IJIS Institute, in partnership with JISP and the National Criminal Justice Association (NCJA).

We believe that certain content in this document, as well as some of the toolkit attachments, are foundational to the pre-Request For Proposals (RFP) process. We also acknowledge the need to provide current and relevant information that addresses the ever-changing integrated justice information sharing (IJIS)[3] environment. As such, every effort has been made to include up-to-date references where possible; however, we welcome reader feedback.

Comments and Corrections

We invite, value, and look forward to receiving feedback from the users of this toolkit. You can send an email to toolkit@ijis.org to:

- Provide comments and corrections; or,
- Contribute new tools, materials, research, templates, success stories, lessons learned, and/or additional reference materials.

Additional Help

Contact the IJIS Institute with any questions or for additional information regarding the topics discussed in the toolkit. The Institute may be able to provide more in-depth assistance through its Technical Assistance (TA) Program or through several educational curricula it offers. Additionally whether new to the field or an experienced veteran, the authors also recommend joining the IJIS Institute as an Associate or the JISP as a Member for practical advice and support from other IJIS managers and technologists.

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[1] A full list of definitions for all acronyms and abbreviations in this document may be found in APPENDIX A.

[2] In January 2005, the IWG was abolished as a separate entity and organization, and its committees were fully transferred to the Integrated Justice Information Systems (IJIS) Institute as a not-for-profit corporation; "History," IJIS Institute, http://www.ijis.org/_about/history.html#.UaYr55wplLE

[3] For the purpose of this document, and this document only, any use of the singular word '*IJIS*' is a reference to '*integrated justice information sharing*'; whereas, '*IJIS Institute*' or '*Institute*' are references to the organization itself (http://www.ijis.org). For example, the phrase "IJIS project," would mean an "integrated justice information sharing project" **type**, and does not represent a reference to the "IJIS Institute" **entity**.

Toolkit History

The toolkit is a practical guide to pre-procurement readiness. The toolkit includes many original works, as well as tools and templates contributed by and borrowed formerly from the IWG, and currently from the IJIS Institute, and the IJIS Institute member organizations from jurisdictions across the country. The original toolkit was developed under the leadership of the IWG, which served as an advisory group to the U.S. Department of Justice (DOJ) on key issues related to justice information sharing, ranging from procurement reform to emerging technologies. All members of the original toolkit committee were volunteers, and each contributed numerous hours to the development of the first version of the toolkit.

In 2007, a second edition of the toolkit was developed, which included updated, new content, and was again completed with volunteer contributions from the IJIS Institute Editorial Review Committee and staff members. To ensure that the toolkit reflects the needs of the practitioner community, the IJIS Institute partnered with JISP. The IJIS Institute helped support toolkit planning by leveraging a grant from the Bureau of Justice Assistance (BJA) to support important toolkit planning, writing, and review sessions.

This third edition of the toolkit was produced by the IJIS Institute in April 2013 to better assist the practitioner community in planning for successful IJIS system integration. As with previous editions, the IJIS Institute helped support toolkit planning by leveraging a TA grant from the BJA to support important toolkit planning, writing, and review sessions. The Office of the Program Manager of the Information Sharing Environment (PM-ISE) also contributed to the funding of this effort through their procurement innovation initiative. This effort continues to be an example of the collaboration that is possible between industry and practitioners for the betterment of all participants in public safety and criminal justice.

This is the third edition of this toolkit. This update was made at the request of the JISP Steering Committee in order to reflect recent guidance from the DOJ, Office of Justice Programs (OJP). Since early 2012, OJP now requires grantees to conform to the Global Standards Package (GSP) and all constituent elements where applicable, including components such as the Global Reference Architecture (GRA), Global Service Specification Packages (SSP), and Global Federated Identity and Privilege Management (GFIPM). DOJ's Global Justice Information Sharing Initiative (Global) encourages the use of common standards and evidence-based practices when building and enhancing justice information sharing systems and methodologies. These revisions make this edition of the toolkit a valuable resource to enhance IJIS efforts across the country. In making these additions, the toolkit was also reorganized in an effort to make it flow consistent with the pre-procurement planning process. Additionally, the third edition provides updated references and refreshes standards and models that have evolved since the prior edition.

Acknowledgments

The editing and revision of this third edition of the toolkit was completed by IJIS consultants and Institute staff including:

- Alicia L. Antonetti-Tricker, *Crowe Horwath LLP*
- Susan A. Laniewski, *SAL Consulting LLC*
- Donald A. Gabbin, *IJIS Institute*
- Robert May II, *IJIS Institute*
- Chelsea S. Cooper, *IJIS Institute*

The draft document was reviewed and revised based on input by JISP Steering Committee and NCJA representatives including:

- Terry O'Connell, *JISP Steering Committee*
- Cathy Plummer, *JISP Steering Committee*
- Tammy Woodhams, *NCJA*

SECTION I: IJIS PROCUREMENT PLANNING & PRE-IMPLEMENTATION TOOLKIT INTRODUCTION

1 Toolkit Overview and Contents

1.1 Overview

Integrated justice information sharing (IJIS). Criminal justice information sharing (CJIS). Data exchange. Integrated justice. Data-driven justice. Interoperability.

No matter what jurisdictions and agencies choose to name these initiatives, the goal is the same: to share critical information across departments, agencies, jurisdictions, and levels of government at key decision points to support day-to-day operations and emergency situations.

IJIS projects are complex technical and organizational undertakings. IJIS project managers (PM), the intended audience for this toolkit, will recognize this as an understatement, given both the tremendous opportunities and formidable challenges inherent in the conception, planning, procurement, deployment, and support of a local, regional, or statewide IJIS project.

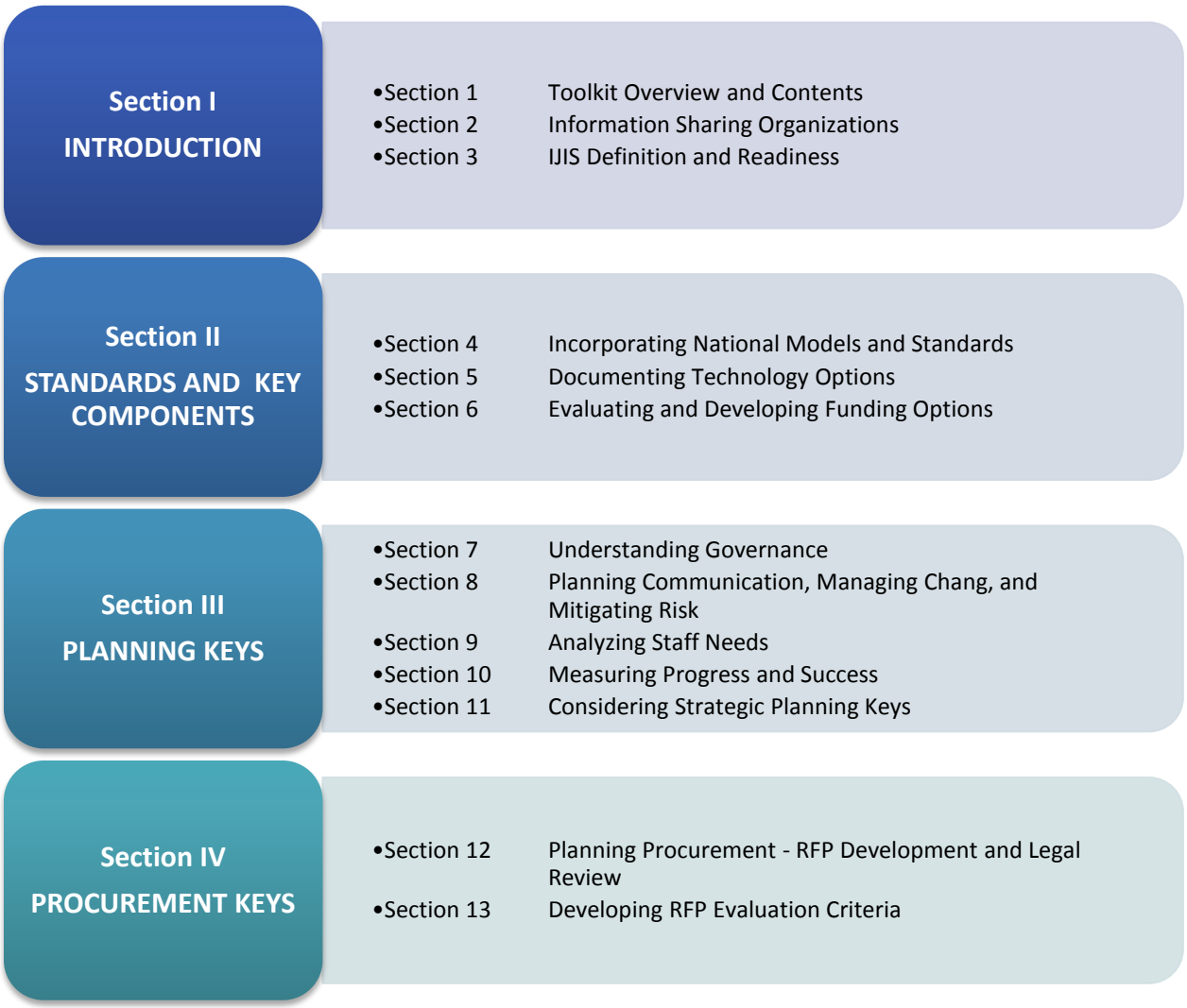
1.2 Contents

Gaining momentum to begin, upgrade, or enhance a justice information sharing initiative takes significant effort – even when all parties acknowledge the need to more effectively share information. With multiple stakeholders, regularly representing multiple levels of government and multiple elected officials (and many times representing different political parties), and dwindling funding for capital projects, getting started can be a challenge.

This toolkit provides guidance in several areas critical to pre-procurement planning and readiness assessment, ranging from defining information sharing for communities, to assessing support and governance, to developing strategic plans and project requirements (both technical and functional), to utilizing national data sharing models and standards. The toolkit also provides links to key resources, templates, and examples from seasoned practitioners and vendors who have successfully negotiated the procurement process and have implemented functional information sharing systems.

This toolkit is comprised of four (I-IV) main sections to address key areas of pre-procurement IJIS planning. The four sections and contents of each include:

FIGURE 1. MAIN TOOLKIT SECTIONS



This toolkit is intended to provide guidance on the topics above to practitioners looking for assistance in establishing, enhancing or upgrading IJIS initiative. Furthermore, it is not intended to be a step-by-step guide as the authors recognize that each jurisdiction is unique and will have their own pre-procurement processes that will need to be followed. Therefore, the authors invite readers to explore this toolkit and to utilize the applicable sections for their unique needs. In order to best utilize all information included in this document and provided as attachments in the toolkit, please note two elements of this document:

1) Wherever possible, in-text, **embedded URLs and/or footnotes** have been included in order to direct the reader to an additional external resource.
2) Any toolkit attachment mentioned within a section is listed in a **toolkit tools summary** table at the end of the section.

2 Information Sharing Organizations

This toolkit provides a primer for planning IJIS initiatives. There is a lot of work ahead when it comes to planning for and upgrading, enhancing, or implementing the technology of choice for information sharing architecture projects, regardless of the size or scope of the jurisdiction. The good news is there are helpful resources available—and, this toolkit intends to collect many of those resources into a package practitioners can use to guide them through the process.

This section of the toolkit highlights organizations that provide such assistance – ranging from peer-to-peer networking among justice information sharing practitioners to organizations that provide guidance documents or even short-term technical assistance on any aspect of IJIS projects. This section provides a non-exhaustive list of some of these national organizations (Federal and state and local practitioners) that significantly influence and guide information sharing models and standards, including domain-specific guidance.

Many of the organizations highlighted in this section have well-developed websites that provide an extensive amount of information about integrated justice, on issues ranging from governance and planning to emerging technologies and trends. Additionally, these organizations are referenced throughout this toolkit.

This section includes an overview of the following entities involved in IJIS planning, standards and procurement:

- Justice Information Sharing Practitioners (JISP)
- IJIS Institute (IJIS)
- National Criminal Justice Association (NCJA)
- U.S. Department of Justice (DOJ) Office of Justice Programs (OJP) & Bureau of Justice Assistance (BJA) - Global Justice Information Sharing Initiative (GLOBAL)
- SEARCH – The National Consortium for Justice Information and Statistics
- Information Sharing Environment – Program Manager (PM-ISE)
- National Information Exchange Model Project Management Office (NIEM-PMO)
- Federal Bureau of Investigation (FBI) – Criminal Justice Information Services (CJIS)
- National Institute of Justice (NIJ)
- American National Standards Institute (ANSI)
- National Institute of Standards and Technology (NIST)
- Organization for the Advancement of Structured Information (OASIS)
- Object Management Group (OMG)
- Forum on the Advancement of Court Technology (FACT)
- Nlets, The International Justice and Public Safety Network
- National Center for State Courts (NCSC)
- American Probation and Parole Association (APPA)
- Project Management Institute (PMI)

2.1 Justice Information Sharing Practitioners (JISP)

JISP is a “virtual” peer-to-peer network made up of government practitioners, representing all criminal justice disciplines from local, state, regional, and tribal levels across the United States.

The JISP mission is to increase the sharing of information among state and local justice and public safety integration professionals through peer collaboration and facilitation.

JISP accomplishes these goals in many ways. JISP maintains a "members-only" web site, a document repository, and access to a membership directory, electronic forum, and social networking features to facilitate collaboration with other practitioners across the country. The objective of this forum is to exchange ideas and lessons learned and to create a network of peers to share information and best practices. JISP also provides webinars and training sessions on relevant topics of interest to justice information sharing professionals.

Practitioners are encouraged to join JISP to leverage the vast resources available to members on information sharing.

2.2 IJIS Institute

The IJIS Institute is a national nonprofit association with a mission of promoting public/private partnerships in the area of criminal justice information sharing. The IJIS Institute membership is comprised of private sector firms that have expertise in technology and how it applies to the justice system. Currently, there are more than 146 firms that are members of the IJIS Institute.

The IJIS Institute activities include:

- Providing education and consulting advice on technology issues to state and local organizations engaged in building integrated justice systems
- Conducting research, development, and demonstration projects designed to develop more efficient and cost effective methods for designing and implementing integrated justice information systems
- Promoting the Industry viewpoint within the many forums currently in existence for setting standards for integrated justice information systems
- Conducting training courses and seminars that are relevant for the overall improvement of the technology for developing integrated justice information systems

2.3 National Criminal Justice Association (NCJA)

The NCJA serves as the voice in the nation's capital for the criminal justice community. NCJA works to promote a balanced approach to communities' complex public safety and criminal justice system problems.

With support from BJA, NCJA provides assistance to advance inter-domain and inter-state criminal justice information sharing focusing on promoting and strengthening state level leadership in the development of justice information sharing systems, and implementing information sharing solutions that leverage the Global suite of products and tools. NCJA also provides:

- Assistance to state criminal justice administering agencies (SAA) to build sustainable capacity to engage in community and evidence based strategic planning to improve the administration of justice.
- Assistance in developing and delivering guidance and training for state, regional, local, tribal, transportation and port jurisdictions/agencies on basic and advanced grants management principles and practices in order to improve the ability of FEMA grant recipients to administer federal grant funding.

- Assistance in helping SAVIN Administrators overcome programmatic and technology barriers by helping states build, implement, and improve their victim notification capacity.

NCJA members are the state, territorial and tribal administrators of federal justice assistance grant funding, as well as policy makers and practitioners from all parts of the criminal and juvenile justice systems. In their role as administrators, they oversee planning and administration of crime prevention and suppression initiatives across their states and the justice system. They demonstrate, test, and share best practices in all facets of the justice system including: law enforcement, pre-trial services, courts, corrections, reentry, substance abuse treatment, juvenile delinquency prevention, and information sharing

2.4 DOJ's Global Justice Information Sharing Initiative (Global)

The U.S. DOJ, OJP, and BJA list resources available to practitioners on technology, technical assistance, and valuable reference materials. Additionally, they support Global, which was created to advise the U.S. Attorney General on information sharing initiatives and works to encourage standards-based sharing of information for the justice community through a variety of standards.

The OJP and its BJA have created a number of resources to assist state and local agencies with the planning, procurement, and implementation of integrated justice. These resources often respond to issues and priorities identified by working in partnership with Global, which is a Federal advisory committee (FAC) with a mission of promoting the efficient sharing of data among justice entities. The work of Global drives OJP and BJA priorities with regard to information sharing in the justice community.

Global is a "group of groups," representing more than 30 independent organizations spanning the spectrum of law enforcement, judicial, correctional, and related bodies. Member organizations participate in Global out of shared responsibility and shared belief that, together, they can bring about positive change in inter-organizational communication and data sharing.

Global advises DOJ and provides support on information technology (IT) issues. Global also aids its member organizations and the people they serve through a series of important initiatives, including the development of technology standards, which are independently versioned but packaged together, to support interoperable solutions. This package is called the GSP. The GSP includes several independent standards including:

- National Information Exchange Model (NIEM)
- Global Reference Architecture (GRA)
- Global Service Specification Packages (SSP)
- Global Federated Identity and Privilege Management (GFIPM)
- Global Privacy Technology Framework (GPTF)

Each of these standards is explored in greater detail later in this toolkit.

In addition to the initiatives mentioned above, the OJP information technology webpage located at includes important information about:

- Upcoming technology meetings, training, and events for justice practitioners;
- News regarding technology initiatives at the Federal, state, and local levels;
- Information about technical assistance supported by the Justice Department in the area of information technology; and,

- A library of documents with useful information to help with the planning, procurement, and implementation of integrated justice technology.

2.5 SEARCH, The National Consortium for Justice Information and Statistics

SEARCH is a nonprofit membership organization created by and for the states, which is dedicated to improving the criminal justice system and the quality of justice through better information management, the effective application of information and identification technology, and responsible law and policy.

Since 1969, SEARCH's primary objective has been to identify and help solve the information management problems of state and local justice agencies confronted with the need to exchange information with other local agencies, state agencies, agencies in other states, or with the Federal government. SEARCH accomplishes these goals by providing a number of diverse resources, products, and offerings, such as:

- Technical assistance to address specific needs of state and local justice agencies in the area of technology and integration. Specific grants allow SEARCH to provide assistance on the National Criminal History Improvement Program (NCHIP), National Incident Based Reporting System (NIBRS), and Drug Courts information systems, among others.
- Training on a variety of issues, ranging from investigation of computer crime to education on its Justice Information Exchange Model (JIEM) methodology and tool for capturing data exchanges among justice agencies.
- Online resources via its website that include extensive information on IT initiatives currently being implemented nationwide, as well as news and policy information related to justice information sharing.
- Participation on national task forces and development of national models and standards for justice information sharing.
- Sponsorship of national conferences, symposia, and workshops on a broad array of justice information technology issues.

2.6 Information Sharing Environment (ISE)

The ISE is part of the Office of the Director of National Intelligence (ODNI), which reports to the White House on information sharing matters. The Program Manager – Information Sharing Environment (PM-ISE) is responsible for working with communities to improve the management and sharing of information. Additionally, the ISE provides analysts with information needed to keep our communities safe and enhance national security at the local, state and Federal levels.

2.7 National Information Exchange Model Project Management Office (NIEM-PMO)

The NIEM-PMO is the organization that executes the vision of the NIEM. NIEM is a national data sharing model to provide a standards-based mechanism to share data. As shared on the NIEM website:

> *The National Information Exchange Model (NIEM) is the result of a collaborative effort to produce a set of common, well-defined data elements used for data exchange development and harmonization. NIEM is a reference model. It is not a rigid standard that must be used exactly as it is in its entirety. NIEM was designed as a core set of building blocks that are used as a consistent baseline for creating exchange documents*

> *and transactions across government. While an XML schema rendering of the entire model exists, it is not a requirement for conformance that this entire schema be used for validation. Nonetheless, there are several informal conformance requirements.*[4]

NIEM is led by three agencies, the U.S. Department of Homeland Security, U.S. Department of Justice and U.S. Health and Human Services. Each of these agencies is part of the NIEM executive steering committee (ESC), which oversees NIEM. Additionally, the chair of the Global Advisory Committee, the executive director of the National Association of State Chief Information Officers, the Chief Enterprise Architect for the U.S. Office of Management and Budget and the Program Manager for the Information Environment sit on the ESC for NIEM.

2.8 Federal Bureau of Investigation (FBI) – Criminal Justice Information Services (CJIS)

FBI's CJIS, the largest division of the FBI, is the central repository for criminal justice information for the Bureau. The Division's mission is: "to equip our law enforcement, national security, and intelligence community partners with the criminal justice information they need to protect the United States while preserving civil liberties."[5]

The Division is in charge of several national information sharing efforts including:

- National Crime Information Center (NCIC)
- Uniform Crime Reporting (UCR)
- Fingerprint identification, including Integrated Automated Fingerprint Identification System (IAFIS)
- National Incident-Based Reporting System (NIBRS)

2.9 National Institute of Justice (NIJ)

The NIJ is the research and evaluation division of the DOJ. NIJ plays a critical role in information sharing through its focus on strategic goals including:

- Fostering science-based criminal justice practice
- Translating knowledge to practice
- Advancing technology
- Working across disciplines
- Adopting a global perspective[6]

NIJ has a plethora of publications, multimedia, and podcasts available to practitioners that on relevant information sharing and criminal justice topics.

[4] "Implementation Guide," *NIEM*, https://www.niem.gov/aboutniem/grant-funding/Pages/implementation-guide.aspx.

[5] "About/Overview," FBI CJIS, http://www.fbi.gov/about-us/cjis/overview

[6] "About," NIJ, http://www.nij.gov/about/welcome.htm

2.10 American National Standards Institute (ANSI) and National Institute of Standards and Technology (NIST)

The ANS and NIST play a critical role in information sharing. ANSI is the organization that oversees the development and use of thousands of guidelines and standards that impact organizations and businesses across the country, in many sectors and domains. NIST, as a division of the U.S. Department of Commerce, promotes innovation and competitiveness in science and technology through research. Together, ANSI and NIST support the development of information technology standards, including information sharing.

2.11 Organization for the Advancement of Structured Information (OASIS)

OASIS is a global nonprofit that drives the development and adoption of open standards for information sharing. OASIS promotes consensus building for information technology standards including security, cloud, service oriented architecture and web services. OASIS open standards promote the opportunity to lower cost through the open standards approach. OASIS also has a committee dedicated to developing standards in emergency management for information sharing.

2.12 Object Management Group (OMG)

OMG is a global nonprofit that works with its member organizations to develop enterprise integration standards. OMG's mission is:

> *To develop, with our worldwide membership, enterprise integration standards that provide real-world value. OMG is also dedicated to bringing together end-users, government agencies, universities and research institutions in our communities of practice to share experiences in transitioning to new management and technology approaches like Cloud Computing.*[7]

OMG supports information sharing today through the support for the UML profile for NIEM, which is presented later in this document.

2.13 Forum on the Advancement of Court Technology (FACT)

FACT promotes public/private partnerships in the courts community, which includes criminal justice, family law, civil and traffic. An advisory group created and working in tandem with the National Association of Court Management (NACM) and others, its members include private sector firms that provide products and services to courts, court and court advisory organization members, government agency representatives, and not-for-profit members, who promote court technology, provide education on court technology trends, and serve as an advisory group for court and justice integration.

FACT provides an environment to:

- Deliver education to court professionals
- Explore product development and user needs

[7] "Getting Started," OMG, http://www.omg.org/gettingstarted/gettingstartedindex.htm

- Participate in development of standards
- Assist in streamlining the procurement process

2.14 Nlets, The International Justice and Public Safety Network

Nlets is a nonprofit organization to serve the data sharing needs of law enforcement across the nation. Nlets is the leading justice and public safety network in the nation for the exchange of law enforcement, criminal justice, and public safety-related information. Nlets provides unrivalled reliability based on a network built to endure threats without impacting performance.

2.15 National Center for State Courts (NCSC)

NCSC is a national nonprofit organization created to serve court improvement needs across the country. NCSC provides research, information services, education, and consulting services for courts, and helps court entities plan and implement improvements to create greater effectiveness and efficiencies. Created more than 20 years ago, NCSC membership provides consultative services, promulgated court case management, case processing and performance standards, and participation in national and international standards development initiatives. NCSC supports information sharing among courts and other justice partners.

2.16 American Probation and Parole Association (APPA)

APPA is a nonprofit that serves the needs of probation and parole organizations across the country. Representing a unified voice for the corrections community, APPA is committed to enhancing probation and parole practices by fostering the development of the right skills and gathering the right resources.

2.17 Project Management Institute (PMI)

The PMI is a nationally-recognized source of information on technology project management. Established in 1969 and headquartered outside Philadelphia, PMI is the world's leading not-for-profit project management professional association. PMI provides global leadership in the development of standards for the practice of the project management profession throughout the world. PMI's premiere standards document, *A Guide to the Project Management Body of Knowledge* (*PMBOK® Guide*), is a globally recognized standard for managing projects in today's marketplace.

PMI has developed and maintained a rigorous, examination-based, professional certification program to advance the project management profession and to recognize the achievements of individuals in project management. PMI's Project Management Professional (PMP®) certification is the world's most recognized professional credential for individuals associated with project management. In 1999, PMI became the first organization in the world to have its Certification Program attain International Organization for Standardization (ISO) 9001 recognition.

3 IJIS Definition and Readiness

3.1 IJIS Defined

At the highest level, *IJIS* may be defined as the ability to electronically access and share critical information at key decision points throughout the justice and public safety enterprise. While inspiring and fundamental, this definition by itself is too broad to direct operational aspects of an individual IJIS project, and it should be augmented by a more complete discussion, tuned to the interests and priorities of the specific jurisdiction.

More precise and constructive elements of the definition of "integration" are offered by SEARCH[8]:

- The standardized flow of information throughout the justice enterprise, together with analyses of the business rules that govern information exchange;
- The automation of information exchange between justice and justice-related organizations;
- The ability to provide complete, accurate, and timely information to justice system decision-makers, when and where it is needed;
- The standardization of information flow throughout the justice enterprise, together with analyses of the business rules that govern information exchange; and,
- Implementation of universal functions associated with information sharing, including Query, Push, Pull, Publish, and Subscription/Notification, as well as APIs.

The definition should be particularized to the precise nature of the IJIS projects that jurisdictions choose to undertake, while referencing broader perspectives associated with this expansive industry.

In addition to the general guidance provided in this toolkit, each chapter contains links to other sources that may be of value, including to other websites, guides, and resources. The various documents provided in the links are also available TBD.

3.2 IJIS Readiness

Readiness is relative. The practitioner advisors to this group point out that no project is perfect; and, that each jurisdiction and manager must decide when the time is right to proceed to procurement. Once that procurement is issued, things start moving fast. Time spent assessing readiness and filling a few gaps lessens future discomfort for practitioners, solutions providers, member organizations, and key stakeholders.

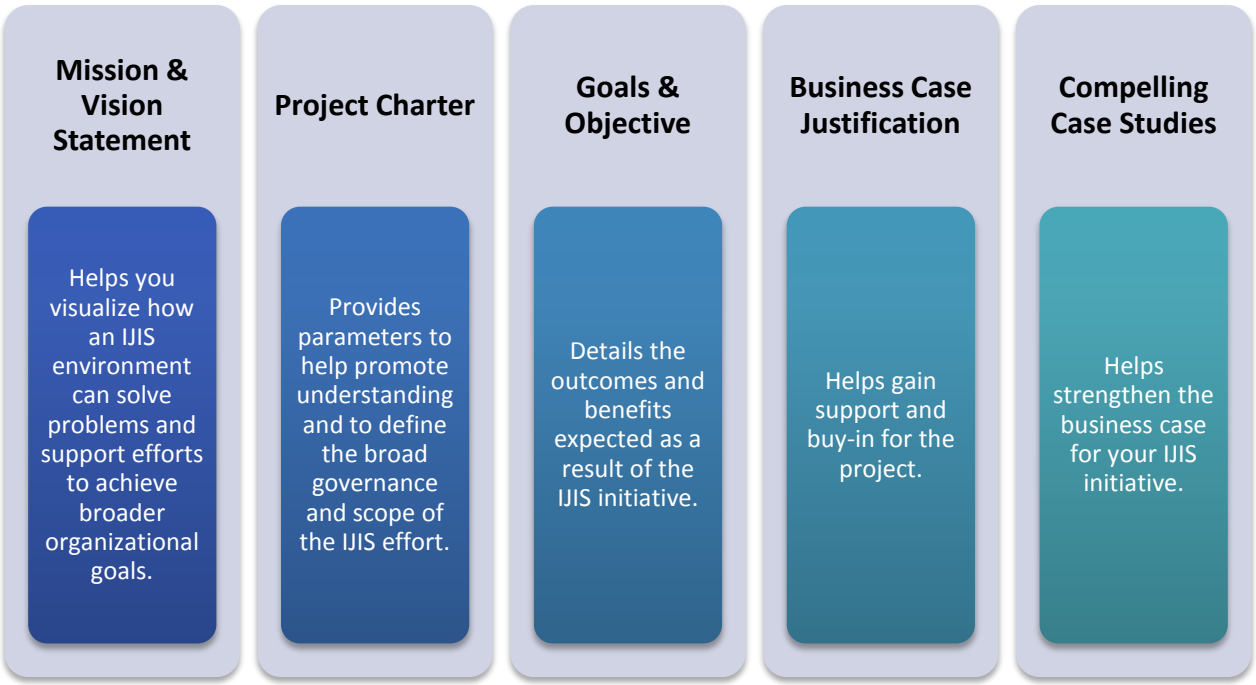
This section of the toolkit focuses on the activities, tasks, tools, and deliverables that frame the definition of IJIS. Many of these topics are basic project management components—and it may seem curious to include them in a procurement readiness guide – it might even seem like moving backwards. In fact, regularly revisiting these project tenets throughout the IJIS lifecycle and the pre-procurement phase is an important checkpoint. The more clearly an agency can articulate what IJIS projects must achieve, the better the odds that the procurement will result in effective, solutions-based bids. At a minimum, the IJIS-defining components will include:

- A definition of integrated justice that is project-specific;
- A statement of mission, and an articulation of vision;
- An explanation of scope, typically contained within the project charter;
- A detailing of the goals and objectives that support that vision;
- A well-documented business case; and,
- Compelling case studies and stories to support that business case.

[8] SEARCH Special Report, *Integration in the Context of Justice Information Systems: A Common Understanding*, 2001.

Each of these components is discussed in more detail in Sections 3.3 through 3.7 below.

FIGURE 2. IJIS KEY PLANNING COMPONENTS



3.3 Mission and Vision Statements

The *mission statement* associated with each IJIS initiative identifies the overall purpose for which the initiative is organized, while the vision statement describes the future business environment and state of information sharing being sought. Just as a vision anchors an IJIS project, it also informs the procurement process. The State University of New York (SUNY) at Albany's Center for Technology in Government (CTG) has published a helpful publication to assist in evaluating the proposed IJIS vision. In *Justice for All: Defining Your Business Case for Integrating Justice Information Systems*, CTG suggests that "…vision for the future can be described by answering the question, 'How will things be different when this problem is solved?'" A copy of this publication is included in the toolkit.

Vision statements should express the ideal future of information sharing embodied in the project. The goals and objectives on which the vision statement operates should be focused, articulate, quantifiable milestones and benchmarks that will enable independent measurement. The vision statement itself should reflect a broad image of the future state of information sharing that agencies are seeking to achieve. Moreover, the vision statement should reflect values intrinsic in the effort. Examples of mission and vision statements are provided in the toolkit.

- Take another look at the proposed vision statement.
- Compare it to the examples included in T 1-3-A.
- Ask "Does this clearly express the ideal state to be achieved through the integrated justice project?"

In crafting the vision statement, closely work with users and managers who understand the day-to-day operations of the involved agencies, and the clear business value of improving the information sharing

associated with the project. Ensure all key stakeholders are fully supportive and invested in the vision that is developed for this project, as executive level sponsorship is a critical success factor in any such initiative.

3.4 Project Charter

A *project charter* establishes the scope, governance structure, and organizational relationships of the IJIS effort. It provides high-level "marching orders" to the individuals involved in the program's planning, research, and implementation. It also serves as a guide to stakeholders and other interested community members who want or need to understand why the project is being undertaken, what will be accomplished, how the effort will be organized and managed, and by whom. A scope sample, entitled Criminal Justice Portal Scope, is included in the toolkit.

Consider including the entire IJIS project charter in procurement documents, or draw from the charter when completing pertinent sections of the RFP. Either way, the project charter is an important item to complete and execute before the procurement process begins. Sample project charters are provided in the toolkit. In addition, a monograph by the NIJ Pickett Institute is included in the toolkit.

3.5 Goals and Objectives

While preparing for IJIS projects, it is critical to clearly articulate and define the outcomes and benefits that are expected to result from the IJIS initiative. By defining a list of specific project goals and objectives, it is possible to build the foundation for objective performance measures that will demonstrate the tangible business value of the information sharing initiative. Moreover, these goals, objectives, and performance measures will enable project managers to: assess progress of the initiative throughout the duration of the project; identify deviations that may hinder or impede successful completion of critical project milestones; and, signal where project activities are missing targets. In addition, they will serve as touchstones and cumulative measures that demonstrate continuing progress in a measured and orderly manner. As agencies define these goals and objectives, they must consider the role technology plays in all process areas and among all project partners, so appropriate requirements can be included in the overall procurement plan.

For example, here are just a few questions to ask in relation to the topics of people, process, and technology:

FIGURE 3. HELPFUL QUESTIONS FOR DETERMINING GOALS AND OBJECTIVES

People	Process	Technology
• What improvements in existing customer services are desired as a result of the project? • How will communication with stakeholders be enhanced by available technologies?	• What are the business processes that require improvement or re-engineering in order to accomplish the desired objectives?	• How will the efficiency and effectiveness of any existing technology be improved? • What national models or standards may be utilized to facilitate technology integration program objectives and how will this encourage reuse and interoperability? • What technology performance objectives are desired? • How often should the technology be upgraded and replaced? • How will the technology be maintained (fiscally and operationally)?

Using the vision statement and needs assessment data created as part of the IJIS project definition process, consider forming a cross-functional committee of stakeholders to write objectives for implementing technology throughout the organization(s) to address unmet needs. The resulting discussion and review of these written objectives generates a necessary sense of project ownership to enable greater support from the participating stakeholders and assists in securing final approval.

Technology should not drive the decision-making process. Rather, decisions should be made based on the business needs of system users and the information access needs of jurisdictional constituents. Objectives related to the use of technology should include:

- Improving processes by utilizing technology to extend and enhance the organization's functions through national standards
- Improving access to information resources
- Defining staff skills relative to the use of technology
- Reducing duplicate data entry
- Improving record quality and data consistency
- Shortening process and transaction times
- Distributing critical data throughout the enterprise
- Evaluating and resolving duplicate record occurrences
- Enhancing data publishing capabilities

Consider the following questions:

- How will technology be used to:
  - Improve the overall efficiency of the organization?
  - Support changes in the roles and responsibilities of staff, administrators, community users, and others in order to achieve the intended vision?

- Support organizational and governance structures that are consistent with the project's vision?
- Support and provide meaningful professional development experiences for staff?
- Support the organization's accountability and assessment system?
- Support the provision of comprehensive services for the public?

Even when sufficient resources are initially available, it has been shown to be unwise to attempt to complete major portions or an entire complex project like an IJIS initiative in one fell swoop. In fact, executing this philosophy has been shown to be a major reason for IT project failure in general. In order to phase in the plan over time, prioritize objectives to ensure that the most important or critical objectives are implemented first. These objectives can be characterized in many ways (*e.g.* providing a critical need, increasing the safety of practitioners or community, least costly, least risky, least time or resource intensive, politically expedient, etc.). The most important aspect is that each project manager (PM) may have different reasoning for their priorities and that all decisions should be based on documented rationale. The key is involving all the stakeholders early in the planning process.

The final list of prioritized objectives should be shared with leaders in the participating organizations before the remainder of the plan is completed. Again, this builds support for approval of the final plan.

3.6 Business Case Justification

PMs are probably well aware of the importance of "making the case" for an IJIS project. Certainly, there will be help in this area from agency heads, elected and appointed officials, and other champions within the member organizations and the community. But do not underestimate the amount of sales and marketing that is continually required throughout the project life cycle. Just as a solid business case justification is important to garner the political and financial support required to initiate, develop, complete, and support an IJIS project, so too is the need to include it in the procurement process. A solid business case provides background and context to improve potential vendors' understanding and responses.

The business case should be articulated in terms that are clearly understood and directly related to the vision, goals, and objectives of the efforts, and they are typically tied back to one or more of three universal objectives for integrated justice information sharing:

3) Improving justice, public safety, homeland security, and emergency/disaster management;
4) Enhancing the speed, quality, and equality of justice; and,
5) Achieving efficiency, effectiveness, and return on investment (ROI).

Build a business case that demonstrates how the vision, goals, and objectives of the IJIS project translate into tangible, measurable improvements in the management of justice and public safety. Benchmark the original and how the enhancements will improve speed, quality, and equality of justice from pilot and/or real world examples. In addition, defining what success looks like with specific numbers/percentages for efficiency, effectiveness of operations, and ROI is fundamental in the IJIS planning process. The National Governors Association (NGA) provides insight into enhancing the delivery of services in an article included in the toolkit.

3.7 Compelling Case Studies

By providing compelling case studies, agencies can strengthen the business case by showing the advantages that can be achieved, and the disadvantages that can be avoided through an IJIS initiative. These studies should highlight lessons learned and best practices while affording the agency an opportunity to identify the mistakes that have been made by previous agencies.

Begin by reviewing other publications on the subject of integrated justice for examples of IJIS successes and failures. Several such publications are included as part of this toolkit.

3.8 Toolkit Tools Summary

TABLE 1. TOOLKIT TOOLS SUMMARY – DEFINITION AND READINESS

- T = Tools
- RW = Referenced Work

ID #	DESCRIPTION / PUBLICATION INFORMATION
T 3-3-A	Sample Vision and Mission Statements
T 3-4-A	Sample Project Charter #1 (simple)
T 3-4-B	Sample Project Charter #2 (detailed)
RW 3-1	*Mission Possible: Strong Governance Structures for the Integration of Justice Information Systems*, BJA, February 2002
RW 3-2	*Consequences of Inadequately Integrated Justice Information Systems*, Center for Society, Law and Justice, University of New Orleans, March 2002
RW 3-3	*And Justice for All: Defining Your Business Case for Integrating Justice Information Systems*, Center for Technology in Government, SUNY, Albany, 2000
RW 3-4	*Integration in the Context of Justice Information Systems: A Common Understanding*, SEARCH, 2004
RW 3-5	*Criminal Justice Portal Scope*, August 2005 (sample scope)
RW 3-6	*Establishing the Planning Charter: Authorization, Scope & Management*, NIJ Pickett Institute, 2002
RW 3-7	*The View from the IT Industry – What States Can Do to Improve Government Efficiency and Service Delivery*, NGA Center for Best Practices, July 11, 2005
RW 3-8	*A Comprehensive, Integrated Justice Information Management System for Texas Counties*, CIRA Advisory Committee, 2007

SECTION II: IJIS STANDARDS AND KEY COMPONENTS

The emergence and evolution of national data sharing models and standards has changed the information sharing landscape significantly since the inception of this toolkit. Additionally, available technology to support such initiatives has also changed, allowing jurisdictions to more easily implement solutions to share information. Funding to support the implementation of IJIS has also transitioned with more specific requirements placed on jurisdictions that use grant funding.

This section of the toolkit addresses three fundamental components when determining to start an information sharing initiative:

1) National models and standards
2) Technology options
3) Funding options

On the forthcoming pages, best practices are shared in these three critical areas. While not *all* jurisdictions will be able to leverage *all* components, we encourage jurisdictions undertaking an IJIS initiative to explore how these practices may fit into their unique information sharing environment and accordingly plan.

4 Incorporating National Models and Standards

National data sharing models and standards have significantly evolved since the initial version of this toolkit. Standards have been created to provide a common approach to sharing electronic information among tribal, local, state, and Federal organizations. These standards help define business processes, including the triggers that result in the need to share information, provide a common platform and language to exchange information, assist with security, and address domain-specific needs.

- The *Business Processes* section addresses the importance of examining and defining business requirements for information sharing, including the triggers (often called key decision points) that require information to be exchanged. Several standards are shared that help document processes, including the JIEM and the NIEM-Unified Modeling Language (NIEM-UML).
- The *Foundational Standards* section discusses a common language to share information. Several standards are addressed, including the NIEM, GRA, and GFIPM, which are the primary components of the GSP.
- The *Functional Standards* section addresses standards that have been developed for specific domains (*e.g.* courts, corrections, suspicious activity reporting).

4.1 Business Processes

The information exchange processes that define IJIS for a jurisdiction or project must be carefully considered, as automating manual processes or integrating interfaces can change the very nature of the desired exchange. Thorough documentation of the current “as is” environment (see Section 5.1) is one of the important steps in defining the requirements to compare with the “to be” model. Some processes may actually be eliminated because data missing in the existing system can be captured in the new system.

Completing basic business process modeling prior to implementing an IJIS initiative is the most reliable way to assure that all of the requirements of the jurisdiction are captured. The business process model is the foundation for defining the detailed functional requirements used as a roadmap for a new system and to evaluate each vendor's proposal. If current processes cannot be defined, then the processes and requirements that define a new system cannot be either. Jurisdictions that do not define a current business model prior to issuing an RFP could pay more for procurement in unbudgeted expenditures, through change orders discovered during the design process. This practice can lead to both unbudgeted expenditures and time delays.

Below, two best practice process modeling standards are described: JIEM and NIEM-UML.

4.1.1 JIEM

The success of information sharing initiatives lies in the ability of multiple stakeholders to collectively create a shared vision for their data exchange solution. To do so, stakeholders must understand and clearly document business processes in order to build consensus and agreement on what information should be exchanged and when. Additionally, having this understanding ultimately provides a foundation for the design and implementation of an information sharing enterprise.

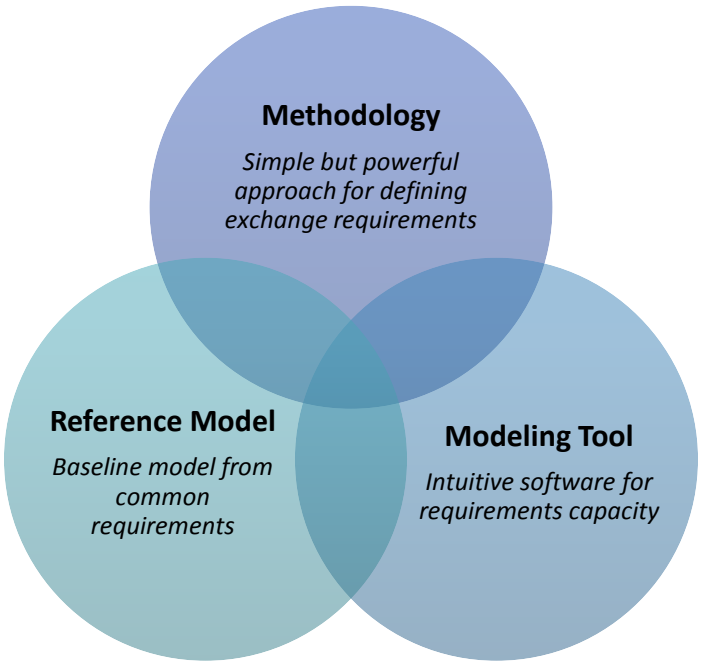
A useful standard to assist in identifying and documenting business processes has been developed by SEARCH. Called the *Justice Information Exchange Model (JIEM)*, this standard includes a methodology and tool to help identity and document information exchange business requirements. Specifically, JIEM benefits information sharing partners by[9]:

- Promoting an enterprise view of information sharing;
- Helping build consensus around business needs;
- Sharing and building upon best practices and lessons learned from other jurisdictions;
- Linking to exchange design and implementation tools and national models; and,
- Following a formal, documented methodology.

JIEM consists of three integrated components, as depicted in the figure below.

[9] "Justice Information Exchange Model Overview, SEARCH, http://www.search.org/programs/info/jiem/

FIGURE 4. JIEM COMPONENTS[10]



These components include[11]:

- The JIEM Methodology
  - A structured, formally documented approach for defining and capturing information exchange requirements.
- The JIEM Reference Model
  - Sets of information exchanges regarding business functions that are common to most jurisdictions and that have been defined and honed by other JIEM users.
- The JIEM Modeling Tool
  - Easy-to-use software that enables justice practitioners to build a model of their "as-is" and "to-be" information exchanges.

JIEM also includes a JIEM Conceptual Framework to help identify the types of information that should be considered when creating JIEM models. This includes the understanding and documentation of five dimensions:

1) Process
2) Event

[10] "Justice Information Exchange Model Overview," SEARCH, http://www.search.org/programs/info/jiem/

[11] "Justice Information Exchange Model Overview," SEARCH, http://www.search.org/programs/info/jiem/

3) Agency
4) Condition
5) Information

The JIEM Conceptual Framework is included in the toolkit.

4.1.2 NIEM-UML

Through a partnership between OMG, NIEM, and the PM-ISE, the NIEM-UML is in the process of being defined as a modeling tool for business processes, as well as data structure. UML is OMG's most-used specification[12].

This modeling process includes a set of techniques to create models of object-oriented, software-intensive systems. UML offers a standard way to visualize activities, actors, and business processes, making information sharing technology more tangible for practitioners.

While still under development at the time of the writing of this toolkit, the UML profile is intended to be an industry standard that will enable the efficient and effective development of NIEM-conformant information sharing across systems, agencies, and all levels of government. Additionally, for technical resources, the UML profile will significantly reduce the requirement to learn the details of the NIEM Naming and Design Rule (NDR) and will enable a better understanding of what it means to be NIEM conformant. More information on NIEM is provided in sections below.

Information on NIEM-URL can be found online, and includes a useful presentation that describes the standard in greater detail, including the goals on NIEM-UML, which include[13]:

- To represent the semantics of NIEM while being agnostic of its structural representation;
- To leverage standards and standards based tools;
- To reduce complexity and lower the barrier for entry;
- To facilitate reuse of NIEM models and as a result schemas;
- To embrace accepted UML modeling styles and constructs;
- To enable use of NIEM-PIM models for use with other standards, technologies, and layers; and,
- To support deterministic mapping to and from the NIEM technology layers based on NIEM rules.

This presentation is also included in the toolkit.

[12] "UML Resource Page," OMG, http://www.uml.org/

[13] *Model Driven Information Sharing with NIEM-UML at Enterprise Data World 2012*, April/May 2012, http://lib.modeldriven.org/MDLibrary/trunk/Pub/Presentations/EDW2012%20-%20NIEM-UML%20-%20Casanave.pdf

4.2 Foundational Standards

National data sharing models have transformed the information sharing world in the past decade – with significant progress made in the past five years alone. This section provides an overview of national information sharing models and standards for jurisdictions to consider utilizing when undertaking an information sharing initiative. More information about each standard may be found on organizational websites, and links have been provided.

4.2.1 GSP

The Global Standards Package (GSP), developed by Global, is a set of technology standards to support information sharing. Each of the standards is versioned independently, but go together to form a comprehensive bundle for the delivery of information sharing technologies. GSP includes several independent standards—GRA, GFIPM, SSP, GPTF—which are described in greater detail below.

Additionally, Global has developed a *Global Information Sharing Toolkit (GIST)*. This resource compiles all of the Global resources into one location, providing a user-friendly way to navigate the standards and to determine what resources may be best to meet each jurisdiction's unique needs. Visit the GIST website for the most up-to-date information on the toolkit and all Global standards.

4.2.2 GRA and SSPs

GRA[14/15], developed by Global, is an information sharing architecture based on the concepts and principles of service-oriented architecture (SOA). The mission of GRA is "to enhance justice and public safety through a service-oriented approach to information sharing. We accomplish this mission by providing a reference architecture with guidance for identifying, defining, implementing, and governing services.[16]"

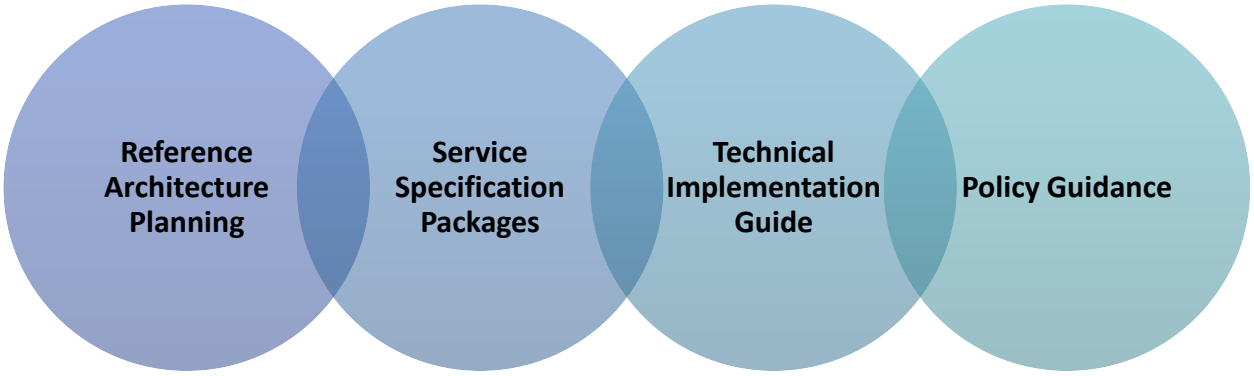
GRA is intended to provide a framework for jurisdictions to leverage for the setup of an enterprise-wide data sharing architecture. GRA was designed to work with other national data sharing models and standards, including NIEM (described above) and GFIPM (described below). Specifically, GRA includes the following four components, as shown in the figure below.

[14] "GRA Frequently Asked Questions," OJP, http://www.it.ojp.gov/docdownloader.aspx?ddid=1178

[15] "Global Reference Architecture (GRA), PM-ISE, http://www.ise.gov/building-blocks-content/global-reference-architecture-gra

[16] "Global Reference Architecture (GRA) (Formerly known as Justice Reference Architecture)," OJP, http://www.it.ojp.gov/gra

FIGURE 5. GRA COMPONENTS



4.2.2.1 Reference Architecture Planning

This component provides recommendations and references for the implementation of GRA that leverages SOA concepts.

4.2.2.2 SSPs

GRA promotes the development of SSPs to demonstrate conformance with this standard. SSPs articulate the connection method for the exchange (*e.g.* use of web services), the exchange language (*e.g.* XML and the use of NIEM is highly-encouraged), and the security specification (*e.g.* encryption at data layer, transport layer, etc.). An SSP clearinghouse is in the process of being created. In the meantime, SSP examples may be found on the GRA website. Additionally, an example of an SSP for the Inmate Release Information (IRI) is included in the toolkit.

4.2.2.3 Technical Implementation Guide

Figuring out where to start with the implementation of GRA is often a daunting task, even for experienced enterprise technical architects. Technical implementation guidance for GRAs provides architects and developers with tools to get started, including how to integrate SSPs into existing technology environments. Several guidance documents are available including:

- *GRA Service Specification Package, v1.0.0*
- *GRA Execution Context Guidelines v1.1*
- *GRA Web-Services Service Interaction Profile v1.3*
- *GRA ebXML Messaging Service Interaction Profile v1.1*
- *GRA Reliable Secure Web Services, Service Interaction Profile v1.2*

4.2.2.4 Policy Guidance

In addition to the challenges with the technical implementation of GRA, many policy considerations also must be addressed to effectively guide the exchange of information. Policy documents include items such as Service Level Agreements (SLA), access and identity management specification, and Memoranda of Understanding (MOU), to name a few. Two documents have been provided by Global to assist with the policy side of GRA, which include:

- *GRA Information Sharing Enterprise Statement of Participation v1.1*
- *GRA Information Sharing Enterprise Service-Level Agreement v1.1*

These documents are also provided in the toolkit.

4.2.3 GPTF

The GPTF is a framework to help with the technical implementation of interoperability privacy, to address the challenges associated with such an endeavor. Guiding documents are available on the framework, including:

- *Implementing Privacy Policy in Justice Information Sharing: A Technical Framework Executive Summary*
- *Implementing Privacy Policy in Justice Information Sharing: A Technical Framework*

4.2.4 GFIPM

GFIPM is a framework for federated identity developed by Global. Federated identity allows for a person's permissions granted to them by their jurisdiction to access information in many systems, across many networks, so only one sign-on is necessary. Practically speaking, GFIPM allows for user single sign-on when accessing data in other jurisdictions, which is considered outside their own data sharing jurisdiction or enterprise. When jurisdictions team up to share information, they form a data sharing federation, which allows for sharing across the enterprises. GFIPM addresses the three most common areas of user security in a data sharing federation:

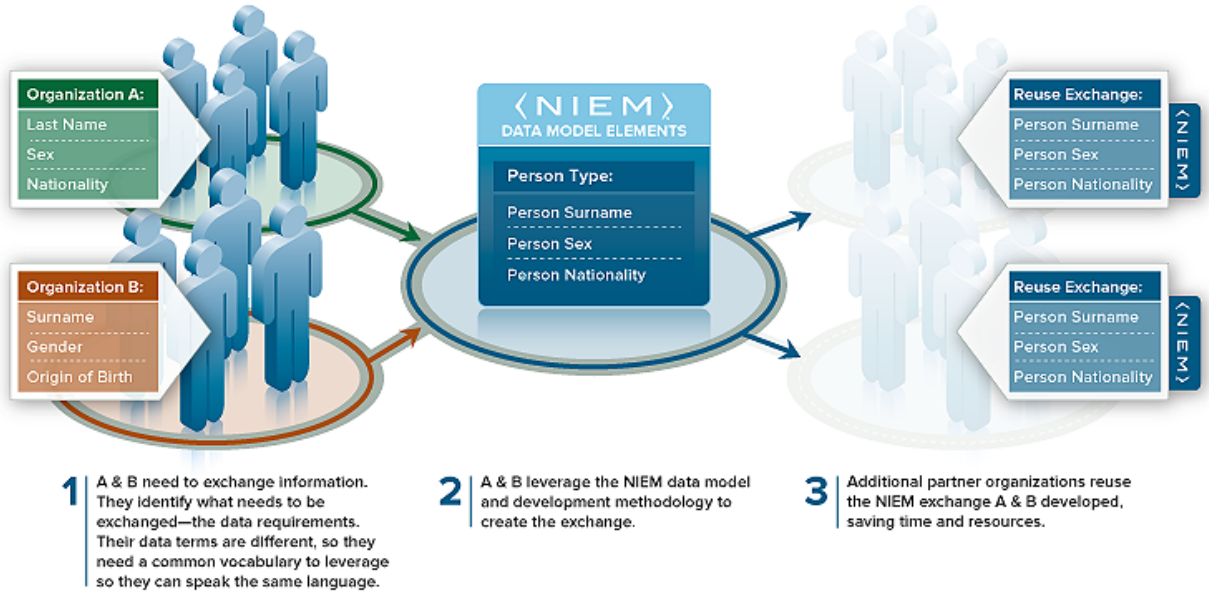
- Identification/Authentication
  - This component addresses who are the end users and how the end users authenticate.
- Privilege Management
  - This component addresses what privileges the end user has, to determine what data they should be able to see (*e.g.* job classification, clearances, etc.).
- Audit
  - This component addresses what information should be retained to audit system access and use by the individual end users.

Global has released many GFIPM guidance documents to assist jurisdictions with implementing the framework.

4.2.5 NIEM

The NIEM is a community-driven, standards-based approach to exchanging information. Led by the DOJ, the U.S. Department of Homeland Security (DHS), and the U.S. Department of Health and Human Services (HHS), NIEM creates a foundation for information sharing by utilizing a common vocabulary so that two or more entities can exchange information based on a common language. The figure below illustrates how NIEM works.

FIGURE 6. HOW NIEM WORKS[17]



As depicted in the picture, the two organizations are now able to easily exchange information, having adopted common foundational language through the NIEM data model. Jurisdictions that leverage NIEM may take advantage of the data model as well as a governance structure, methodologies, training, technical assistance, and an active community to assist users in adopting a standards-based approach to exchanging information. NIEM supports many communities of information sharing, including:

- Biometrics
- Chemical, Biological, Radiological and Nuclear (CBRN)
- Cyber
- Children, Youth and Family Services (CYFS)
- Emergency Management
- Health
- Human Services
- Immigration
- Infrastructure Protection
- Intelligence
- International Trade
- Justice

[17] "About NIEM," NIEM, https://www.niem.gov/aboutniem/Pages/niem.aspx

- Maritime
- Screening
- Other communities (or domains) are currently in process of being developed as well

At its core, NIEM is based on XML, which is a key technology for assisting organizations in exchanging information and conducting business over the Internet. XML promotes interoperability – it allows systems to communicate with each other and paves the way for expanded collaboration among agencies in the future. Its object-oriented nature allows for efficient extension and reuse, which is an important component of NIEM. NIEM uses XML because XML is compatible with major Internet transmission protocols and is also highly compressible for faster transmission. Almost all major software vendors fully support the general XML standard. Major database vendors and their database applications provide software development "tools" to help justice agency technical staff more efficiently and productively develop and use XML within agency applications. XML is very developer-friendly, yet ordinary users with no particular XML expertise can make sense of an XML file. The XML standard is designed to be independent of vendor, operating system, source application, destination application, storage medium (database), and/or transport protocol.

To create a NIEM exchange, NIEM leverages Information Exchange Package Documentation (IEPD). An IEPD is a specification for a data exchange and defines a particular set of data to be shared. NIEM IEPDs following a specific lifecycle, as detailed in the figure below.

FIGURE 7. THE IEPD LIFECYCLE[18]

[18] "IEPD Lifecycle," NIEM, https://www.niem.gov/technical/model-package-description/Pages/iepd-lifecycle.aspx

NIEM community members have access to the NIEM IEPD Clearinghouse, a library of standardized schemas created by justice, public safety, and homeland security agencies, some of which are discussed in the Functional Standards Section 4.3 below. All schemas have been submitted by partners who have implemented Global Justice XML Data Model (GJXDM) and NIEM. To get started, developers may utilize a NIEM tool called the NIEM Data Model Browser, which is a tool to help map data elements to NIEM in the common vocabulary.

4.3 Functional Standards

Over the past several years, an effort has been made to develop functional standards for key criminal justice technologies, such as computer-aided dispatch (CAD) for law enforcement, as well as the case and records management systems (RMS) used by law enforcement, the courts, corrections, and probation. Functional standards set a common expectation and baseline from which buyers and sellers can work. As such, justice information sharing systems can be developed to meet user needs at a lower cost.

Another benefit to commonly agreed-upon functional standards is that it allows IT firms to leverage investments in product and service lines. Absent functional standards, the technology components, requirements, and implementation are "custom" in every jurisdiction, which drives up the price of those products and services.

Work to develop functional standards for the criminal justice community has occurred under the leadership of the professional associations affiliated with the disciplines of justice, such as NCSC, APPA, CTA, and the Law Enforcement Information Technology Standards Council (LEITSC). Much of this work has been facilitated through the support of the BJA. The following are brief summaries of each of these efforts.

4.3.1 Court Functional Standards – NCSC

The court community has been working for several years on the development of court-specific functional standards[19] to support court automation. In early 2001, the Conference of State Court Administrators (CSCA), the NACM, the Consortium for National Case Management Automation Functional Standards, and NCSC published the results of a 3-year effort to assist state courts in automating case processing systems. This consortium was tasked with developing guidelines that help state courts more effectively use financial and staffing resources to obtain a state-of-the-art computer system – either through in-house development or procurement from a software developer. The consortium has focused on ways in which the state courts could reduce the time needed to procure new automated systems, improve work processes, and reduce staffing requirements.

The functional standards documentation released by the consortium describes the functional standards for a specific type of case processing system, tracks how these cases move through the court system, and provides accompanying documents and reports. The volumes currently available are:

- *Volume 1 - Introduction to Case Management Standards*

[19] "Court-specific standards," NCSC, http://www.ncsc.org/services-and-experts/technology-tools/court-specific-standards.aspx

- *Volume 2 - Civil Case Management Functional Requirements*
- *Volume 3 - Domestic Relations Case Management Functional Requirements*
- *Volume 4 - Criminal Case Management Functional Requirements*
- *Volume 5 - Juvenile Case Management Functional Requirements*
- *Volume 6 - Traffic Functional Requirements*

NCSC has also supported a significant amount of work in the area of electronic filing (e-filing) of court documents and XML applications in court. This includes the e-filing technical and business process, and the electronic court filing (ECF) standards approved by the Joint Technology Committee (JTC).

4.3.2 Probation Functional Standards – APPA

The APPA—with support from BJA, and in partnership with the Association of State and Correctional Administrators (ASCA) SEARCH, Public Policy Associates, and the IJIS Institute—has conducted pilot implementations of service-oriented reentry exchange information exchanges in three jurisdictions: two state-level and one county-level. The information exchange projects are based on the NIEM, GRA, and previously generated IEPDs.

The APPA, in partnership with NCSC, identified a need for information sharing in to support adult probation agencies. During specification documentation, adult probation agencies that were employing effective case management practices and had automated case management systems as the baseline were identified so that APPA could obtain written specifications from agencies with either exemplary case management practices or exemplary automated case management systems. The APPA compiled this information into a functional standards document[20] and validated it with working groups made up of practitioners and industry participants.

In parallel to documenting design specifications, the APPA facilitated planning sessions with probation practitioners, state information technology leaders, and industry to develop system recommendations to develop the Interstate Compact for Probation and Parole (ICOTS). The result of these working groups was the establishment of the ICOTS public web portal, which allows the public to search for information about offenders who have been given permission to have their supervision transferred to another state.

4.3.3 Corrections Functional Standards – CTA

The ASCA, in collaboration with the CTA, has chartered the corrections functional standards effort, with support from BJA. The CTA issued a statement of work in December 2002, seeking proposals from qualified teams to undertake a two-pronged standards development effort:

1) To define and document the XML data exchange standards that allow for interoperability between corrections agencies and other governmental entities; and,
2) To define and document common functional standards that can be used when states are developing, enhancing, or replacing automated correctional systems.

[20] "Functional Standards Development for Automated Case Management Systems for Probation," APPA, http://www.appa-net.org/eweb/docs/appa/pubs/FSDACMS.pdf

The corrections standards[21] contain functional descriptions of associated activities and processes, and identify the data groups required for each activity and process. The data group will be required to identify those data elements set forth in performance measures previously identified by the ASCA. These standards also contain the most commonly used exchanges between corrections and other justice agencies.

4.3.4 Unified CAD Functional Requirements – IJIS Institute and APCO

A number of technical systems are used to support law enforcement, fire, and Emergency Medical Services (EMS) telecommunicators and responders. Yet governmental agencies that fund and guide technology standards and other key IT initiatives have rarely coordinated or aligned their efforts to maximize national adoption and cost effectiveness. Disparate technology standards and specifications across communities that have similar and, in many cases, overlapping requirements, result in unnecessary duplication of efforts, at a high cost to taxpayers.

The initial report *Standard Functional Specifications for Law Enforcement Computer Aided Dispatch (CAD) Systems*[22] was developed and published in 2006 by the Law Enforcement Information Technology Standards Council (LEITSC) in partnership with the IJIS Institute. That document limited its scope to functional specifications for CAD systems required by law enforcement. Subsequent to that document, it was decided to add fire and EMS functionality to the existing functional specifications for law enforcement CAD systems. The new specifications are called *Unified CAD Functional Requirements (UCADFR)*.[23]

4.3.5 Suspicious Activity Reporting (SAR) and the Nationwide SAR Initiative (NSI)

The NSI is a collaborative effort of Federal organizations and state, local, and tribal entities aimed at providing law enforcement with the tools needed to prevent terrorism and other criminal activities. NSI is a standards-based approach to gathering, documenting, processing, analyzing, and sharing SAR information across all levels of government.[24]

4.4 Toolkit Tools Summary

TABLE 2. TOOLKIT TOOLS SUMMARY – NATIONAL MODELS AND STANDARDS

- ♦ RW = Referenced Work

ID #	DESCRIPTION / PUBLICATION INFORMATION
RW 4-1	*Justice Information Exchange Model Conceptual Framework*
RW 4-2	*Model Driven Information Sharing with NIEM-UML at Enterprise Data World 2012*
RW 4-3	*Inmate Release Information (IRI) Service Specification, Version 1.0*

[21] "CTA Specifications," CTA, http://www.correctionstech.org/files/publications/ctaspecifications.pdf

[22] Specifications for Law Enforcement Computer Aided Dispatch (CAD) Systems, BJA / NIJ, http://www.it.ojp.gov/documents/LEITSC_Law_Enforcement_CAD_Systems.pdf

[23] UCADFR, IJIS Institute / APCO, http://www.ijis.org/docs/Unified_CAD_Functional_Requirements_FINAL.pdf

[24] "Resources," NSI, http://nsi.ncirc.gov/resources.aspx

ID #	DESCRIPTION / PUBLICATION INFORMATION
RW 4-4	GRA Service Specification Package, v1.0.0
RW 4-5	GRA Execution Context Guidelines v1.2
RW 4-6	GRA Web-Services Service Interaction Profile v1.3
RW 4-7	GRA ebXML Messaging Service Interaction Profile v1.1
RW 4-8	GRA Reliable Secure Web Services, Service Interaction Profile v1.2
RW 4-9	GRA Information Sharing Enterprise Statement of Participation v1.1
RW 4-10	GRA Information Sharing Enterprise Service-Level Agreement v1.1

5 Documenting Technology Options

Understanding the current technical environment, and coming to a consensus of the desired, future technical state are important components of the IJIS planning process. These two activities help begin with the end in mind, and assist in creating the technical roadmap to most efficiently and effectively move from today's state to the desired state.

This chapter of the toolkit provides guidance in documenting the current technology environment and the desired future technology state. These steps ensure that specific technology goals and priorities are established, relevant stakeholders are organized, and outcome and performance-based systems are created – before making hardware or software decisions.

- The *Current Environment* section discusses analysis of current data sharing tools, all software applications, databases, data, hardware platforms, security, network, manual data sharing processes, and information sharing gaps/needs.
- The *Desired Future Environment* section discusses the type of tool and/or technology solution desired to achieve information sharing goals and objectives.
- The *Technology Planning Principles* section discusses principles to consider when developing an IJIS technology plan.

5.1 Current Environment

A key component of the IJIS planning process is determining the current state of the technology environment (*e.g.* current systems) and also understanding what data sharing, both manual and electronic, currently involves. By documenting and understanding the current environment, it is easier to develop a roadmap to the desired future state. In documenting the current environment, planning is critical and must begin with an assessment of existing systems, interfaces, and capabilities in order to establish a baseline.

In November 2005, CTG at SUNY, Albany released the *Sharing Justice Information: A Capability Assessment Toolkit*[25]. It is designed for professionals to use when considering or planning for an information-sharing initiative. The toolkit is user-friendly and provides a guide and process for assessing

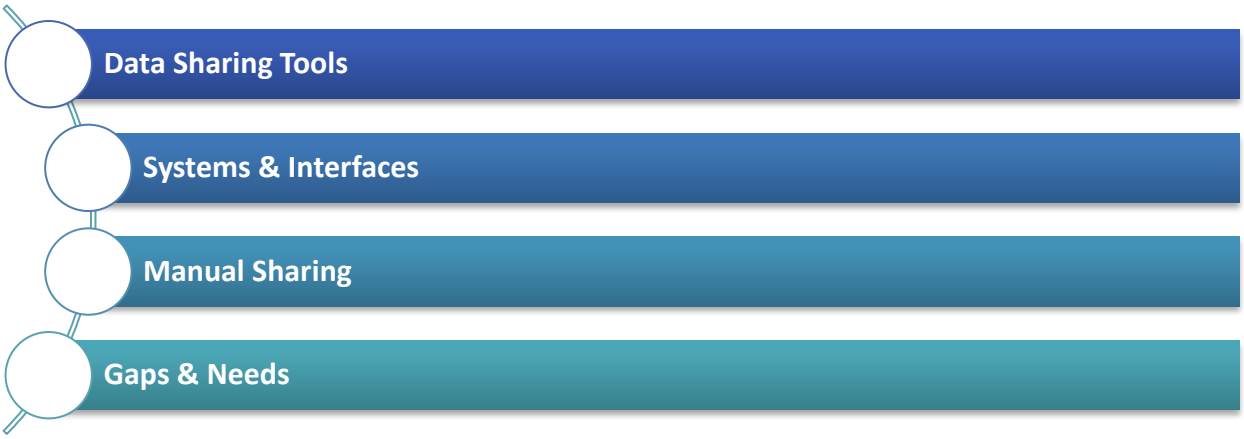
[25] "Abstract – Sharing Justice Information," SUNY, Albany, http://www.ctg.albany.edu/publications/guides/sharing_justice_info

where information-sharing capabilities exist and where they must be developed in order to achieve public safety goals.

It is important to understand that integration planning is a dynamic process and should be expected to evolve over time as the needs of the stakeholders, the environment in which they operate and technology change.

To understand the current environment, the following areas should be considered.

FIGURE 8. UNDERSTANDING THE CURRENT TECHNOLOGY ENVIRONMENT



5.1.1 Data Sharing Tools

It is important to consider current data sharing tools in use in the jurisdiction, including existing data warehouses, data exchange engines, and existing enterprise service buses. For each current tool used in the jurisdiction, even if not used for justice, public safety, or homeland security, you must understand:

- Who owns the tool;
- What data is currently being shared using this tool; and,
- What polices are in place that govern the use of the system.

5.1.2 Systems and Interfaces

It is also important to consider current systems, including interfaces, utilized by the jurisdiction(s) desiring to share information. Included in this documentation about each system in the current environment should be:

- *Business overview*—including: the business use for the system; the type and number of users today; and, standards for how data is collected and entered into the system.
- *System governance*—including: how change is managed for the system; who is responsible for maintenance and support; who owns the data; and, what policies, MOUs, or other agreements are in place that govern the system related to privacy, confidentiality, and system use.
- *Information overview*—including: key information stored and tracked in the system (*e.g.* data, images, documents, etc.).

- *System architecture*—including: if it is a thick client, thin client or web-based software solution; the database environment; and, the platform of the system (*e.g.* .NET, JAVA, open, etc.).
- *Infrastructure*—including: where the system is hosted; what hardware currently supports the system; and, how the application is distributed over the network.
- *Security*—including: how security is managed and authentication.
- *Interfaces*—including: a list of all current interfaces. For each interface, document the following information:
  - What is the purpose of the exchange?
  - What is the source and target system for the data exchange?
  - Is the interface one-way or bi-directional?
  - What is the frequency of the exchange?
  - What type of data is shared?
  - What method is used to transmit the exchange (*e.g.* XML, CSV, etc.)
  - Are any standards currently being used (*e.g.* NIEM, etc.) with the exchange?

5.1.3 Manual Sharing

Understanding manual data sharing is to document what information is currently being shared via paper or through other, non-interface means. For manual information sharing, you should understand:

- What data is sent or received?
- What is the source of the manual data (e.g. system name)?
- How often is the information sent or received?
- Is this information put into a system?

5.1.4 Gaps and Needs

Understanding information sharing gaps and needs includes asking:

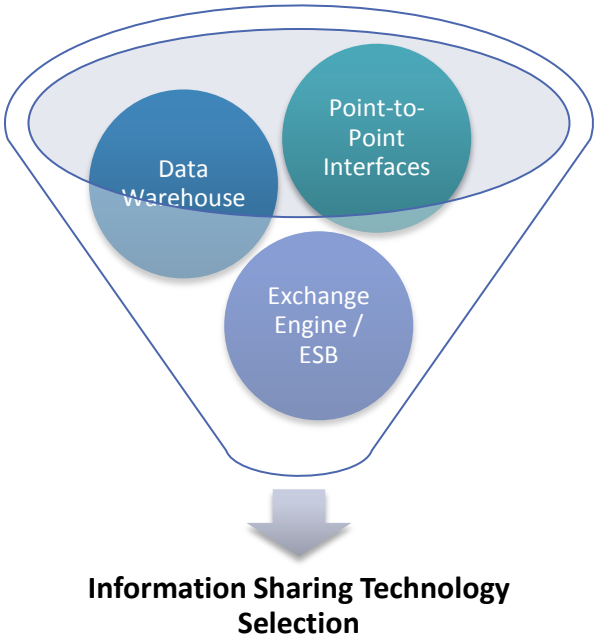
- What existing information does the agency not have access to that they would like to begin to electronically receive?
- Who owns this information?
- How often is it needed?
- What system stores this information today?
- Where would this information be sent (*e.g.* to what system)?

5.2 Desired Future Environment

Without adequate technology planning for an IJIS initiative, time and money can be wasted and results can be disappointing. Agencies, jurisdictions, and other levels of government compete for scarce dollars, inhibiting the partnership and leadership required to develop interoperability for an IJIS environment.

Prior to procuring an IJIS technology solution, it is paramount to select the right tool for both the participating agencies and the jurisdiction. Many options exist, which are described below.

FIGURE 9. ELEMENTS OF THE DESIRED FUTURE TECHNOLOGY ENVIRONMENT



5.2.1 Point-to-Point Interfaces

Point-to-point interfaces may be created to share data from one system to another. This type of information sharing is best for jurisdictions that have identified a very small amount of data sharing needs. Otherwise, point-to-point interfaces are cost prohibitive, as they are then often recreating the same exchange of information, instead of leveraging the investment.

5.2.2 Data Warehouse

A *data warehouse* may be used to centrally send and store information, providing the ability to retrieve the centrally stored information when needed. The benefit of a data warehouse model is that the information is centrally stored and easy to access, with the appropriate security in place. The challenge with data warehouses is that data owner often feels a loss of control of their data that is then shared and centrally managed.

5.2.3 Data Exchange Engine / Enterprise Service Bus

Data exchange engines or *enterprise service buses (ESBs)* act as a middleware or broker of information, which sit in the middle of systems that desire to exchange information. As data exchanges are requested, the exchange engine or ESB directs information to the systems. The benefit of this model is that data is not centrally stored; rather, source system owners maintain their information and send it when requested, based on security settings.

The "right" model for each jurisdiction will vary, depending on need. We recommend evaluating these three models for the jurisdiction, to determine what will work best – which may end up being a hybrid, combining parts of more than one model to meet different data sharing needs and standards.

5.3 Technology Planning Principles

In addition to selecting the right tool, infrastructure planning, including planning needs for the network is critical. The agency IT infrastructure, especially the network, plays a crucial role in the success of implementation projects—yet, it is a part of the procurement process that many times gets either downplayed or overlooked. Any existing infrastructure that is to be utilized in the planned system needs to be clearly defined. Additionally, the jurisdiction should make sure that enough specification is included in any later procurements or third-party proposals to define any additions or changes to the infrastructure that a proposed solution would require. This becomes critical when responsibility for the network and fiscal planning for purchase and maintenance are defined for planning and implementation purposes. If this element of the system is overlooked in the planning stages, then it will be difficult to sort out responsibilities once a contract is in place and/or a project is underway. Planning is an important first step and this section provides some considerations for pre-procurement planning and direction.

There are several principles to consider when developing a technology plan for integrated justice information systems, as depicted in the figure below.

FIGURE 10. TECHNOLOGY PLANNING PRINCIPLES

- **It should be standards driven.**
  - It can be easier, less costly, and result in reduced risk if different jurisdictions, agencies, or departments work together to agree to follow existing standards or

values. *Standards driven* means adhering to a pre-defined set of technical models that all entities involved in the information sharing effort leverage. See Section 2.1 for more information on available standards that may be leveraged in IJIS projects.

- **It should be scalable.**
  - The solution should be dynamic in several ways. It should be able to be initially implemented with a few systems sharing several types of information at a cost commensurate with that limited functionality. It should also be able to be locally used between agencies or localities, statewide, and at multi-state and national levels.
- **It should provide ROI.**
  - The planners should include estimates identifying the expected ROI to the community, region, or state so constituents and agencies can understand what can be gained in human and financial terms by developing an IJIS.
- **It should allow for incremental development.**
  - Most states, regions, and communities do not have the resources to develop full integration in one budget cycle. Develop a plan that can get the job done in smaller steps.
- **It should ensure internal and external security.**
  - Any architecture implemented to provide for the sharing of information should be able to repel known types of attacks from internal to an organization or enterprise, as well as external to that organization or enterprise. It should be able to accomplish this with multiple levels and types of protection (*e.g.* secured networks, data encryption, private key certificate authority, data level access restrictions, etc.). The planning for, and implementation of, security must be ever vigilant as the environment can change on a daily or weekly basis; and, it must be capable of swift and effective response to new threats, as they occur, and to new technologies[26], as they are made available.
- **It should closely monitor information privacy policies and develop rules and procedures consistent with them.**
  - It is important to be cognizant of existing and changing policies, procedures, and laws regarding access to and dissemination of information that is either held by the enterprise or shared by its members. Depending on the jurisdiction this can result in a plethora of rules and regulations to follow and expose the enterprise to an equally wide variety of potential penalties and liabilities for not following them. Privacy

[26] New technologies on a variety of levels are reviewed and summarized by the IJIS Institute Emerging Technology Committee. Look for new reviews on an on-going basis at: http://www.ijis.org/_publications/reference_papers.html (ijis.org > Resources > Publications > Reference Papers) and also consult the reference organizations provided in the toolkit.

policies also address legal consent and data sharing restrictions that must be built into any automated data sharing processes.

- **It should ensure there is synchronicity with political approval processes.**
  - Additionally, it should be able to accommodate normal budget cycles, legislative structures, agency roles, and decision-making cycles within those processes.

The following are the basic elements of a technology plan for an IJIS.

Business Strategy

- Description of key stakeholder IJIS strategic goals
- Definition of key IJIS functional areas
- Definition of current business processes that affect the sharing of information between agencies and that incorporate the IJIS methodologies
- Inventory of systems, platforms, hardware, information applications, databases, data types and characteristics, existing interface modalities and protocols for each system, network topologies, bandwidth allocations and utilizations, etc.
- Prioritization of process improvement projects
- Goals for how technology will improve processes in the short- and long-term
- Definition of success and methods of measurement
- Description of anticipated challenges to implementing technology plans
- Description of risks and change management strategies for technology change
- Conversion strategies for legacy systems

5.4 Toolkit Tools Summary

TABLE 3. TOOLKIT TOOLS SUMMARY – DOCUMENTING TECHNOLOGY OPTIONS

- T = Tool
- RW = Referenced Work

ID #	DESCRIPTION / PUBLICATION INFORMATION
T 5-2-A	Technical Environment Assessment Worksheet
T 5-2-B	Sample Technical Inventory Tool
RW 5-1	*NASCIO Enterprise Architecture Development Toolkit, v 3.0*
RW 5-2	*SEARCH Technical Assistance Report (State of Idaho)*
RW 5-3	*Global Reference Architecture (GRA) Guidelines for Identifying and Designing Services Version 1.1*

6 *Evaluating and Developing Funding Options*

Obtaining funding to support IJIS systems may be one of the most significant obstacles to overcome, especially in tight fiscal times. At the Federal level, Congress continues to emphasize deficit reduction through spending cuts, which will impact the dollars available for state and local programs. While Federal dollars have been a source of support and stopgap funding for state and local IJIS efforts, that funding is subject to increased slashes of prior stimulus funding of agency programs and technology. IJIS

projects should emphasize consolidation with other county agencies, outsourcing IT support, and infrastructure.

According to a recently released NGA and National Association of State Budget Officers (NASBO) report, Fiscal – Spring 2012 State fiscal conditions are continuing to improve into fiscal 2013, although many state budgets are not fully back to pre-recession levels. This report finds that governors' recommended budgets show an overall increase in both general fund expenditures and revenues in fiscal 2013. Fiscal trends indicate that, while aggregate state revenues will be above their pre-recession levels in fiscal 2013, total general fund spending will not yet surpass pre-recession levels. Consequently, state budgets reflect a national economy in which growth is slow and not as robust as in previous recoveries, yet overall state fiscal improvement is occurring.[27]

However, remembering how quickly revenue declined in the past, states remain cautious. Expenditure pressure continues, as the budgetary strain of Medicaid, and looming issues such as pensions, demographic shifts, and infrastructure all compete for a piece of the state budget pie. Now, more than ever, state and local justice agencies need to be innovative in garnering financial support for IJIS efforts.

This section of the toolkit explores traditional funding methods, such as Federal grants and earmarks, as well as alternative funding mechanisms that may be useful in supporting IJIS at the state and local level, including shared services and outsourcing. This section also includes examples of funding for IJIS efforts at the state and county level. Finally, a tool highlighting where to go for support and information about funding for IJIS is included as well.

6.1 Presenting the Case for Funding

IJIS systems are complex in a variety of ways and often less visible than other capital investments. Separate state and local governance creates barriers to more effective, efficient, and often less costly shared systems (See Section 7 for more information regarding governance).

Public officials know the difficulties in obtaining funding for more visible enforcement and emergency equipment such as patrol cars, fire trucks, or ambulances. Obtaining funding for an IJIS system is even more difficult. To present the case for funding IJIS systems, agencies should:

- Provide examples of other entities that have implemented a similar system and saved money over the cost of developing a stand-alone system.
- Bring in outside experts to confirm that the benefits are tangible and quantifiable.
- Provide cost figures, if possible, as well as the assumptions used to develop the estimate.
  - From there, demonstrate how the increased efficiencies of an IJIS system will help save money for the jurisdiction in the future.
- Indicate cost-saving measures that have been taken to demonstrate fiscal responsibility.

[27] "An Update of State Fiscal Conditions," NGA and NASBO (April 2012), http://www.nasbo.org/sites/default/files/Spring%202012%20Fiscal%20Survey%20of%20States.pdf

- Engage outside experts to bolster and confirm the projected benefits and any anticipated ROI.
- Provide, if possible, cost figures and the assumptions used to develop the estimate.
  - From there, demonstrate how the increased efficiencies of an IJIS system will help save money in the future.

Another mechanism to garner support is to engage the media's interest—and, therefore, the public's interest—early in the planning process. By allowing the media and key decision-makers to view the problems associated with the inability to share information first-hand, a powerful message can be generated and sent to key decision-makers; however, media involvement is a two-edged sword. Once issues or problems are identified, agency heads may be exposed to criticisms concerning how they could let these conditions develop and/or persist. Then, as the project develops, the media are likely to closely monitor progress or lack of and report this as well.

More information about creating a business case for IJIS is found in Section 3.6 of the toolkit.

The following subsections cover both traditional and alternative means of developing funding that can be used for an IJIS project.

6.2 Traditional Approaches

Traditional approaches include Federal funding, grants, and earmarks.

In addition to state and local budget appropriations, projects are often supported by Federal and other grant-in-aid funding sources. This section of the toolkit examines the IJIS-related funds available from various sources within the U.S. government. Readers are cautioned to periodically check the cited websites, as funding types, amounts, and qualifications may change throughout the grant cycle, and with each fiscal appropriation, annually, as the U.S. Congress constructs the Federal budget. Grants and funding for projects may also be available from in-state and private not-for-profit organizations. Due to the fluidity of these programs, complexity and number of variations nationally, non-Federal grant sources are not discussed here.

6.2.1 Federal Funding Sources

In addition to state and local budget appropriations, IJIS projects are often supported by Federal funding. The Federal government distributes billions of dollars each year to state and local agencies to support a broad array of crime control and prevention initiatives. Many of these funding networks can be used to support record management and justice information sharing systems.

6.2.2 Federal Funding Programs and Federal Earmarks Defined

Each year, through many of the grant programs previously listed, the U.S. Congress provides billions of dollars of support to state and local agencies. Most of these grant opportunities are passed down from the Federal government to state and local applicants via a method defined by statute. For example:

- Grants.gov is the federal government's central storehouse for information on over 1,000 grant programs and provides access to approximately $500 billion in annual awards. Grants.gov provides an online resource that allows agencies to search for funding announcements, apply for grants, and track their application status.
- Over the past 10 years, OJP has provided **52,000 funding awards** to the criminal justice community totaling more than **$26 billion**.

- In Fiscal Year (FY) 2009, OJP awarded **4,900 grants** totaling more than **$2.5 billion**.
- In FY 2009, OJP also awarded an additional **3,883 *Recovery Act* grants** totaling more than **$2.74 billion** to state and local and tribal law enforcement and community organizations.

These awards include: formula grants, congressionally directed awards, discretionary grants, cooperative agreements, and payment programs.

6.2.2.1 Formula Grants

Formula grants[28] are funding programs that state or local jurisdictions do not have to compete for – though they must submit applications and meet other specified requirements. They ensure that designated recipients will receive funds, and are usually administered and managed by State Administering Agencies. Exactly how funds are distributed is most often governed by statutes or congressional appropriations acts that specify which factors are used to determine eligibility, how the funds will be allocated among eligible recipients, as well as the method by which an applicant must demonstrate its eligibility for that funding. Each grant award amount is calculated by a formula, and actual funding amounts vary.

Formula grant programs can be for a specific purpose [*e.g.* Office of Juvenile Justice and Delinquency Prevention (OJJDP) Juvenile Accountability Block Grants Program; Office for Victims of Crime (OVC) *Victims of Crime Act (VOCA)* Victim Compensation Formula Grants] or can support public safety operations, in general. For example, the Byrne Formula Grant Program[29] [*i.e.* Justice Assistance Grant (JAG)] is distributed to state agencies designated by the governors through a formula that is based on population and crime rate, among other variables.

6.2.2.2 Congressionally Directed Awards

A *congressionally directed award*, or *earmark*, directs approved funds to be spent on specific projects or directs specific exemptions from taxes or mandated fees. Congressionally directed awards do not mandate additional government spending, but allocate approved spending for specific purposes.

6.2.2.3 Discretionary Grants

Discretionary grants may be directly awarded by a Federal agency such as OJP to eligible recipients, most often on a competitive basis. The discretionary classification means the Federal agency distributing the funds has the authority, subject to Federal rulemaking provisions, to competitively administer grant funding in program areas that the agency deems timely or important to the field. Examples of these funding streams in an IJIS environment include the NCHIP.

[28] "State Administering Agencies," OJP, http://www.ojp.usdoj.gov/saa/

[29] "OMB Circular A-133 – CFDA 16.579: Byrne Formula Grant Program," DOJ, http://georgewbush-whitehouse.archives.gov/omb/circulars/a133_compliance/06/doj.pdf

6.2.2.4 Cooperative Agreements

A *cooperative agreement*, typically a *discretionary award*, is a legal instrument that permits OJP to transfer money or something of value to accomplish a public purpose of support authorized by Federal statute. This type of award is used when it is anticipated that substantial involvement will be required by the Federal government.

6.2.2.5 Payment Programs

Payment programs fund participating jurisdictions for designated purposes, but do not involve post-award activities. The State Criminal Alien Assistance Program, Bulletproof Vest Partnership, and Southwest Border Prosecution Initiative are examples of such programs.[30]

Program requirements and details are available at grants.gov and, specifically for justice-related awards on the OJP website. To assist in understanding the complexity of the funding, OJP has developed a "Grants 101" educational website, which provides details on the process, types of awards, application funding, and selection. See http://www.ojp.gov/grants101/index.htm for more details.

6.2.3 Grants

Each year, DOJ and DHS administer sizeable budgets aimed at funding state and local governments, a percentage of which can be used for related missions. In FY12, the combined available funds from these agencies totaled over $5 billion, with at least 15% aimed at data sharing and information exchange technology.

The following is a short list of grant programs active as of the last update of this document and includes both Byrne or JAG Grants, OJP, the Community Oriented Policing Services (COPS) office, and the DHS State and Local Government Coordination and Preparedness (SLGCP) grant offerings, many of which may be suitable for agencies looking for grants to support justice information sharing initiatives. The major Federal grant programs with funds available to assist in systems development are discussed below.

6.2.3.1 JAG

The JAG Program[31], administered by the BJA and authorized under *Public Law 109-162*, is the leading source of Federal justice funding to state and local jurisdictions. The JAG Program provides states, tribes, and local governments with critical funding necessary to support a range of program areas including law enforcement, prosecution and courts, crime prevention and education, corrections and community corrections, drug treatment and enforcement, planning, evaluation, technology improvement, and crime victim and witness initiatives.

In FY05, the JAG Program replaced the Byrne Formula Grant Program and the Local Law Enforcement Block Grant Program. The new JAG program is a partnership among Federal, state, and local governments to create safer communities. The BJA awards grants to states and local government to

[30] "Grants 101," OJP, http://www.ojp.gov/grants101/index.htm

[31] "Justice Assistance Grant (JAG) Program," BJA, https://www.bja.gov/ProgramDetails.aspx?Program_ID=59

improve the criminal justice system. The program places an emphasis on breaking the cycle of substance abuse and crime, combating violence, holding offenders accountable, enhancing law enforcement initiatives, and supporting advancements in adjudication.

- In FY11, BJA processed 1,348 local and 56 state applications totaling more than $368M in JAG funding (approximately $246M to states and territories and $122M to local units of government).
- In FY12, there are a total of 56 states and 1,217 local jurisdictions eligible for JAG funds, with a total of $295.58M available (approximately $193M to states and territories and $95M to local units of government).[32]

6.2.3.2 NCHIP

The NCHIP is administered by the BJS, OJP, within the DOJ, and implements a number of national programs. Through the NCHIP, BJS provides direct awards and technical assistance to states and localities to improve the quality, timeliness, and immediate accessibility of criminal history records and related information. Complete records require that data from all components of the criminal justice system, including law enforcement, prosecutors, courts, and corrections be integrated and linked. NCHIP continues DOJ efforts to build an accurate and useful national system of criminal records. Availability of complete computerized criminal records is vital for criminal investigations, prosecutorial charging, sentencing decisions, correctional supervision and release, and background checks for licensing, purchasing of handguns, and applying for child-care positions or other responsibilities involving children, the elderly and the disabled. NCHIP assists states to establish the integrated infrastructure that meets the needs of all components.

One of the major initiatives in this program is the National Instant Criminal Background Check System (NICS)[33] program. This two-year old program, administered by OJP's BJS, provides grants to assist states, state court systems, and tribal governments in updating NICS with the criminal history and mental health records of individuals who are precluded from purchasing or possessing guns. The *NICS Improvement Amendments Act*, which authorizes this grant program, was enacted in the wake of the tragic shootings at Virginia Tech. Jurisdictions continue to struggle with meeting rigid eligibility requirements mandated by the Act. Funding has been used by state recipients to address critical information gaps. State contacts, funding information, and progress reports for this initiative, as well as others funded by NCHIP, and state-by-state awards and reports are highlighted on the website.[34]

To date, all states, the District of Columbia, and five U.S. territories have received funds under NCHIP. Federally recognized tribes are also eligible to apply for funds under NCHIP. Further information about the history of the NCHIP program and its accomplishments is available online.[35]

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[32] "JAG Fact Sheet," BJA, https://www.bja.gov/Publications/JAG_Fact_Sheet.pdf

[33] "National Instant Criminal Background Check System," FBI, http://www.fbi.gov/about-us/cjis/nics

[34] "FY 2012 Performance Budget: Office of Justice Programs," DOJ, http://www.justice.gov/jmd/2012justification/pdf/fy12-ojp-justification.pdf

[35] "National Criminal History Improvement Program," BJS/OJP, http://www.bjs.usdoj.gov/index.cfm?ty=tp&tid=47

6.2.3.3 OJP

OJP, primarily through BJA and DOJ's Global, supports national policy, practices, and technology solutions to improve information sharing capacity within the criminal justice community, while emphasizing the importance of privacy and civil liberty protections and improving safety in our communities. These initiatives include: NIEM, Federated Identity, Privilege Management, and Technical Privacy Implementation, maintenance and support of the National Sex Offender Public Website (NSOPW), and support for various programs related to Justice Information Sharing Training and Technology Assistance. Funding for 2012 and programs are defined on the website.

Each initiative requires a multidisciplinary response, executive sponsorship, stakeholder ownership, and collaborative program implementation to address operational, technical, and policy needs. The initiatives presented do not require a large investment of resources and will support DOJ's information sharing mission, improve the information sharing processes to strengthen decision making, and enable research and evaluation to identify promising practices with a strong return on investment. In 2012, problem definition, coalition building, program design, training, and technical assistance will be critical to ensuring program processes are successful and replicable. In addition, field practitioners' insights will continue to be invaluable for developing targeted, sustainable solutions nationwide.

6.2.3.4 DHS

The DHS Office of SLGCP is the Federal government's lead agency responsible for preparing the nation against terrorism by assisting states, local, and tribal jurisdictions, and regional authorities as they prevent, deter, and respond to terrorist acts. SLGCP provides a broad array of assistance to America's first responders through funding, coordinated training, exercises, equipment acquisition, and technical assistance. In early 2007, SLGCP (previously named Office of Grants and Training) was reorganized into the following offices: Grant Preparedness Directorate (GPD) and the National Preparedness Directorate (NPD).

This office manages a number of programs that provide funding to enhance the capacity of state and local jurisdictions to respond to, and to mitigate the consequences of, incidents of domestic terrorism involving the use of weapons of mass destruction. DHS grants to state, local, tribal, and territorial jurisdictions, and other regional authorities are concentrated into emergency (disaster planning) and non-emergency grants to assist in the preparation, prevention, and response to terrorist attacks and other disasters. Localities can use grants for planning, equipment, training, and exercise needs. The seven DHS Preparedness Grant programs include more than $1.3 billion to assist states, urban areas, tribal and territorial governments, non-profit agencies, and the private sector in strengthening our nation's ability to prevent, protect, respond to, and recover from terrorist attacks, major disasters and other emergencies in support of the National Preparedness Goal (NPG)[36]. The FY12 grants focus on the nation's highest risk areas, including urban areas that continue to face the most significant threats.

Under the Federal Emergency Management Agency (FEMA) mission, FEMA provides state and local governments with preparedness program funding in the form of Non-Disaster Grants to enhance the

[36] "DHS Announces More Than $1.3 Billion in Fiscal Year (FY) 2012 Preparedness Grant Awards," DHS, http://www.dhs.gov/news/2012/06/29/dhs-announces-more-13-billion-fiscal-year-fy-2012-preparedness-grant-awards

capacity of state and local emergency responders to prevent, respond to, and recover from a weapons of mass destruction terrorism incident involving chemical, biological, radiological, nuclear, and explosive devices and cyber-attacks. Further information on specialized initiatives in DHS and FEMA-specific funding that may be applicable to the procurements and implementation can be found online.

Specific grant awards for recent years are shown on the websites for the specific program and can also be accessed by state and program initiative, for example:

- *COPS Law Enforcement Technology Program*. Examples of recently programs are:
  - Integrated Criminal Justice Information System for the State of VA – $2.1M
  - Justice Integrated Information Management System for Kalamazoo, MI – $150,000
- *Crime Identification Technology Act (CITA)*. CITA offers assistance in improving and implementing effective state, local, and tribal justice information systems. Information regarding the history of CITA, eligibility criteria, and the distribution of funds is available online.[37] Additional resource links to similar technology efforts and contact information may also be helpful to those who have specific inquiries about CITA.
- *Edward Byrne Discretionary Grant Program*. Examples of recently funded programs are:
  - National Sheriff's Association Pegasus Program – $1M
  - J-ONE Information Sharing System in New Hampshire – $3,000

More information on JAG grants is provided below.

JAG[38] Grants

The Edward Byrne Memorial Justice Assistance Grant (JAG) Program [*42 U.S.C. 3751(a)*][39] is the primary provider of Federal criminal justice funding to state and local jurisdictions. The JAG Program provides states and units of local governments with critical funding necessary to support a range of program areas including law enforcement, prosecution and court programs, prevention and education programs, corrections and community corrections, drug treatment and enforcement, crime victim and witness initiatives, and planning, evaluation, and technology improvement programs.

The Bureau of Justice Statistics (BJS) calculates, for each state and territory, a minimum base allocation which, based on the statutory JAG formula, can be enhanced by (1) the state's share of the national population; and, (2) the state's share of the country's Part 1 violent crime statistics. Once the state funding is calculated, 60 percent of the allocation is awarded to the state, and 40 percent to eligible units of local government. State Administering Agencies (SAA) can provide additional information about what is available.[40]

[37] "Office of Justice Programs Crime Identification Technology Act Web Page," OJP, http://www.it.ojp.gov/fund/files/cita.html

[38] "Byrne JAG Program – Cornerstone for Justice," NCJP, http://www.ncjp.org/byrne_jag

[39] "Justice Assistance Grant (JAG) Program," BJA, https://www.bja.gov/ProgramDetails.aspx?Program_ID=59

[40] "State Administering Agencies," OJP, http://www.ojp.usdoj.gov/saa/

In an early 2010 survey of the State Administering Agencies (SAAs), 52 responding states and territories reported to the NCJA how they distributed their Byrne JAG formula grants in 2009. This includes *Recovery Act* and any other Byrne JAG funding allocated from their FY09 or earlier awards. Of the total, $89.6 million, or 7 percent, was directly spent on information sharing projects. An additional $33 million, or 3 percent, was spent on criminal records management upgrades, cybercrime, identify theft, fusion centers, and Internet crime initiatives, which primarily are technology and information sharing needs. A further $117.4 million, or 10 percent, of the total was for law enforcement equipment or technology purchases, a significant portion of which supports information sharing initiatives.

Most SAAs are a component of the Governor's (or Mayor's) office; and, are a free-standing criminal justice planning entity or a division of the state department of public safety. In addition to location, the mission, vision and strategic focus of an SAA is often defined by state statutes. Due to differences in location, formula grants administered, research capacity, and the leadership selection processes, SAAs are a diverse group of government agencies with differing capacities, perspectives, missions and priorities. The figure below illustrates placement of the office, department, and division of the 56 state and territorial SAAs.

FIGURE 11. STRUCTURE OF SAA OFFICES[41]

Location	Number of SAAs	% of Total SAAs
Freestanding state agency	11	20
Department/Office/Division of Public Safety	18	32
Governor/Executive-level Office	13	23
Attorney General's Office/Department of Justice	6	10
Department of Finance, Administration, Commerce, etc.	4	8
State police departments	2	4
Department of Homeland Security	1	2
Other	1	2
Total	56	100

Governing Boards and Councils

In an effort to better serve the criminal justice community, SAA offices often staff and closely work with high-level governing boards and state level advisory councils. These boards and councils, comprised of state and local level decision-makers, help the SAA establish policy and priorities, analyze statewide trends, identify recourses, and share successful program models. These councils and boards can assist in developing justifications for a strategic investment, create policy and practice recommendations, and

[41] "An Overview of State Administering Agencies (SAAs)," NCJA, http://www.ncja.org/about-ncja/about-saa

guide future initiatives. Identifying and contacting any such groups in the respective state or local geographical area can be helpful when planning IJIS grant applications.

Formula Grants

In addition to administering the Byrne JAG Program, the majority of SAAs oversee other Federal criminal justice formula grant programs. In 2011, 75 percent of SAAs administered at least four of the DOJ state formula grants.

FIGURE 12. DOJ STATE FORMULA GRANT PROGRAMS[42]

DOJ State Formula Grant Programs	
Programs	% of SAAs Administering
JAG	*100*
RSAT	*93*
Coverdell	*76*
VAWA	*71*
VOCA	*61*
OJJDP	*50*

6.3 Alternative Funding Approaches

In restrictive budget environments, innovative financing options are important to consider. Developing new relationships, leveraging resources, and developing new user fees are just a few ways to form new funding approaches to support justice information sharing. Creating these new avenues of support can be as simple as signing an MOU with a partner organization, and can be as complex as encouraging a state legislature to adopt a new fine or fee associated with the criminal justice process.

This section explores some of these alternative funding approaches—leveraging investments, financing options, and other user fees—that may provide additional support for an IJIS effort.

6.3.1 Leveraging Investments

Current budgeted funds for IJIS systems may not be sufficient to fund long-term efforts to achieve the ultimate integration vision. Budgeted funds can help address the cost factor when combined with reallocated sources of funds and new funding resources, including Federal and private grants, leasing of infrastructure, and fees. The first step, however, is to look at innovative ways to cut the costs of implementing IJIS systems.

6.3.1.1 Shared Systems

Many public safety agencies use shared systems and resources instead of building independent systems. Technologies such as web services, XML, and middleware make the sharing of information from

[42] "Fund Administration," NCJA, http://www.ncja.org/about-ncja/about-saa/fund-administration

disparate systems more affordable and easier to implement. Not only do shared systems support integration, but jurisdictions can save money by leveraging economies of scale in making expenditures. This is one of the reasons that SOA becoming more popular since one of its goals is to acquire and implement a service and then have more than one agency utilize it.

- Shared systems can be *vertical*, supporting information sharing between different levels of government, such as between cities, counties, tribes, states, and Federal agencies.
- Alternatively, shared systems can be *horizontal*, where several agencies of the same type or at the same level of government share information, such as when multiple law enforcement agencies share investigative information.

When multiple agencies, jurisdictions, or governmental levels share a system, costs of the new system can be reduced for each agency to the degree that the cost of infrastructure, fixed equipment, maintenance, and applications are shared. For example:

- Arizona received a NICS Act Record Improvement Program (NARIP) grant to improve their NICS reporting and have set up a Microsoft SharePoint© site to facilitate their NICS Task Force activities. This provides a single location on the Internet to review all documents for Task Force meetings.
- The Massachusetts Executive Office of Public Safety is using NIEM to share gang information with other states.[43]

6.3.1.2 Volume Pricing

Lower pricing, especially for equipment and software packages, can be a byproduct of the higher volumes generated by a shared system or by group purchasing agreements. Smaller agencies can enjoy the benefits of having purchases combined with those of larger agencies to obtain volume discounts. Developing purchasing alliances or compacts is another method of lessening costs. In order to avoid agencies with similar needs duplicating each other's purchases, agencies and jurisdictions should investigate group purchasing arrangements available through their respective state agencies, the Federal government, and public interest groups, such as the National Association of Counties (NACo).

6.3.1.3 Use of Existing Infrastructure

If a governmental entity owns infrastructure that can be used for the new system, or if commercially available infrastructure can be found, then significant cost reductions can be realized. The conversion of up-front capital costs to long-term leasing costs can be of great benefit. Depending on the leasing rate and how long the leased item is used, the cost of leasing can equal or even exceed the cost of purchase or development. A specific fiscal analysis must be conducted to determine which method makes sense.

[43] "Gang Data Sharing," NIEM, https://www.niem.gov/documentsdb/Documents/Case%20Studies/NIEM_case_studies_Unify.pdf

6.3.1.4 Shared Information

Contacting other governmental units that have already contracted with prospective vendors can provide valuable information on the prices that a vendor has charged to others.

The best results maximize economies of scale, but balance the size and effort against diminishing return. Economies of scale can be realized by sharing resources among agencies and jurisdictions; however, depending on the leasing rate and other factors, leveraging these economies of scale through the participation of other agencies and jurisdictions may increase the difficulty of implementing solutions, and may outweigh the benefits. One trend that would alleviate this problem is the establishment of centralized procurement agencies, particularly at the state level. These agencies, with differing levels of authority, can be responsible for reviewing current IT infrastructure, defining goals for future capabilities and technologies, establishing standards, and assisting with the procurement process across a jurisdiction. In this way, the establishment of an enterprise or services oriented architecture can be more easily and efficiently achieved.

Some useful references for centralized oversight and procurement agencies include:

- Virginia Information Technologies Agency (VITA)
- Arizona's Government Information Technology Agency (GITA)
- New York City's Department of Information Technology and Telecommunications (DoITT)
- National Association of State Chief Information Officers (NASCIO)

6.3.2 Financing Options

Financing methods for IJIS systems include lease purchase agreements, capital appropriations, and bond proceeds. A government entity can use more than one financing method to achieve full funding. It is important to remember that financing methods used to fund assets generally must match the life of the asset.

6.3.2.1 Fee-for-Service

With most jurisdictions facing shrinking budgets, the search for alternative financing methods that do not require large capital investments has led to fee-for-service, or lease purchase, agreements. A private company or source can build and own the system, leasing it back to a government entity for a charge that usually includes a maintenance agreement. Care must be given to ensure that appropriate levels of management control are exercised to meet law enforcement and judicial regulations.

6.3.2.2 Capital Appropriation

Compared to long-term financing, capital appropriation is in the "pay-as-you-go" category. The funding comes from revenues that are collected from current year taxes and fees. The government entity sets aside the funds for capital projects that usually take less than 10 years to repay. Capital appropriations also are used to reduce dependency on long-term financing.

6.3.2.3 Bond Proceeds

This long-term financing method can be used for purchases that average 20 years to repay. For instance, a government entity needing $5M for infrastructure could prepare a public bond issue. The government entity obtains the money right away and makes payments through a debt service.

6.3.2.4 Revenue Enhancement

Some state and local governments have adopted specific fees, increased existing fees, or diverted some of the revenues from existing fees to fund new IT initiatives.

6.3.2.5 Special Fees

Funding for integrated justice can come from revenue collected from special fees, such as the enhanced 9-1-1 fee for both landline and wireless communications, or from additional fees charged to offenders through court proceedings.

6.3.2.6 User Fees

Many agencies charge user fees based on the number of individuals within the participating agency who use the IJIS system. This approach is particularly effective in funding long-term costs; however, charging user fees can present fiscal and psychological barriers for agencies considering joining the system.

6.3.2.7 Motor Vehicle Fees

Some states have used either existing fees or increased fees on motor vehicle and boat transactions. Due to the large number of transactions, these fees can generate significant funds.

6.3.2.8 Gaming Fees

Several states have gaming operations that generate significant sums of revenue. Dividing the existing revenue collected or increasing the amount of revenue collected can provide a significant source of funds, both in the short- and long-term.

6.3.2.9 Revolving Funds

Revolving funds offer another way of raising funds for IT projects that do not rely solely on the traditional tax levy by allowing agencies to establish a revolving fund from which agencies could borrow for IT proposals. Agencies then repay the fund from cost savings or new revenues generated as a result of the project. Fund managers decide which projects merit the risk of a loan. The revolving fund thus functions as internal venture capital, supporting risky and longer-term projects that may be much harder to fund through the traditional budget process. Because agencies repay when projects bear fruit, the fund is perpetuated for future IT investments. A surcharge in the fees often used to fund IT services could also be used to support revolving funds.

6.3.2.10 Public/Private Partnerships

Look for opportunities to partner among government agencies (*i.e.* public/public partnerships), as well as private sector organizations (*i.e.* public/private partnerships). Partnering builds ownership and greatly assists in project planning and implementation.

6.3.2.11 Public Transaction Fees

Another source of funding could be public access or public transaction fees. These fees are paid by individuals processing transactions remotely such as paying fines, tickets, obtaining arrest reports, warrant and bonding information, traffic accident reports, etc.

According to guidance published by the U.S. Department of Transportation on building public/public and public/private partnerships, partners do not necessarily have to contribute funding. Knowledge, services, equipment, and public relations support are examples of contributions that other partners can

make. Chambers of commerce, for example, may become formal project partners because they want to improve public safety and reduce traffic congestion to promote tourism and economic development.

Furthermore, some industry groups may be interested in assisting a jurisdiction with an IT project in order to test or further develop a new technology. While there is some risk to the agency in taking this approach, in many cases, the firm offers its services to the jurisdiction at a significantly reduced or no cost model.

It is important that partnering agreements are formalized in writing so that all parties are clear about project responsibilities, as well as the benefits of participation. Sometimes, when partners are not financially contributing to a project, the project responsibilities can be taken too casually. Drafting a partnership agreement in the form of an MOU can help create the team discipline necessary for success.

SECTION III: IJIS PLANNING KEYS

Creating plans to serve as a foundation of IJIS initiatives is a critical component for success. In this section of the toolkit, guidance is presented on key planning items.

7 Understanding Governance

Since their inception, integration and IJIS systems have presented challenges to technology planners and for management. Preparing to create an IJIS environment can cause even the most experienced technologist or administrator some anxiety. To successfully implement an IJIS project, key stakeholders must approach the project in much the same way they would plan a construction project, such as building a house or a bridge. According to Spector and Gifford, "Bridges are normally built on time, on budget, and normally do not fall down."[44] The construction project depends upon multiple levels of planning, implementation, and a team approach that is scheduled and staged. A lack of understanding of the preferred overall result can lead to differing perceptions of the design and construction process. The leaders and governing body must commit their support to the project to ensure its successful construction and ability to stand on its own when completed. When designing anything, proper planning, clear requirements, and substantial user involvement and buy-in are needed to ensure success.

In a 2007 report titled *From the CIO Trenches: Why Some Projects Fail and Others Succeed*, David McClure defined undisciplined project management practices, poorly functioning governance, and lack of or little executive support/sponsorship as the top reasons that IT projects fail. This Gartner research report states:

> *CIOs should conduct a health checkup of their IT governance processes — increasingly built around business case requirements in governments — for adequate insights they provide into project selection, management controls, and results or benefits realization. As noted in our survey responses, these are core issues directly affecting IT project failure and success."*[45]

This need for governance and executive support and leadership continues to be demonstrated as essential critical success factors in IJIS project planning and RFPs.

When entering into the planning and pre-proposal phase of an IJIS project, it is important to understand that integration requires collaborative control and shared decision-making. Leadership and governance provide the basis for trust, ownership, and communication. These components are not independent of one another. They overlap and, at times, take on different levels of importance and priority, depending on when and where they come into play during the project.

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[44] "Bridge Design and Construction," *Communications of the ACM* 29(4): 267-283, Alfred Z. Spector and David K. Gifford, April 1986

[45] "From the CIO Trenches: Why Some Projects Fail and Others Succeed" (ID Number: G00151721), Gartner / David McClure, http://www.gartner.com/id=526114

Some decisions that need to be made may involve changes to longstanding processes or traditions, and may permeate the entire organization or a key piece of it. One of these, *technology*, can be especially sensitive. It is important to understand the necessity for strong leadership and governance when beginning the initial phases of an IJIS project.

The following subsections describe some strategies and steps that may aid agencies and their partners in the development of these critical factors: *Leadership* sets the tone for the project as a whole; and, *governance* helps foster commitment and keeps goals in mind.

7.1 Leadership

Leadership is critical to the success or failure of an IJIS initiative and goes far beyond the planning process and the standard executive management and oversight tasks. In IJIS efforts, leadership must also serve as the champion and "cheerleader" or promoter of the IJIS initiative. The entire project life cycle, from conception to completion, is a process of change. IJIS effort leaders must strengthen relationships with various groups within the community, as well as within the organization, build support and enthusiasm for the IJIS, and continually encourage enthusiasm and commitment to the effort. Strong relationships amplify the chances for a successful outcome, and these relationships must be developed, nurtured, and maintained throughout the lifespan of the IJIS plan and project.

IJIS planning is not performed in a vacuum. Each issue must be reviewed and discussed within the context of organizational goals. Leadership is vital—and it goes beyond the financial support of the partnering agencies to garnering support of the overall project. It is imperative that leaders be educated regarding the purpose of the project, its vision, its goals, and critical planning issues prior to the development of an RFP, and that the leaders are visible as the spokespersons and champions of the process.

Leaders within the IJIS community and on IJIS governing boards may need to change others' opinions about technology, its use, and its purposes for integrated justice information system. In order to achieve the objective and end goals, the keys to successful IJIS project leadership are based in commitment and communication:

> *It is the ability to develop a keen external awareness that separates the truly great communicators from those who muddle through their interactions with others. Examine the world's greatest leaders and you'll find them all to be exceptional communicators. They might talk about their ideas, but they do so in a way which also speaks to your emotions and your aspirations. They realize if their message doesn't take deep root with the audience then it likely won't be understood, much less championed.*[46]

Communication and commitment are two key qualities of leadership in successful IJIS projects. This includes the following tasks for IJIS leadership:

[46] "Courageous Leaders Don't Make Excuses…They Apologize, Erika Andersen / Forbes, http://www.forbes.com/sites/erikaandersen/2012/06/05/courageous-leaders-dont-make-excuses-they-apologize/

FIGURE 13. KEY TASKS FOR SUCCESSFUL IJIS PROJECT LEADERSHIP

7.1.1 Communicating of IJIS Goals and Objectives

Key members or stakeholders within the community may not understand how an IJIS environment will help the community achieve its goals and objectives. First, be sure to learn how these individuals address technology and information sharing in their own organizations from both operational and technical perspectives. Are they excited about the IJIS initiative, or are they weighed down by the concept? Do they understand their role in the process and the benefits and advantages that their specific agency will realize?

7.1.2 Managing Stakeholder Support

Identify other members within the IJIS community who are supportive of the project's concepts, goals, and objectives, and who understand integration, technology, or the outcome measures desired for the system. Then, invite these individuals to join various subcommittees. Bringing different viewpoints to the overall IJIS planning effort may help others understand project objectives and build additional support. Key stakeholders do not only include the participating agencies' leadership and technical staff; IJIS also has impacts upon the community at large, and includes recognition and resolution of legal challenges, management concerns, funding issues, grants management, and operational change management. This will require all impacted personnel to be aware of the IJIS project mission and goals up front. Leadership should demonstrate their support for the initiative and should champion its development.

7.1.3 Including SMEs

A commonly used method for educating a community, board, or government agency is to invite outside SMEs to speak about successfully implemented systems, costs, planning processes, and advanced technologies for IJIS systems in use across the country. SMEs include technology and operational staff who have experience in planning and implementing IJIS systems, and successfully acquiring technology, project management, and integration expertise for similar sized jurisdictions and scope IJIS systems. Leadership should ensure there is comparability between the SME's experience and the current project. For example, a SME speaking of a county-wide IJIS plan that involved all municipal and local law enforcement agencies can provide lessons learned and best practices that will be applicable to a county IJIS RFP.

7.1.4 Maintaining Involvement

Keep the community and decision-makers involved in the planning process, and make sure they understand its dynamics. Progress reports are important and should be provided to the governance board and at regular and *ad hoc* sessions to the IJIS community – not just the executive planning committee. Progress reporting should be regular and should include updates on successes and

completed tasks, no matter how minimal these actions may be to the overall process. Remember, lack of information leads to rumor and innuendo, and the IJIS system is not the only activity going on in a jurisdiction. Lack of involvement will lead to lack of interest and no one having "the time" to commit to necessary IJIS planning tasks.

7.1.5 Discussing Funding Sources

Discuss the financial impacts of the IJIS endeavor. Openly consider expected costs and savings, as well as anticipated increases in productivity and services to the public. This shared understanding provides a shared stake between all agencies involved in the project. Successful leaders participate in the development of the IJIS financial roadmap and funding options and have a thorough understanding of the funding sources, including grants and aid available. Leadership must champion the funding of the project both initially and long-term, and encourage through communication and collaboration shared support and buy-in to the IJIS project.

7.2 Governance

Critical to the success of any IJIS project is the establishment and maintenance of a governance structure. No single governance model will meet the needs of all sizes or levels of IJIS initiatives. Governance is the process used to formally define a structure and manage the information, processes, and resources in the IJIS project. It ensures that the appropriate stakeholders are involved in the decision-making and development tasks for the IJIS RFP.

Gartner research on governance suggests that the leadership is responsible for bringing both good and bad news about governance of a project to executives and others.

> *A governance leader bears this responsibility by preparing and presenting special and periodic governance reports […] A data governance leader should always report about value that governance returns to an enterprise. The value should be commensurate with investments in the governance program. A data governance leader should measure and report costs avoided and risks lowered because governance actions succeeded.*[47]

In the past, OJP worked with the NCJA on state surveys to identify and document the characteristics of governance models across the country that oversee the development and implementation of integrated criminal justice systems. Similarly, the OJP and NASCIO conducted numerous studies to identify and document characteristics of local governance models used to operate integrated justice systems in counties, municipalities, and regional units of government.[48/49] These studies are provided in the toolkit.

When determining a governance structure for an IJIS project, questions to be addressed include:

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[47] *Framework for Governance Program Reporting* (ID Number: G00204028), Gartner / Joe Bugajski Burton IT1 Research (July 8, 2010), http://www.gartner.com/technology/about/ombudsman/omb_guide2.jsp

[48] "Mission Possible: Strong Governance Structures for the Integration of Justice Information Systems," NCJRS, https://www.ncjrs.gov/App/publications/Abstract.aspx?id=192278

[49] *Connecting the Silos: Using Governance Models to Achieve Data Integration*, NASCIO Interoperability & Integration Committee, https://www.nascio.org/nascioCommittees/interoperability/connectingSilos.pdf

- What are the key governance principles needed for an IJIS project?
- Who is involved in the governance process?
- Do we have a stakeholder matrix that defines the process and the roles and responsibilities of the stakeholders?
- What governance models from industry and management organizations can be reviewed for best practices?
- How do we develop a governance structure as part of our planning process?
- What other factors impact IJIS governance?
- Are there models that have been successfully completed by other states and links to resources on information sharing that can be reviewed as used as the basis for our project?

Tennessee's Integrated Criminal Justice Project is included in the toolkit.

7.2.1 Establishing a Governance Structure

A governance structure is an organizational body with the authority to make decisions and oversee the successful implementation of the project. A governance structure can take many forms. It can be formal or informal. There is no right way to establish one.

The structure can be created using a variety of methods, including MOUs signed by partnering agencies and organizations within a collaborative effort; joint agreements signed by agencies in separate jurisdictions or by several government entities within a district or region; or, through signed charters or other agreements. Several MOU examples have been provided as part of the toolkit. Governance structures do not have to be created in the same way. Jurisdictions/agencies or clusters of agencies must decide what works best for them and accordingly design their structures. (*NCJRS NCJ-192278*) Whatever the method, a written statement of general goals should be prepared to identify the members and decision-making policies and procedures that are agreed upon in advance.

The governance document should also identify partners and participants, as well as everyone's roles and responsibilities—in other words, include a stakeholder responsibility matrix with definitions of roles and responsibilities. There also needs to be an understanding regarding the level of commitment of these individuals to the project. This helps avoid the potential of governance members lacking the commitment to devote the necessary time and resources to the effort. Without such a commitment, the effort has a high potential for failure.

A key objective of the governance structure is to make certain the goals of the IJIS project do not get weighed down in politics, procedures, financial, jurisdictional, or turf issues. A governance structure generates levels of agency equality, sets the direction for the effort, and moves it forward. The governing body can facilitate the participation of small agencies and jurisdictions that might otherwise lack the resources to participate in large agency collaborations. It is imperative that all participating agencies, organizations, jurisdictions, and regions make progress toward achieving the agreed-upon goals and objectives; however, to successfully accomplish this objective, the governance body must ensure the appropriate staff is assigned to the teams handling the day-to-day work of the project.

The coordination and establishment of specialized teams or subcommittees is critical. These committees and teams must include specialists and stakeholders from the various agencies. Members of the governance body should represent *all* agencies and public safety disciplines, jurisdictions, and regions participating in the IJIS effort, regardless of size—and the stakeholder roles and responsibilities should

be divided among all participants. No one individual or agency can do it all, and collaborative management requires all participants to play an active role. Stakeholders include representatives from the management and user staff and also external stakeholders, elected and appointed officials, jurisdictional budget professionals, community and industry advocates, and others deemed essential to a successful implementation. The lack of funding is a critical obstacle both in terms of the project itself, but also in terms of establishing and maintaining the governance effort.

A sample governance structure for both a county-wide IJIS (Sacramento) and a state-wide IJIS (Illinois) project are included in the toolkit.

7.2.2 Maintaining a Governance Structure

As the IJIS project evolves, the governance structure and its establishing document should be re-examined to ensure the needs of the IJIS effort remain current. Changes may be required to keep the project moving in the right direction, and with the right oversight. These can include additional stakeholders, stakeholder governance communications, standards, and changes or updates to the project governance structure and plan. As legislative and fiscal data changes (at a minimum, annually), many active IJIS organizations include updates on their website. In this manner, all participants, external and internal stakeholders can stay up to date on activities and progress.[50] Utilizing links to the requisite standards and budget sites also provides updates and sets up a more efficient communication and notification process.

Elected and appointed government officials have major responsibilities in the development, implementation, and institutionalization of an IJIS effort. They can provide the voice of political leadership, help reduce turf issues, and assist in securing necessary funding. But, to do so, they need to understand the nature of the IJIS effort and be educated regarding its benefit to the community.

Also critical to the success of the effort is identifying a "champion." This can be an elected or appointed government official or other leader in the community. This individual (or individuals) must possess the appropriate knowledge of what the effort is trying to accomplish, and s/he must be committed to seeing the project through to completion.

7.2.3 Critical Success Factors

Most agree that there are several critical success factors for establishing local governance structures that can facilitate the integration of justice information systems. The critical success factors include the six 'C's[51]:

[50] "Criminal Justice Information Systems Integration (CJIS) – Governance," Iowa Division of Criminal & Juvenile Justice Planning (CJJP), http://www.cjis.iowa.gov/

[51] "The Six Cs of Successful Project Management," SAL Consulting, LLC (2004)

FIGURE 14. THE SIX C'S OF SUCCESSFUL PROJECT MANAGEMENT

7.2.3.1 Champion

Champions and leadership are essential to IJIS system success. Committees and governance structures can define processes, approval cycles, and task completion; however, champions communicate and support the effort. Champions must be dedicate themselves to the IJIS mission and vision, advocate the process and implementation, and promote and encourage the process. This is not just the "cheerleaders at half time" metaphor, but the ongoing advocacy, encouragement, and justification of the IJIS to internal and external stakeholders.

- *All successful IJIS projects have a champion who relentlessly supports and promotes the shared vision.*
- *IJIS leaders must endorse and believe in the project to be champions for the initiative.*

7.2.3.2 Commitment

Stakeholder buy-in and agency commitment are essential for an IJIS RFP, and are critical to an IJIS system implementation. While all agencies may not have a continual lead role, in the process, it is an integration effort that requires involvement and participation of all participating agencies. Often, IJIS projects will initially have the commitment of key stakeholders, but then the commitment and participation will decrease as other agency priorities appear. The stakeholder buy-in process in the governance document should ensure that roles and responsibilities are assigned to all participants across the length of the project. While everyone cannot participate in every step and process, there should be commitment from all agencies to complete each major milestone, based upon their roles.

- *Stakeholder buy-in is required from all participating agencies to promote and maintain the shared vision. Commitment includes participation:*

- In all phases of the project; and,
- In governance and pre-/post-RFP activities.

7.2.3.3 Collaboration

Ensuring involvement from all participant agencies is critical. Turf battles happen and are impediments to any sharing or integration effort, not only an IJIS effort. Essential to the success of the effort is establishing a collaborative organization that identifies the roles and responsibilities and involves all organizations in a coordinated and collaborative manner that will instill project ownership.

- *Agencies must work together on agreements for data sharing, data standards and security*
- *Agencies must coordinate shared CJIS efforts in a timely manner and accommodate scheduling of individual agency priorities*
- *An objective implementation management methodology and governance structure is essential for collaborative organizations to share a mission and vision, and to complete all roles and responsibilities in a fluid and distributive management structure.*

7.2.3.4 Communication

Implement a sound communication plan and process (see also Section 8.1). A key purpose of a governance structure is to facilitate communication between all participating agencies and organizations. Open and honest communication with stakeholders is critical. Therefore, it is important that a detailed communication plan be established. Such a plan helps participants stay in the loop, relieving inevitable trust issues and agency concerns, particularly in cases where agencies or organizations are working together for the first time.

If possible, the use of a website for sharing the governance structure—as well as other project documents, processes, etc.—is recommended. This website can also serve as a communications vehicle for the project to report successes and progress.[52]

- *All stakeholders must communicate IJIS progress to the individual agencies, public, media, legislative and other government bodies.*
  - An Internal Communications Plan is needed.
  - A Change Management Plan is needed.

7.2.3.5 Controlled Results

A critical success factor often overlooked is the development of an IJIS strategic plan with realistic goals and objectives. Unwisely, some jurisdictions and agencies attempt to undertake an IJIS project without the benefit of serious, detailed planning. Planning takes time and thought and, in some cases, the desire to move the effort forward overcomes the need to have a clear, thought-out plan. This shortcut approach can result in project failure. Early planning and phased approaches help the project achieve small successes along the way to the ultimate goal. These successes keep the governance board and its

[52] "IJIS System," Sacramento County, http://www.ijisprogram.saccounty.net/AboutUs/default.htm

members motivated and ensure the support of the community for the long term. Several strategic plan examples are provided in the toolkit.

- *The plan must be phased to ensure that each agency realizes tangible benefits at each stage.*
  - A scalable solution to meet the needs of future phases and agencies.
  - Control the project scope with defined acceptance criteria.

7.2.3.6 Cash

Identify and obtain secured funding. "Follow the money" has been a proven mantra for IJIS development. Without the funds to plan, develop, implement, and support an IJIS initiative, the plan and project will fail. Funding requirements must be identified in advance and include not only development costs but short- and long-term capital investments. Agencies participating have to have "skin in the game" if they are expected to dedicate funds on a long-term basis. Costs associated with system replacement, upgrades, conversion, ongoing operations, and maintenance for connectivity, software and hardware, and other costs (*e.g.* staff, support, etc.) can be overwhelming, if not properly planned for and estimated prior to developing an RFP. Staged funding plans that are collaboratively developed ensure that participating agencies continue to support and contribute to the IJIS. When planning an IJIS project, sustainability is also an important consideration that feeds into the business case.

- *Cash is best if earmarked.*
- *Multiple funding sources should be included.*
- *Grants in aid can be multi-year.*
- *Do not forget to include maintenance and support costs.*
- *Specialized funding may be available for standards implementation.*

Many IJIS efforts have failed because they did not have adequate support from all parties impacted by the project, especially from elected and appointed officials. Good leadership, governance, collaboration, and open, honest communication are critical to any successful integration effort.

Additional information to consider, further discussion on governance, and a sample MOU are provided in the toolkit.

7.3 Toolkit Tools Summary

TABLE 4. TOOLKIT TOOLS SUMMARY – UNDERSTANDING GOVERNANCE

- RW = Referenced Work

ID #	DESCRIPTION / PUBLICATION INFORMATION
RW 7-1	*Mission Possible: Strong Governance Structures for the Integration of Justice Information Systems*, BJA, February 2002
RW 7-2	Sample Governance Structure – *The State of Tennessee, Integrated Criminal Justice Project*
RW 7-3	*A Survey of Governance Structures for Statewide and State-Level Integrated Justice Information Systems Initiatives*, NCJA, 1999 / Update 2002
RW 7-4	*States' Governance of Justice Information Systems Integration: Managing Decision-making in an Integrated Environment / Observations And Insights from the Field*, NCJA, 2001
RW 7-5	*Improving Public Safety through Justice Information Sharing*, NGA, February 24, 2002
RW 7-6	Sample MOU

ID #	DESCRIPTION / PUBLICATION INFORMATION
RW 7-7	State of New Jersey, the Office of the Attorney General (OAG), Emergency Preparedness Information Network (EPINet) Strategic Plan, February 2006
RW 7-8a	State of California, County of Sacramento, Integrated Justice Information System (IJIS) Information Strategy Plan, January 2002
RW 7-8b	Sacramento IJIS Integrated Justice Information System (IJIS) Program, Summary Level Overview, Revised November 2, 2006
RW 7-9	*Governance Structures in Cross-Boundary Information Sharing: Lessons from State and Local Criminal Justice Initiatives*, Theresa A. Pardo, J. Ramon Gil-Garcia, and G. Brian Burke, Center for Technology in Government, SUNY, Albany
RW 7-10	The Development of State and Local IJIS Charters, Tarrant County IJIS, Les Smith, TIJIS Chairman
RW 7-11	Governance Agreements in Public Safety Information Sharing Projects, IJIS Public Safety Technical Standards Committee (IPSTSC), 2012
RW 7-12	Washington Justice Information Network 2009-11 Strategic Plan, 2008
RW 7-13	Arizona Records Improvement & Information Sharing Plan, 2011
RW 7-14	Kansas Information Sharing Strategic Plan, 2008
RW 7-15	Kansas Information Sharing Strategic Plan (Action Plan), 2008
RW 7-16	Illinois Integrated Justice Information System, Strategic Direction for Enterprise Information Sharing, 2009-2012
RW 7-17	State of Ohio Homeland Security Strategic Plan, 2011
RW 7-18	North Dakota Criminal Justice Information Sharing Program, Strategic Business Plan, 2011 – 2013 Biennium
RW 7-19	Mecklenburg County Criminal Justice Information Systems Strategic Plan, 2010

8 Planning Communication, Managing Change, and Mitigating Risk

Planning and managing communication, risk, and change on a project are paramount to project success. Communication is vital to project health. Without a solid project communication plan and management of that plan, there can be no structure for planning and managing project risk and change, and the processes and activities of the IJIS project cannot be effectively shared and tracked. Communication planning and management provides an authority for assigning tasks, resolving issues, and obtaining sign-offs on deliverables and changes. A communication plan also provides a structure so that the various project teams know what type of information they are expected to report, how often, and when. And, it ensures that project activities and progress are communicated to outside stakeholders, leadership, and supporting agencies.

Change is also inevitable and predictable, to the extent that it will occur and can have a significant impact on the success of any project. Change happens! Expect change throughout the project from the initial planning activities to prioritization, to procurement, and through implementation. It will come in various forms: undiscovered requirements, enhancement suggestions, market changes, team and stakeholder changes, technology and business process changes, and changes to the fiscal and operational climate in which the IJIS is operating. Plan to manage these changes through an analysis process that measures impact to project cost, scope, resources, and schedule. A well-defined and practiced process is the key to change management. Change management processes and planning go hand in hand with risk mitigation.

Like change, there will be risks to the project that may impact the project schedule, focus, scope, implementation, procurement actions, and success. All IJIS projects face risks; and, some cannot be

avoided – only minimized or mitigated through careful planning and management. Risks vary in degree of severity and may or may not be predictable. It is critical to project progress that team members proactively identify, monitor, manage, and resolve risks, issues, and jeopardies throughout the entire planning, procurement and implementation process. Understanding the breadth and depth of each issue is critical. Impact on project scope, cost, resources, and schedule must be analyzed, weighed, and prioritized. The change management planning process in strategic plans should include a risk mitigation strategy.

Project risk can be monitored and managed by identifying potential risks, documenting risk mitigation strategies and contingency plans, providing risk assessment structure using a standardized tool, and by building checkpoints and status review processes into the project milestones and schedule to accommodate known and unavoidable risks.

In any project, it is imperative to have tools in place to successfully manage communication, risk, and change.

- *Communication* planning involves creating a plan that defines who, what, when, where, why, and how details of the project will be communicated.
- *Change management* includes discussion and sample organizational readiness assessment tools to aid in the process of developing a change management plan and to assist in risk management and mitigation.
- *Risk mitigation* includes identifying the steps necessary to identify and monitor project risks.

8.1 Communication Plan

The purpose of a project communication plan is to establish a forum for project participants, stakeholders, and team members to have a voice in project scope and direction, to communicate project activities and successes, and to provide structure for ensuring that project tasks are completed and project objectives are met. The communication plan also defines the forum(s) and the methodology by which items such as external funding can be acquired and managed. Components of an effective communication plan include:

- Identifying key stakeholders
- Defining the project's organizational structure and associated roles and responsibilities
- Designing issue resolution processes
- Anticipating status reporting
- Choosing formal and informal communication media

Personnel from all agencies participating in the project should be identified as "key stakeholders." Individuals at both the decision-making level and the working level should be included. External stakeholders will include external agencies and resources that are impacted by the IJIS, but may not be directly involved in the IJIS project. This would include the community, advocacy groups, the media, and future participants in the IJIS project.

A project's organizational structure should define the role that each of the key stakeholders assumes during each phase of the life of the project. At a minimum, the plan should define:

- An *executive committee*
  - Accept and review deliverables, signoff authority, and decision-making authority.
- A *project manager*

  - Oversee the production of deliverables, and the management of project resources and schedule.

- A *core project team*
  - Production of project deliverables.
  - In large projects, the PM often leads a Project Management Office (PMO), which oversees daily activities, and leads a number of teams responsible for procurement, evaluation, testing, fiscal and resource management and implementation.
- A *technology team* and a *business team*
  - Responsible for specific project tasks that may be under PMO supervision; or,
  - Report directly to the PM.
- A *change management and communications team*
  - Maintain progress reporting and track risks and changes to the project; and,
  - Communicate progress and status and schedule changes to the PMO and the executive committee.

Organizational structures that mimic the organizational structure of the justice community as a whole have a greater degree of success. For instance, department or agency heads should be included on the executive committee; and, business and technology teams should be structured in the same way as those teams are structured within the agencies and IT departments. Cross communication is critical for business and technical teams to ensure there is complete understanding of the IJIS goals and objectives to achieve a shared vision.

Special consideration should be given to how project issues are resolved. In a multi-jurisdictional project (*i.e.* multi-county partnerships or state and local agencies), more than one enterprise may be "in charge"; therefore, it is important to include participants who can represent the interests of all parties and establish procedures that accommodate "tiebreakers" in decision-making.

Internal reports (*i.e.* within the project organizational structure) and *external reports* (*i.e.* outside agencies, such as Federal grant administrators) are important to the success of any project. The plan should state the frequency, as well as specific deadlines, for reports and meetings related to each project participant or affected organization. Reporting methods (*e.g.* written reports, status updates, presentations, demonstrations, standing meetings, etc.) should be identified in the plan, as well; for example:

- "The project manager provides a written status report to the executive committee by close of business on the first day of the month."
- "The executive committee meets with the project manager and the core project team on the second and fourth Tuesdays of every month at 10:30 a.m."

Expectations of report contents should also be included in the reporting section of the communication plan, such as the type of information that status reports should contain (*e.g.* accomplishments during the reporting period, plans for the next reporting period, issues/problems, name of reporter, name of report, date of report, report period, etc.).

A communication plan is integral to successful projects. From defining roles and responsibilities to outlining communications method and frequency, the importance of communication cannot be overestimated.

8.2 Change Management

Change is both necessary and inevitable. It is also the single greatest barrier to progress in any project. Documenting and managing change is a formidable task that should include risk identification, process improvement, and schedule management. Knowing what to do and when to do it—and when to take a pause to reassess or make a scope change—is what separates projects that move forward from those that stand still or wander off course.

In the implementation of projects, change management is a moving target, with continual requests for changes in requirements, enhancement suggestions, stakeholder and team member changes, and "scope creep." In addition to managing project deliverables, time and effort must be dedicated to managing the human element associated with change (*i.e.* individual expectations, experiences, and feedback and commitment) as the project progresses.

In and of itself, the pre-RFP process is an exercise in defining organizational change. By examining critical business needs, process enhancements, and best practices, agencies can outline changes that will improve the operational process of data sharing in the justice area. More often than not, organizations discover during this process that change preparedness and readiness are critical steps on the path to implementation success. Moreover, the migration process from one solution to another is inherently fraught with change; organizations are embarking on new territory, shared operations, and shared outcomes, all based on common goals. While the results are worthwhile, the process of initiating an IJIS project can be overwhelming.

It is human nature to fear, rather than to embrace change. It is imperative to begin the process of change management both from an organizational perspective, as well as from an individual employee perspective, during the pre-RFP phase of the IJIS project.

An effective change management plan, at a minimum, contains:

- **Assessing organizational readiness**, which is the first step to planning and preparing for change.
- **Planning for change** includes defining the reason for change, developing the vision, selecting change agents, and identifying measures of success.
- **Implementing and analyzing change** involves communication, resistance strategies, role model visibility, and change plan adaptability.
- **Accepting and communicating change** involves agreeing to a change in requirements, scope, schedule, or other actions, as well as supporting and advocating for the change.
- **Instituting mitigation strategies or risk avoidance processes** to keep the project on schedule and budget.

8.2.1 Assessing Organizational Readiness

Is the organization ready for change? All organization assessment tools share common themes, which include analyzing various organization components, including: administrative support, leadership, climate, education, and problem recognition. All of these factors have a dramatic impact on an organization's ability to move forward in a rapidly changing environment.

"Guiding change may be the ultimate test for a leader." --J.P. Kotter[53/54]

There are many forums (*e.g.* workshops, informal meetings) and tools (*e.g.* written surveys, informal discussions) that can be used to gather information and to provide feedback regarding an organizational readiness assessment. Regardless of the approach selected, representatives from all affected areas should be included in the information-gathering process.

To analyze an organization's preparedness to change, a number of assessment tools are available. Those included in this toolkit are variations of tools including:

- Those used by the State of Missouri in conducting a Change Management Workshop for managers and employees[55];
- A change management guide from the National Institute of Corrections (NIC) designed to assist criminal justice policymakers, practitioners, and others interested in learning about and engaging in a criminal justice system planning process.
  - The guide provides lessons learned from the 10 jurisdictions who participated in the Criminal Justice System Project and many other policy planning efforts supported by the DOJ, NIC, and other tools from NASCIO's CIO series.
- Materials from the Illinois Integrated Justice Information System (IIJIS) effort.[56]
  - The IIJIS Planning Committee has adopted the PMI methodology, which defines project management as the application of knowledge, skills, tools, and techniques to a broad range of activities in order to meet the requirements of the particular project (*e.g.* communication plan, quality plan, risk assessment plan, status reporting and project time lines).
- The New York State Office of Information Technology Services (ITS) has provided a toolkit of templates for project management on their website.[57]
- Other county project reports

Selecting the right tool and the right approach for assessing organizational readiness largely depends on the composition of the organization. Incorporating various information gathering methods (*e.g.* surveys, interviews, informal discussions) may provide the best means of collecting a representative sample from all affected areas.

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[53] *Transforming Government Through Change Management*, NASCIO (2007), http://www.nascio.org/publications/documents/NASCIO-Transforming%20Govt-Research%20Brief.pdf

[54] *Leading Change*, Kotter, J. P., Harvard Business School Press (1996)

[55] Some content has been modified for the purpose of inclusion in this document.

[56] "IIJIS | Oversight," IIJIS, http://www.icjia.state.il.us/iijis/public/index.cfm?metasection=oversight&metapage=plan_management

[57] "Enterprise Program Management (EPMO)," New York State Office of ITS, http://www.its.ny.gov/enterprise_program_management_office

8.2.2 Planning for Change

Following organizational assessment, the next step in the change management process is planning. Consider the old adage: "Fail to plan. Plan to fail." Within a change management plan, organizations should define the reason(s) for change, develop the vision for the future, select and mentor change agents, and identify measures of success.[58] Once conceptual and resource issues are identified and documented, timelines and milestones will logically follow.

> *"Effective collaboration also protects the leaders essential to successful change. All public system reform requires risk taking on the part of its leaders. The justice system operates in a politically charged environment […] Maintaining the status quo is much easier and certainly the path of least resistance. It is safer, but it is sometimes wrong […] but no leader can or should be expected to bear all the risks. A collaborative body involving all the system's actors provides a context for leadership to emerge and offers the protection of collegial support and policy consensus when controversy—a predictable by-product of real change—eventually arises. --Kathleen Feely, "Collaboration and Leadership in Juvenile Detention Reform"*[59]

8.2.3 Reasons for Change

As with any project, a strong foundation is the key to success. Buy-in for change begins with a change statement, which affirms the dramatic and urgent reason for change. Simple, concise, compelling, and easily understood, the change statement is synonymous with project theme. An example of a change statement may be:

- "Funding restrictions and service delivery mandates require that the agency develop automated solutions to more effectively and efficiently meet client needs."

Interestingly enough, the tool that assists with the change process is often the IJIS solution, which requires a change in the way that data is shared and that means changes in processes, operations, and technology. The change statement and corresponding business case for change should be imbedded throughout the RFP.

8.2.4 Change Agents

One of the most important pieces of the planning phase is selecting and mentoring change agents. These individuals are the megaphones of change. They are the influencers and the project champions.

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[58] *Getting It Right: Collaborative Problem Solving For Criminal Justice*, Center for Effective Public Policy (2006)—The guide is designed to assist criminal justice policymakers, practitioners, and others interested in learning about and engaging in a criminal justice system planning process. The guide draws on the lessons learned from the ten jurisdictions who participated in the Criminal Justice System Project and many other policy planning efforts supported by the project's funder, the DOJ, NIC. The guide describes a systemic planning process that policymakers can engage in and provides tools and exercises that policy teams can use to establish and maintain their own criminal justice planning efforts. The guide is organized around 14 core principles essential to a successful planning effort. The guide includes case studies, examples of materials developed by participating jurisdictions, references, and other hands–on materials that jurisdictions can use in their own planning efforts.

[59] "Guidelines for Developing a Criminal Justice Coordinating Committee," NIC, http://nicic.gov/library/017232

Change agents are individuals who have the ability to bring people from the "We have always done it this way" side to the "Change is good" side.

Good qualities of change agents include being a positive role model who is enthusiastic about implementation, innovative, creative, willing to learn, and respected by others. As discussed in the governance section (Section 3.1), change agents should represent all facets of the implementation, as well as all levels of the organization. These individuals should assist with the development of the change statement and vision, if possible.

8.2.5 Implementing Change

Implementing and analyzing change are the last pieces of the change puzzle, which involve continual communication, ameliorating of resistance, role model visibility, schedule and scope monitoring, and change management plan adaptability.

8.2.6 Communication

An effective message, a proven channel of communication, and repetition are necessary components regarding communicating change. "Early and often" is the communication rule of thumb, using the change agents as messengers of the vision. These individuals bridge the gap between top executives and the front-line workers, preparing the organization for what is to come.

Additional planning and managing time should be devoted to prepare those outside the agency for the change, as well (*e.g.* affected agencies, as well as the public). Forums, flyers, public service announcements, and advertisements may all be viable communication tools for getting the word out.

The bottom line: It is vital to communicate information ***and*** concerns, progress ***and*** successes, and delays ***and*** advances.

8.2.7 Resistance Strategies

Prepare for resistance – it is a normal reaction to change and should be anticipated from an implementation perspective. Plan accordingly. Be prepared to:

- **Surface the resistance** by getting the resistance out in the open and making the expression of resistance as "safe" as possible—in fact, go ahead and invite it.
- **Honor the resistance** by listening, acknowledging, and reinforcing the fact that it is okay to resist.
- **Explore the resistance** by authenticating the resistance and probing it.
- **Re-evaluate the resistance** by reviewing the objection to change and noting any agreements made with respect to the resistance.
- **Mitigate the resistance** by promulgating changes that can reduce resistance and gain buy-in.

8.2.8 Visible Role Models

Top executives, change agents, and front-line workers can all be positive, visible role models for change. Additionally, it may be equally as important to select one organization naysayer as a role model for two reasons: first, it is better to identify and resolve legitimate resistance early; and, second, it is worthwhile to try to persuade the naysayer to become a supporter instead of a detractor.

Role models must be carefully selected, educated, and monitored throughout the implementation process. These individuals support and encourage others, while providing opportunities for individuals to become involved in implementing the change. Individuals involved in the implementation process possess an increased commitment to the change, the project, and the team. Key stakeholders have to be promoters of change and communicate support to the change and adaptations necessary for an IJIS project to succeed.

8.2.9 Change Plan Adaptability

The four Ps govern components of an effective plan[60]:

1) The *purpose*
   - Why are we doing this (the change statement)?
2) The *picture*
   - What is the vision?
3) The *plan*
   - How will goals be accomplished?
   - What are the timelines and milestones?
4) The *part*
   - What part will each individual play in the plan?

The ability to change the plan as needed means being open to change during the assessing, planning, and implementing processes. An effective plan contains contingencies should major organizational changes occur during the implementation (*e.g.* a change agent leaves the organization or an elected official is not re-elected) or to accommodate advances in technology (*e.g.* a new version of the software is released, or hardware and network changes impact the project), fiscal impacts (*e.g.* future funding is cut or reallocated), or schedule and scope (*e.g.* original plan requires more time or materials than planned). If a piece of the plan is broken, then it must be fixed—and the implementation goes on. Flexibility and adaptability are the keys.

Change management is complicated. There is an organizational perspective, as well as a human perspective – both of which must be defined, addressed, and monitored throughout the assessing, planning, and implementation stages of any large-scale project, particularly one involving technology. The organizational change management plan should be comprehensive and tailored to meet the needs of the organization, as outlined in the readiness assessment phase of the project. A comprehensive plan, proactive communication, enthusiastic change agents, visible role models, and plan adaptability ultimately have the greatest impact on project success.

[60] *Managing Transitions: Making the Most of Change* (2nd edition), Bridges, William, Perseus Publishing (May 27, 2003)

8.3 Risk Mitigation and Management

Risk is inherent in all projects, regardless of magnitude. The goal of a risk management plan is to identify, manage, and mitigate potential project risks. In other words, the goal is to prevent risks before they occur.

Anticipating risks and developing preventative measures creates a type of an insurance policy for the project. In most cases, risk management is less costly than solving a problem after the fact (*e.g.* looking for additional funding in the middle of a project, which may cause delays). Some individual risk mitigation strategies can be costly; however, within the overall context of the project, risk management can save both time and money.

Risk management is an ongoing task. It occurs throughout the project's lifecycle, from the inception of the vision through implementation and beyond. Individual risks are solved, and new risks arise, depending on the status of the project at any given time. The risk management plan aids in the management of the project throughout the lifecycle.

Several steps occur in the development of a risk management plan:

- Identify and describe the risk.
- Determine the probability or expectation that the risk will occur.
- Determine the impact of the risk on the project.
- Measure the severity of the risk's impact.
- Develop a mitigation strategy for the risk.
- Assign responsibility and dates for the mitigation strategy.

Project team members and representatives from all stakeholder groups, including legal and purchasing, should be involved in the development of the risk management plan. Once the initial risk management plan is complete, it should be reviewed at frequent, predetermined intervals to determine the status of the defined risks and manage additional identified risks. Status reporting, and schedule and scope management, are inherent ways to reduce risks and to strategically handle those unforeseen delays in schedule that will place risk on the project success.

From identifying and describing project risks to assigning responsibility and deadlines for developing a mitigation strategy, the entire risk assessment, planning, and management process holds team members accountable for proactively overseeing and resolving project risks. Once the IJIS project risk and communication plans are developed as part of the strategic planning process, they should be included in any procurement documentation and incorporated into contract documentation. This will ensure that any vendors participating in the IJIS process understand and build risk mitigation and change management into their proposals in response to the IJIS RFPs.

8.4 Toolkit Tools Summary

TABLE 5. TOOLKIT TOOLS SUMMARY – PLANNING COMMUNICATION, MANAGING CHANGE, AND MITIGATING RISK

- T = Tools
- RW = Referenced Work

ID #	DESCRIPTION / PUBLICATION INFORMATION
T 8-2-A	Sample Project Communication Plan
T 8-2-B	Project Communication Spreadsheet
T 8-3-A	Sample Risk Management Plan
T 8-3-B	Sample Risk Assessment Tool

ID #	DESCRIPTION / PUBLICATION INFORMATION
T 8-4-A	Sample Organizational Readiness Tool – Assessing Organizational Readiness
T 8-4-B	Sample Organizational Readiness Tool – Checklist for Change
RW 8-1	*Illinois Integrated Justice Information System Implementation Board Annual Report*, 2011
RW 8-2	*Transforming Government Through Change Management*, NASCIO Whitepaper, 2007
RW 8-3	*Government Information Sharing: Calls to Action Volume 1: JUSTICE*, NASCIO, 2005
RW 8-4	*Improving Criminal Justice System Planning and Operations: Challenges for Local Governments and Criminal Justice Coordinating Councils*, Criminal Justice Coordinating Council (CJCC), 2010
RW 8-5	*Criminal Justice Information Systems Strategic Plan*, Judicial Council of California, 2008

9 *Analyzing Staffing Needs*

An IJIS initiative requires significant investment of time and energy. While all successful IJIS projects make good use of resources from member agencies, having at some full-time staff members may be necessary to the initiative's success, depending on the size and scope of reach of the enterprise.

It is important to evaluate staffing needs in the early planning stages of an IJIS initiative. Staffing plans and assumptions are likely to be revisited after a project partner is selected. The sample plan included in this toolkit supports both the initial and revised planning efforts.

A realistic staffing plan is a critical component of a project budget. Most state and local jurisdictions are facing difficult decisions in response to dwindling revenues and increasing demands in the areas of justice and public safety. Having a well-articulated staffing plan enables the justification and explanation of minimum staffing requirements that meet the goals of the IJIS initiative.

The following sections aid in analyzing and planning for IJIS project staffing needs.

- The *Roles, Responsibilities, and Key Personnel* section describes staff considerations and responsibilities, and provides sample client and vendor organizational charts and matrices of responsibilities.
- The *Staffing Plans* section provides a glimpse into the construction of developing a staffing plan for an IJIS project. A sample staffing plan is provided as part of this section.

9.1 Roles, Responsibilities, and Key Personnel

Why is it important to clearly allocate staff responsibilities? First, it is necessary to get the job done. To accomplish this task, the best technical, business, and professional staff should be assigned responsibilities for the key components of the project.

There is another reason to bother with staff considerations. In Section IV, the need to seriously consider contractual responsibilities is discussed (*i.e.* a balance of roles, functions, and duties). Symmetrical organizational structure is not the goal, although the sample organizational charts do outline parallel roles. The objective, again, is the purposeful assignment of roles in order to get the job done.

The key player is the PM. The entire range of functions fall within the domain of the PM: contract management, financial management, external communications, schedule management, resource management, issue management, internal communications, standards compliance, and subcontract management. The PM is the key coordinating official between the management team, the vendor's PM, and the entire array of personnel in each phase of the project.

The sample organizational charts demonstrate the variety of roles and functions of the vendor and client teams. These functions vary, based on the type of project. Role and responsibility matrices for both the

client and vendor are provided in the toolkit. These sample matrices identify typical roles and responsibilities of client and vendors. Each role has a description of responsibilities, qualities, and characteristics.

The main cautionary point regarding staffing is to live up to the contractual responsibilities. Timelines, functions, and tasks are all dependent upon the commitment and quality of staff. Do not fall into the trap of saving money in a contract negotiation by committing staff resources that may be elusive, illusory or, in the current environment, subject to a reduction in force. If objectives cannot be met in the field, then there are implications to the schedule, the cost, potential damages and, ultimately, the outcome. The lesson: Be realistic during negotiation. The cost of changing course in the field may be prohibitive.

9.2 Staffing Plans

In an IJIS project, it is critical that the project be staffed and organized in a way that ensures tasks can be expeditiously completed. Because so much knowledge is spread among many organizations, it is imperative that the right staff participates in the right tasks to ensure that the project is successful. The objective of this section of the toolkit is to provide jurisdictions with a thorough example of a staffing plan. The example staffing plan is included in the toolkit.

This plan provides valuable information on how to achieve maximum staff efficiencies and effectiveness throughout the life of the IJIS project. The client and the selected vendor can develop the staffing plan. It should be viewed as a shared responsibility of the newly formed partnership. The staffing plan also assists in the definition of duties and responsibilities, as well as in the estimation of the level of effort required by both client and vendor staff to complete the IJIS effort. The plan can also be used to determine required positions that may not yet exist within the jurisdiction or participating organizations.

9.3 Toolkit Tools Summary

TABLE 6. TOOLKIT TOOLS SUMMARY – ANALYZING STAFFING NEEDS

- T = Tools

ID #	DESCRIPTION / PUBLICATION INFORMATION
T 9-2-A	Sample Client Organizational Chart
T 9-2-B	Sample Client Organizational Chart, Roles, and Responsibilities
T 9-2-C	Sample Vendor Organizational Chart, Roles, and Responsibilities
T 9-3-A	Sample Staffing Plan

10 Measuring Progress and Success

From its inception, IT has been the subject of considerable debate as to its inherent value in an enterprise. A considerable body of written material proposing models and methods for examining the value proposition in IT has been published. In the commercial world, the common approach is to evaluate IT investments in terms of their potential ROI. Generally, the clear measure is the extent to which IT projects increase competitive advantage, leading to increased market share and, presumably, to increased profits. By estimating the effects of an IT project on this potential return, decisions about the investment can be made. Companies such as FedEx and Wal-Mart have pioneered the deployment of new IT on the basis of such analysis.

There are opposing views of this kind of modeling. In 2003, Nicholas Carr published an article in the *Harvard Business Review* titled "IT Doesn't Matter,"[61] in which he charged that IT has become a commodity that everyone has and, therefore, can no longer result in increasing the competitive advantage of a company, so executives might want to reconsider their spending and support plans. This article sparked a furious debate among technologists and financial directors on the topic, including at least 14 letters to the editor and many other editorials questioning Carr's conclusions.

Government agencies have similarly struggled to define the value proposition of IT projects, with strong opinions expressed on the issue by Congressional study groups and accountability organizations. The commonality between business and government is that IT is very expensive to acquire and maintain, and there must be a clear ROI to justify such major expenditures. In the commercial world, the ROI is related to profit; in the government world, the ROI must be connected to improved service or efficiency (implying a reduced cost of government).

Following a number of projects over the last decade addressing the need to re-engineer the Federal government, one essential premise has evolved for justifying the expenditure of public funds for any program or project. While there is still room for some level of experimentation, as well as research and development efforts, decisions on funding for extensive implementations or continuation funding for programs should be "evidence based."

The concepts of evidence-based public policy formation are not new. Dr. Lawrence Sherman presented a paper titled *Evidence-Based Policing*[62] as part of the Police Foundation's series called "Ideas in American Policing," where he argues that the principles of evidence-based policing can be drawn from the medical profession where years of work have been devoted to making diagnostic decisions based on hard evidence rather than intuition. Similar efforts have been undertaken to identify evidence-based policy formulation in corrections in work sponsored by the NIC.[63] The NIJ itself has, as its charter, the call to provide "objective, evidence-based knowledge and tools to meet the challenges of crime and justice."[64]

The practical reality of accepting this premise is that all programs require the collection and analysis of relatively hard data on the value of the programs to society. Anecdotal data is no longer an acceptable basis for making major funding decisions. While this principle has been and will continue to be violated by pressures felt in legislative bodies, the mainstream program evaluation and budget justification trend is toward clear data supporting the efficacy of programs to be funded.

State and local finance executives and funding bodies are adopting this same philosophy—exhibiting a reluctance to fund programs just because they have always done so—and the introduction of new approaches are more often subject to analysis of data regarding program performance. In policing circles, the movement toward data-driven policing implies that processes and activities will be evaluated through the collection and analysis of data regarding the outcomes of such processes and investments using hard data rather than intuition.

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[61] "IT Doesn't Matter," *HBR* / Carr, http://hbr.org/product/it-doesn-t-matter/an/R0305B-PDF-ENG

[62] "Evidence-Based Policing," Police Foundation, http://www.policefoundation.org/content/evidence-based-policing

[63] "Implementing Evidence-based Practices in Corrections," Bogue, Clawson and Joplin (2005)

[64] "National Institute of Justice," OJP, http://www.ojp.usdoj.gov/about/offices/nij.htm

This trend in thinking is being extended to apply to IT, as well as specific programmatic elements of criminal justice, and is an issue that mandates new thinking about how deployments of IT should be supported by more rational thought than may have been the case in past funding decisions.

10.1 A New Standard of Evidence

The call for evidence to support further program funding affects budgets at every level of government and the entire structure of Federal grant programs that make their way into the hands of state and local governments. As the U.S. Office of Management and Budget (OMB) has developed a program of performance analysis for all Federal programs, the grant programs are subject to analysis using the Program Assessment Rating Tool (PART), which is a framework for program evaluation covering all Federal programs.[65]

The fundamental evaluation metric contained in the PART model, and in other less structured approaches to evidence-based program evaluation, is the outcome that is observed as a result of the investment. OMB defines outcome as:

> *An **outcome** refers to the events or conditions of direct importance to the public/beneficiary that are external to the program. An outcome answers the question "What is the program's goal or purpose?" For example, the goal of a job training program is to give someone the skills to find a job, as opposed to giving out a grant. An outcome measure may be the number and percent of people employed within six months of completing the job training program.*[66]

The outcome of projects undertaken in the realm of law enforcement and justice operations may have some specific characteristics that are not necessarily relevant in other programs. OMB attempts to phrase the outcome in terms the public can appreciate as a reasonable basis for the expenditure of tax dollars. The use of such outcome measures become a way to define the ROI in public policy terms so that Congress and state legislative bodies can immediately see a value proposition against which they may measure the investment.

Given the need to express outcomes in generally understandable and hopefully measurable terms, it is important to define outcomes of programs and projects in the justice world in terms that are meaningful to the **average thoughtful American**, regardless of the level of direct experience with the justice environment. For too many years, professionals in the justice world have made intuitive decisions about the right things to do for any given problem, without pausing to articulate the value proposition of such programs in terms that are understandable by the general public, legislators, and financial managers. Outcomes have to be stated in a way that people who are not engaged as criminal justice professionals can determine that the value proposition is worthy of the expenditure of public tax dollars because of the inherent value to society embodied in the program or project.

[65] "ARCHIVE – Assessing Program Performance," The White House, http://www.whitehouse.gov/omb/performance_past

[66] "Frequently Asked Questions," ExpectMore.gov, http://georgewbush-whitehouse.archives.gov/omb/expectmore/faq.html

10.2 Defining IT Performance Measures from Outcomes

Instead of defining useful outcome measures for law enforcement and justice projects, when there have been objectives articulated, they tend to be what OMB and others term as outputs rather than outcomes. The number of people trained in a new process, or the number of transactions automated, or the number of fingerprints scanned are all output measures that may or may not have a bearing on outcomes having a clear and understandable value proposition for the average thoughtful American. In the absence of a theory connecting outputs and outcomes, the easy road is to collect data on outputs and use them as a surrogate for value. This understandable tendency is no longer adequate for evidence-based spending decisions. If the value is to be expressed in outcomes, then, at the very least, there must be a logical and acceptable linkage between outputs and the desired outcomes.

It is difficult enough to articulate clear outcomes for major programs such as the introduction of drug courts or correctional training programs relevant to offender reentry success. It is even more difficult to develop and measure outcomes for IT projects and programs. The reason for the added complexity in assessing outcomes for IT projects is that they are always a second order influence on the kinds of outcomes that the average thoughtful American would endorse. IT projects are instruments to support strategies that have understandable and measurable outcomes. IT projects themselves have little or no measurable or discernible value to the public at large – except as a component of a more direct and clear strategy for improving law enforcement or the administration of justice. Attempts to define this as otherwise—to try to invent outcome measures that are meaningful—usually fail. Technologists often resist attempts to measure performance of IT projects in terms of outcomes and limit the suggestion of performance measures to outputs (*e.g.* speed, quantity, timeliness, etc.). Technologists and some policy makers leave the linkage of IT project outputs to the imagination of the funding organization or the public.

Research and evaluation projects that attempt to connect IT project outputs to acceptable outcome measures are scarce and rarely successful. There are several reasons for this gap in knowledge. Technology projects tend to be implemented without an evaluation design that connects outputs to outcomes; and, in the rare instances that such efforts are undertaken, it is often impossible to design the right kind of research that would deliver hard data relevant to the assessment. Moreover, justice agencies are not in the habit of collecting the kind of data before implementation of an IT project that would permit the assessment of the outcome. In particular, data about failures are rarely collected and there are severe gaps in data not routinely collected so as to serve as a basis for measuring improvements.

For example, it would be relatively straightforward to contend that a higher percentage of complete criminal history information (as opposed to the 60 percent now estimated) would lead to fewer occasions when criminals in custody are released before it can be determined that they have relevant criminal records including warrants; however, no law enforcement agency keeps data on the number of times a wanted person was released before they could be identified. In a major attempt to track down and corroborate incidents involving serious crimes that could have been prevented by information sharing, the Center for Society, Law, and Justice at the University of New Orleans found that even well documented cases of such failures to retain criminals could not be corroborated because the agencies themselves did not want to confirm this kind of failure.

Absent the kind of quality research to connect IT project outputs to outcomes, there is still a way, in many cases, to draw the connection based on either past research or inductive reasoning. With the construction of a logical model that connects outputs to what might be called intuitively obvious connections, it may be possible to define logical connections in which IT projects can be shown to

contribute to a useful outcome that would satisfy legislative and funding bodies, as well as the public at large.

IT projects serve as components of strategies to achieve outcomes relevant to specific agency operations. In themselves, IT projects have few direct outcomes that can be measured and used to expose a direct return on investment; however, in addition to basic value propositions, IT projects can lead to specific efficiencies that are measurable and can be defined as direct outcomes of applying IT to re-engineer a process that may have been solely accomplished by manual means.

When IT projects are positioned as a component of a larger strategy, and are in direct support of strategic objectives, it is possible to create a logic model that is at least some of the basis for achieving the objective measurable with respect to the impact of technology. The following are examples of value propositions for projects involving IT that may be a contributing factor to the success of a specific strategy or objective.

- Decrease the police response time to citizen calls related to violent crimes
- Reduce the likelihood of convicted sexual offenders being employed in sensitive positions
- Increase the probability of arrest for warrants related to serious criminal activity
- Improve sentencing decisions to reduce recidivism rates
- Increase the clearance rate for crimes against persons
- Improve the conviction rate for cases filed with the prosecutor
- Intervene in the continuation of individual criminal careers
- Inform victims about transactions related to specific offenders and provide notice of protection orders to police
- Support the investigation and prosecution of dangerous drug manufacture and distribution
- Facilitate data-driven policing and justice administration
- Consolidate community approaches to youth at risk

As an example of the way IT outputs can be related to outcomes, consider the first strategy, above, of decreasing response time to violent crimes. A good CAD system is designed to help pre-position available units closest to the likely locations of future calls for service related to violent crimes in progress. It will minimize travel time to the scene by providing intelligent routing information to the unit reducing total travel time, which is part of the mathematical calculation of average response time. Response time and its component of travel time can be measured, before and after implementation, to determine if the system objectives were met.

To the extent that the inclusion of an IT component in the strategy employed to address such issues can be arguably shown to make a contribution to the success of the strategy, it is reasonable to draw conclusions about the ROI from the strategy and, hence, the contribution of the technology. As an example, suppose that a particular jurisdiction undertakes a strategy to increase the clearance rates for a specific crime category; and, as one of the components, implements a vastly improved RMS that allows sophisticated matching of suspects to crimes. Through the use of a master name index that supports crime-suspect correlations, investigators are more likely to identify suspects in particular crimes; and, it is clear that better and more accurate suspect identification will, in the course of good investigative practices, lead to more arrests and thus clearances. Measuring the clearance rate before and after the introduction of the technology—particularly if there are no other major environmental

changes in the business practices of investigation and prosecution—will show that amount of improvement as attributable to the introduction of the technology.

By this reasoning, constructing the logic model that explains the linkage between the application of the technology and the likely outcome, and then collecting the data on relevant and meaningful outcomes prior to and following the introduction of the technology, it is possible to make a coherent statement about the actual ROI from the adoption of the technology.

It can be easier to show hard data on the ROI in technology with respect to improved efficiencies introduced by the technology. Most thoughtful Americans would concede that improving efficiency is useful to the public because it reduces apparent cost or avoids additional cost as workload increases; however, improved process efficiency can also be related to, or a component of, strategic objectives.

The following list shows examples of possible IT project efficiency goals or objectives that might be achieved through the introduction of technology. These kinds of examples may also be components of a broader strategy for achieving the desired outcomes of the previously listed value propositions.

- Reduce the elapsed time that information is available across multiple jurisdictions in support of intelligence and investigative activities
- Reduce elapsed time from arrest to adjudication by eliminating delays caused by paper-based information flow
- Automate information exchange and dissemination to support timely and accurate discretionary decision-making throughout justice
- Increase the reliability, availability, and accuracy of information related to past criminal activity
- Improve accountability by implementing security and privacy policies for limiting access to systems only for authorized justice activities
- Eliminate redundant data entry
- Increase access to and usability of IT systems
- Re-allocate administrative resources to direct field service
- Provide or extend the infrastructure required to support value propositions

The general assumption applied to the adoption of IT is that there will be some level of efficiency gained by such an implementation; however, it is again important to link the purposes of automation to the strategic objectives of the agency, and to ensure that the IT implementation truly adds value, and not just added work. It is often been said that the automation of a poor paper-based process will simply result in a poor automated process, and that IT projects not derived from strategic objectives are prone to such results.

It is also important to consider the organizational framework for which the objectives are defined. The use of IT in a specific organizational unit may not result in specific increased efficiency for that unit but may make significant contributions to process improvement for the enterprise as a whole. As an example, a county operating on the passage of paper documents may end up keeping individuals in jail awaiting transport to the magistrate until all the necessary paperwork is prepared, transmitted, and received. If the delays associated with the paper processing amount to several days, as has been the case in some counties, then the jail has to be bigger than it needs to be and more costly to operate as

compared to an automated information sharing environment where information is transferred from computer-to-computer as it is entered.

To better differentiate outputs from outcomes, NCSC developed the CourTools[67], a set of 10 trial court performance measures that offers court managers a balanced perspective on court operations. In designing the CourTools, NCSC integrated the major performance areas defined by the Trial Court Performance Standards with relevant concepts from successful performance measurement systems used in the public and private sectors. It is published in a visual and accessible how-to format.

10.3 Finding Relevant Measures of Performance

Criminal justice programs and projects that are funded to make major changes, in the way that law enforcement and justice agencies perform their statutory duties so as to increase the service to the public or to decrease the cost of providing such services generally, should be linked to their impact on society. Impact is a function of the extent to which a particular program can achieve change in ways the public expects or policy-makers envision. Program objectives should be linked to strategic plans and should show evidence of success with respect to those plans.

Given the sub-optimization of justice agencies with respect to larger goals of society, and the division of responsibility through the largely adversarial system of justice that we endorse, program performance evaluation is best defined with respect to the extent to which a program supports national policy and priorities. Some examples include:

- Many proposed programs and projects in law enforcement could be better measured in terms of the increase in the clearance rate for reported crimes. To the extent that we charge law enforcement with the apprehension of offenders, projects which seek to improve the likelihood of apprehension and successful prosecution, such as DNA testing and a national DNA database, can be shown to be directly linked to improved clearance rates and more just adjudications. Also in law enforcement, the public continues to desire to reduce the fear of crime—and, programs that improve communications with the community will have this result.
- Projects that have as their objectives the speedier handling of criminal charges in the courts can have a direct impact on the costs of the judicial process, as well as the likelihood of convictions and subsequent incarceration, where appropriate. Measuring the percentage of cases that are reversed on appeal can provide indications of the accuracy and equity of lower court proceedings.
- Programs should be measured with respect to the factors under the control of the implementing agency. It is of little merit to measure the performance of the police in terms of actions under the control of the courts.

[67] "CourTools," NCSC, http://www.courtools.org/

SEARCH developed a publication titled *Performance Measurements for Justice Information System Projects*[68] in 2008 that contains a wealth of information. As depicted in the search report, characteristics of a good performance measure include:

- Accurate
- Feasible
- Goal focused
- Inexpensive
- Project-linked
- Unambiguous
- Understandable
- Valid

Additionally, SEARCH produced a report titled *Measuring Progress: A Summary of Key Milestones In Support of Justice Integration* at the request of and in conjunction with the NGA. It stated that the status of IJIS initiatives can be measured by:

1) Evaluating the degree to which justice system officials have complete, accurate, and timely information to support decision-making; and,

2) Evaluating which steps in the integration process have been completed.

It defined the integration process into nine milestones that an agency can use to determine its progress. The milestones are a simplified version of a planning process derived from observations of a variety of IJIS and other systems development initiatives.[69]

The Center for Society, Law and Justice at Texas State University has also developed a guide for *Performance Measurement for Justice Information System Projects* that is designed to assist criminal justice information sharing professionals implement summary performance measures as required by BJA.[70]

In summary, IT projects that are constructed as supportive to strategies to improve the quality and efficiency of law enforcement and justice processes can be linked by reasoning, and, in some cases, prior research, to outcomes envisioned by such strategies. Even where the required proof of causality is difficult or expensive, it may be sufficient to establish by such reasoning the linkage of IT project outputs to programmatic outcomes. It is also clear that such linkages are essential to supporting the justification for the investment. Measuring the outcomes before and after implementation establishes the contribution that the technology makes, which is critical to support further deployment and applications of IT. Such measures should address the intentions of society in improving the quality of justice in America, as well as making our communities safer.

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[68] "Publications," BJA, https://www.bja.gov/Publications/JIS_Perform_Meas.pdf

[69] "Measuring Progress: A Summary of Key Milestones In Support of Justice Integration," SEARCH, http://www.search.org/files/pdf/milestones.pdf

[70] "Performance Measurement for Justice Information System Projects," Texas State University, https://www.bja.gov/Publications/JIS_Perform_Meas.pdf

11 Considering Strategic Planning Keys

IJIS PMs and policy groups are well aware of the importance of strategic planning in any IJIS initiative. Many executive level participants have experience with drafting and executing strategic plans for large, complex organizations or as part of their agency fiscal and operational planning duties.

While that experience will be extremely helpful, it is also important to consider the differences between JIS strategic planning and other organizational planning. This section of the toolkit addresses issues unique to JIS strategic plans, and provides practitioners with planning templates and examples of JIS strategic plans and related progress reports.

The following subsections contain information that will help in the development of IJIS strategic plans:

- The *Alignment and Fluidity* section discusses the differences between JIS planning and traditional strategic planning.
- The *SEARCH Strategic Planning Templates* section provides an overview of each of the sections included in the SEARCH strategic planning template.
- The *Significance of Strategic Planning* section explains the role of planning in the pre-procurement process.

11.1 Alignment and Fluidity

Two concepts are very important to consider when developing a strategic plan for an IJIS project: *alignment* and *fluidity*.

11.1.1 Alignment

One of the most demanding issues for JIS practitioners and policy bodies to address is the alignment of JIS strategic, operational, and technical planning with the plans of each member organization and of the enterprises to which each organization belongs. Proper alignment may also provide additional funding sources, support, and new constituents. Consider carefully how the JIS plan must be coordinated with the following plans:

- Individual Member Organization Plans
  - *e.g.* Police departments, courts, prosecutors, corrections, probation and pre and post court services agencies, educational institutions, health services and, treatment providers, etc.
- County or Regional Plans
- Statewide Plans
- Fiscal and Operational Legislative Initiatives at the State, Local and Federal Levels
- National Standards (see Section II for more information)

Each participating organization is governed and constrained by existing standards and plans. There may, in fact, be little or no conflict between the IJIS plan and these other plans; however, that is not a foregone conclusion. The IJIS policy group and practitioners should develop the strategic plan format in the context of these other domain and enterprise plans in order to address and resolve any real or potential conflicts.

11.1.2 Fluidity

Change is a constant in any organization, and IJIS member organizations are no exception. By the very nature of the endeavor, the pace and effect of change is intensified in an IJIS project and may occur in any phase of the planning and implementation process. IJIS practitioners are charged with coordinating and focusing the activities and contributions of dynamic organizations in a network of collaborative and cooperative undertakings. The vision and goals of the JIS project may remain constant, but the participants and, at times, the very structure of the participating organizations, may not. Consider the effect of routine changes in leadership (*e.g.* new presiding judges or elected officials, changes in legislative and state executives, etc.) that come into play throughout the project lifecycle.

Variability in leadership among the participating organizations and within the JIS policy and practitioner groups is predictable and, in most cases, unavoidable. Thus, it is important to ensure that the structure and practices of the IJIS group support smooth succession and continuity.

This inherent degree of change introduces special challenges to IJIS strategic planning. As with alignment, IJIS planners should specifically and directly address this aspect of the plan, rather than hope that regular and significant changes do not adversely impact or derail the IJIS plan. This governance issue (see Section 7 for more information on governance) will impact stakeholder commitment and roles. IJIS practitioners, by anticipating change, can support smooth succession planning by affirming with new leaders and group members the tenets of the IJIS strategic plan, the alignment of the plan with individual members' plans and priorities, and the continued commitment to the IJIS initiative.

11.2 SEARCH Strategic Planning Template

Several planning tools are available to members of the IJIS community; however, this toolkit discusses a strategic planning template from SEARCH, as well as examples of a completed plan and completed progress reports. These documents are all provided in the toolkit.

The SEARCH template is a comprehensive tool to help IJIS policy groups and managers define, organize, and describe IJIS initiatives. It also provides a good mechanism to report progress in the goals, objectives, projects, tasks, and deliverables outlined in the plan. The full template is included and discussed in this section.

11.2.1 Introduction

This section describes the plan, the process, and the participants. It may also include historical information related to forming the IJIS initiative.

11.2.2 Definition

As noted elsewhere in this toolkit, and explained in detail in the works published by many IJIS support agencies, IJIS must be specifically defined for each IJIS community and initiative. That definition, which drives so much of the IJIS planning and procurement activities and outcomes, should be included in the strategic plan.

11.2.3 Governance

Governance structures are more specifically addressed in Section 7.2 of the toolkit, which includes extensive examples of structures developed and successfully deployed in jurisdictions across the country. Whatever the structure, it should be clearly articulated and included in the strategic plan.

11.2.4 Charter

The project charter outlines basic information about the project, policy group, participating organizations, staffing, leadership, duties and responsibilities, authority, and budget. Examples of project charters are included in the toolkit, and additional examples are available through SEARCH and JISP group members.

11.2.5 Mission

The mission statement, which provides a concise statement of purpose, may relate to the IJIS enterprise or to the policy group, depending upon the governance structure. The governance structure should also describe the decision making process and the ongoing role of any policy and oversight committee(s) throughout the IJIS planning and implementation process.

11.2.6 Vision

Vision statements describe the ideal justice environment as it has benefited from the desired outcomes of the IJIS project. SEARCH noted in the strategic planning template that vision statements, while inspirational, should also be "practical, realistic, and achievable," lest the vision remain only in the realm of imagination.

11.2.7 Values

SEARCH suggests that an articulation of values is especially important in IJIS environments because the participating organization may have different or even conflicting values related to the same objective (*e.g.* confidential vs. open records considerations). Value statements included in IJIS strategic planning help to clarify the vision, mission, and goals. The exercise of the policy body in drafting and including value statements can also help minimize conflict and confusion among participating organizations.

11.2.8 Strategic Issues

As noted above, potential issues and conflicts are inherent in any IJIS initiative. There are also local issues particular to each jurisdiction. Many IJIS groups aggressively identify potential problems or conflicts early in the planning process, documenting the most highly prioritized issues in the strategic planning documents (*e.g.* funding, political support, and unknown support of future elected officials).

11.2.9 Goals

Goals are an expression of intended results. Excellent examples of IJIS goals from various jurisdictions are available on the OJP and SEARCH websites.

11.2.10 Communication Plan

For a more detailed discussion of communication and risk planning, see Section 8 of the toolkit. The SEARCH planning template points out that the direct participants directly involved in the IJIS project are only a very small percentage of the people who have a stake in the activities and outcomes of the project. In addition to outlining the flow of information between and among participants, the communication plan must also address the broader issues of marketing and communication with member organizations, indirect stakeholders, and the community at large.

11.2.11 Operational Requirements

This section describes the data exchanges and flows of information currently existing and planned for the IJIS between organizations. This is significantly different from the business and technical

requirements internal to each participating organization—and, it is important to maintain that distinction.

11.2.12 Project Roadmap

This section defines all steps and phases in the process; and, defines who is responsible and how the work will be accomplished to complete the steps outlined below. The analysis should include both operational and technical factors, which form the basis for the individual agencies' participation in the IJIS.

11.2.13 Integration Needs and Readiness Assessment

This section documents the results of the analysis of information flow, including the impediments to accurate, timely, efficient exchange of information. This includes a business requirements analysis and data exchange needs definition which describes for each of the participating organizations.

11.2.13.1 Organizational Readiness

This involves cultural and political readiness to effectively participate in the IJIS project, and to draw conclusions about the enterprise readiness.

11.2.13.2 Current Technology Environment

For additional information on current technology assessment, see Section 5 of the toolkit. The strategic plan should include high-level descriptions of all the current and planned technologies (*i.e.* infrastructure, applications, networks and other automation processes and existing interfaces) in use by participating organizations prior to the IJIS. The agency IT infrastructure, especially the network, plays a crucial role in the success of implementation projects, yet it is a part of the procurement process that many times gets either downplayed or overlooked. Any existing infrastructure that is to be utilized in the planned system needs to be clearly defined.

11.2.13.3 Analysis of Information Exchange

The IJIS team must review the current infrastructure and data flow processes to identify deficiencies in the current infrastructure, acquire or upgrade applications, and assign priority to the most important automated exchanges of justice information.

11.2.13.4 Prioritized Project List

While there is some debate about whether to include a prioritized list in the actual procurement documents, there is no question that every IJIS initiative will have a longer list of projects than can be launched and accomplished at once. Clearly, there will be some projects, such as infrastructure upgrades, upon which other projects are contingent and which must be addressed first. Others will be determined according to local needs and feasibility. This information should be included in the strategic plan, regardless of whether or not it is included in the background material provided as part of the procurement.

11.2.14 Inclusion of National and Industry Standards

Section II discusses the current and developing technical and business process standards that should be considered for inclusion by the IJIS committee. Practitioners want to consider industry, technical, and functional standards related to individual business domains, and/or government enterprise structures (*e.g.* county, state) to assess potential impact on local IJIS standards. The inclusion of standards will not

only speed up the data mapping and analysis process but it may also provide access to funding for standards implementation.

11.2.15 Information Security and Privacy Policies

IJIS committees must address the current and planned security and information confidentiality issues and rules that may impact and restrict the sharing of personally identifiable data. While much of the information included in the IJIS is law enforcement or criminal investigation data, there are protections built in for individual privacy, and security of that and other personally identifiable data that may be included in the IJIS. Information policies developed to guide and secure the IJIS should include a legal analysis and review of the data sharing, data release, and data protections around the information to be exchanged. This is a requirement of any good IJIS policy. Any information issues, and the policies currently in place that will impact the IJIS, must be reviewed.

11.2.16 Integration Architecture

While the plan will only contain a high-level explanation and conceptual model of the enterprise and the method for sharing information, this explanation should be defined and displayed in a method that will be understandable to non-technical readers, as well as to policy makers and funding bodies.

11.3 Significance of Strategic Planning

While no jurisdiction is likely to move ahead with an IJIS project or procurement without a strategic plan, each jurisdiction must decide what elements to include in the plan and how much of the plan to incorporate into any procurement process.

A good integrated justice strategic plan helps define and justify the IJIS project to members of participating organizations, key stakeholders, funding bodies, and the general community.

As part of the procurement process, the IJIS strategic plan clearly articulates to solutions providers: the environment in which the project will be undertaken; the outcomes that must be achieved, the constraints of each participating organization and of the enterprise; and, if appropriate, the priority of implementation. As noted in other sections of the toolkit, the better informed responders are on the front end of the procurement process, the better able they will be to deliver solid, outcome-based solutions as eventual partners in an IJIS enterprise. The National Center for Justice Planning has a section designed to provide the required tools to develop a strategic plan.

For additional examples of integrated justice strategic plans, visit the SEARCH, IJIS Institute, and JISP websites for resources such as:

- State of Indiana Public Safety Data Interoperability & Integration Strategic Plan
  - To enable success, state leaders developed this forthcoming strategy and plan accompanied by a separate implementation plan, to lay the foundation for a public safety data sharing initiative, setting a shared strategic vision and direction to guide data interoperability efforts
- Northern Marianas Commonwealth Council
  - Review and assessment for the improvement of the criminal justice system
- Navajo Nation, Window Rock, Arizona
  - Development of an Integration Architecture Strategy and Plan for the Navajo Nation Integrated Justice Information Sharing Project (NNIJISP)

- Mecklenburg County
  - Assist Mecklenburg County by performing a high-level review of various criminal justice agency information technology systems and related IT business processes. The end result will be the foundation for a CJIS strategic plan. Review of Criminal Justice System Information Technology Systems and Processes
- Pennsylvania, County Commissioners Association of Pennsylvania (CCAP)
  - Review the County Justice Information Exchange Project (CJIEP) and provide recommendations to implement secure data exchanges.

11.4 Toolkit Tools Summary

TABLE 7. TOOLKIT TOOLS SUMMARY – CONSIDERING STRATEGIC PLANNING KEYS

- T = Tools
- RW = Referenced Works

ID #	DESCRIPTION / PUBLICATION INFORMATION
T 11-3-A	SEARCH Integration Strategic Planning Template
T 11-3-B	Example – *Strategic Planning Results*, Maricopa County, Arizona
T 11-3-C	Example – *A Preliminary Strategic Plan for Improving Public Safety and the Administration of Justice with Information Sharing, 2002-2009*, Arkansas IJIS Office, May 9, 2002
RW 11-1	*Bi-Annual ICJIS Strategic Plan*, Fiscal Years 2003-2004 and 2004-2005, Maricopa County, Arizona
RW 11-2	*IJIS Strategic Plan Briefing*, Sacramento, California
RW 11-3	*Roadmap for Integrated Justice: A Guide for Planning and Management*, SEARCH / Larry Webster, 2004
RW 11-4	*Fusion Center Technology Resources Road Map: Elements of an Enterprise Architecture for State and Major Urban Area Fusion Centers*, Global, April 2009

SECTION IV: IJIS PROCUREMENT KEYS

As part of overall pre-procurement planning for an IJIS initiative, preparing the development of the procurement documents is critical. This section of the toolkit addresses key procurement components.

While no procurement effort is short or easy, the more time spent on planning for and developing pre-procurement documents, the more likely and easier it will be to get through the procurement effort.

12 Planning Procurement – RFP Development and Legal Review

From complex procurement laws to contractual obligations, legal and procurement planning is a springboard to successful RFP development.

Procurement laws can be extremely complex, and vary from state to state, with local and county regulations and processes further confusing the process. When preparing for IJIS procurements, it is essential to engage an attorney and/or procurement specialist with expertise in state processes and laws governing procurement to assist in developing the RFP. Understanding which questions to ask and how to ask them is an important part of procurement planning. More often than not, the best person to do this is one who has experience in enterprise level or multi-agency procurements, and standing in the state's legal community. From reviewing the contract authorities and privacy regulations through assisting with contract negotiations, an attorney provides valuable insight that other team members cannot provide.

IJIS systems often require a review of: data sharing security agreements; confidentiality and privacy law statutes governing consent to data sharing of personally identifiable information; information consolidation and records management state and Federal statutes and policies; and, privacy law. Procurement documents also must address the privacy and security of information policies that govern justice systems.

When procurement results in an award, then contract negotiations will require participation of legal counsel and contract specialists to ensure that agencies receive exactly what they have requested. The words and phrases in a contract must be clear and unambiguous, providing a strong project foundation. Additionally, the contract process must be managed and controlled, making sure that agency interests are represented and that concerns are addressed resulting in a fair and executable document.

Understanding legal and procurement processes is no easy feat. Even the most seasoned government counsel may not be actively involved in contractual and procurement activities on a regular basis. And, though judges and practicing attorneys are often part of the IJIS committee, empowering an educated, experienced technology and procurement trained contact attorney to represent agency interests before and during the proposal process is an investment that will reap benefits throughout the implementation of the project and beyond.

Why pay attention to this section?

In order to bring a successful IJIS project to fruition, it is crucial to establish a supportive and symbiotic relationship between all the parties.

Thoughtful legal due diligence throughout the planning process is one element that assures a successful collaboration of these parties, on a technical and professional basis. Legal planning should be one of the threshold issues faced by the governance committee. An ounce of prevention in the form of a

technology contracts[71] or procurements specialist lawyer can spare agencies the agony and expense of hiring a litigator post contract signature.

Topics discussed in this section of the toolkit include:

- The *Early, Active Legal Planning* section helps set the course for the entire transaction, from proposal to implementation.
- The *Role in the RFP Process* section provides a foundation for understanding the necessity for securing legal counsel.
- The *Procurement Guidelines* section outlines the key questions that should be asked and answered prior to and during the procurement process.

12.1 Early, Active Legal Planning

A needs assessment has been conducted. A governance body has been appointed. Much, if not all, of the budget has been secured – although there can never really be certainty about that. At this point, agencies are ready to move towards procurement, and are transitioning from existing vendors and partners to an open procurement (which will include private sector vendors and may be subject to state, local or other regional or municipal government procurement rules and mandates).

IJIS initiative procurements traditionally: include more than a single site hardware purchase; encompass the multiple components of an integrated technology environment for a multi-tiered or a jurisdictional government entity; and, utilize multiple funding sources or much larger amounts of public and grant dollars to address the public safety, criminal justice, and judicial systems. The stakes are high. Add to that the amount of personally identifiable data, the need to guarantee human rights and protect the privacy and confidentiality of the participants in the justice system, and the need for legal advice and support becomes critical.

In view of the consequences of failure to comply with legal tenets, it is important to define terms at the earliest stages in the IJIS project process. The pre-RFP planning and the words used in the RFP set the course for the entire transaction – from the vendor's proposal and response, to the language contained in the contract, the contract negotiation, and implementation.

At the outset of the process, it is critical to remember two words: *fluidity* and *collaboration*. Planning and preparation are important, but planning should not become a euphemism for inflexibility or rigid adherence to "one way" to accomplish an end. Planning and preparation should provide the tools and self-assurance needed to collaborate and to keep the process flexible and fluid throughout the RFP development and evaluation.

Collaboration, as a team, is the objective in a complex and expensive technology transaction. Playing the primary role in the transaction requires hard work, planning, and an intelligent approach that leads to successful implementation—and, agencies get there by gearing up in the pre-RFP stage of the procurement.

[71] "Maryland State Guide to Technology Contracts and FAQS," Maryland DOIT, http://www.doit.maryland.gov/contracts/Pages/CATSFAQs.aspx

12.2 Role in the RFP Process

The procurement process is a legal process and a fiscal activity. It is important that those engaged the procurement process not be overwhelmed, but it is equally important not to underestimate the importance of following the rules and effectively utilizing the services of project counsel.

Attorneys are often hired to safeguard against an unwanted result of the competitive process - a lawsuit. It's important to document procedural processes and ensure ethical practices throughout the bid process. It is not uncommon for unsuccessful bidders to file Freedom of Information Act (FOIA) requests or bid protests in order to review document procedural mistakes or, worse, claims of ethical practices lapses in the bid process. In this respect, defensive thinking is not a bad thing. Follow the rules of engagement: the procurement laws of the jurisdiction.

Law is not the end, it is the means.

The role of the law and counsel should not be exclusively defensive. The law is not the end but an important means to achieve the end goal, which is an improved IJIS system.

It is important to understand at the outset that legal counsel is not a decision-maker, but an advisor and analyst who can help to guide the process and avoid legal and procurement pitfalls. The client makes the decisions. The lawyer's role is to establish the legal context for the negotiation. In this respect, it is critical to have dedicated legal counsel appointed or hired. While counsel may be available in the Office of the Attorney General, County Counsel or City Attorney, more often than not, even the most competent in-house counsel does not have the luxury to divert attention away from crushing public caseloads, nor do they have extensive expertise in IJIS initiative multi-agency procurements. Most government attorneys handle a multi-agency complex procurement once or twice in their career. Budgeting for outside legal counsel in the project proposal is an investment that should not be overlooked. If agencies or their representatives think they can manage without dedicated legal counsel or, worse yet, retaining counsel at a later stage in the process, then they should rethink this position.

Assume the defense of a legal challenge and prepare a defensive procurement. Set a course through the maze of purchasing laws and regulations and secure a solid foundation both for successful implementation of the system and, if needed, successful defense of potential litigation.

12.3 Procurement Guidelines

Agency representatives need to understand the applicable purchasing policies and procedures for their respective jurisdictions and any ancillary policies that may impact data shared with external stakeholders, especially law enforcement. Developing an RFP and negotiating a contract should not be performed with blinders on. The team needs to master the language and nuances of procurement, information sharing and the law.

Early in the procurement process, some basic questions must be asked. They also need to understand some of the specific questions that will arise.

- What is the legal authority for procurement (*i.e.* statutes, charters, ordinances, county legislation)?
- Are there anti-trust or licensing laws that need to be addressed?
- Is there pending legislation or special legislation governing technology investment?
- Are there procurement regulations, forms, registrations or certifications that need to be met prior to or as part of an IJIS procurement?

- What background checks, company references, confidentiality of data, and security mandates exist in the current procurement law?
  - For example, many states have departments of IT at the agency or division or local level. The security and confidentiality policies governing the data maintained in these will vary based upon the scope and type of data maintained.
- Who has signature authority for the contract? If it is a regional or county project, then is it the mayor, the county executive, the chief budget officer, the attorney general, or more than one party?
  - For every signatory, there is another stakeholder at the table for RFP development, evaluation, selection, and especially contract negotiation.
- Who should be on the agency's side of the table during planning and at negotiations?
  - These may be the same players or, more likely, there may be a changing cast of characters during planning, RFP development, and, later, negotiations – given the length of the process. In addition to counsel (who should not be an active player during long business planning sessions), there needs to be adequate management, technical, and clerical staff support to perform all aspects of procurement, including how to deal with those vendor(s) not selected in the procurement process.

12.3.1 Project Ownership

Whether purchasing a new system or redesigning an old one, be sure that one stakeholder or group commits to ownership of the project. Ownership has a double meaning. First, on the government side of the table, one individual should be the predominant player, or chief negotiator. Second, within the governance structure, there must be both accountability and responsibility for each task in the process.

The IJIS procuring agency needs to make their mission, objectives, and requirements clear in the RFP, at the bidders' conference, throughout evaluation, and in the draft contract. There are differences in procurements that involve "built" systems as opposed to "purchased" systems. If agencies tell vendors what they want and how to do it, then they own it and have, in effect, designed it and are asking the vendor to build the system. If, on the other hand, agencies provide requirements and ask the vendor to help them achieve these by delivering a commercial off-the-shelf (COTS) product, then there is more responsibility on the vendor to provide a more generic system, which will require the agency to request modifications and tailoring.

It is critical to understand this distinction and the cost and schedule considerations for each. While IJIIS requirements are somewhat generic at a high level, the individual complexion of the participating agencies in each jurisdiction almost always requires some degree of tailoring, modification, and unique requirements that the vendor or agency will have to address. Those tasked with leading these efforts must be mindful of the legal ramifications around licensing, warranty, support, and ownership of the various options.

12.3.1.1 RFPs for Components/Products vs. System "Solution"

Should agencies issue separate RFP documents to the vendor community for each component or type of product that would comprise a system and then individually award procurements? It may be possible to save money for the agency by doing this; however, such an effort would require that agency expertise exist to be responsible for the interoperability of products independently acquired. In addition, from the perspective of contract accountability, there is the extraordinary potential for "finger pointing" among

the vendors regarding who is ultimately accountable for the system. Issuing Multiple Award Contracts (MACs) for the purpose of shortlisting groups of potential contractors from which a user may choose to quickly procure a variety of goods and services is gaining more popularity, as are selecting a vendor "team." In both instances, there still needs to be a primary contract signatory on both sides of the table.

When issuing an RFP for an IJIS system with the selected vendor being responsible for everything (*e.g.* the hardware, software, services, design, etc.), responsibility for the design, development, implementation, and warranty of the system is with the primary vendor selected.

12.3.2 Technical Approach

In order to understand how to achieve the desired objectives and accomplish the goals of the technology acquisition, agencies must develop a solid technical approach. This moves from the ownership issue and deals with the question of who is designing the system.

- Who is building the system?
- Who is ultimately responsible for integration?
- Who will handle post implementation operations, support, maintenance, technical training and upgrades?
- How much, if any of the post implementation tasks will be assigned to the IJIS team or individual agency IT staff, or outside support resources?
- What amount of conversion is required?

To define a solid technical approach, these type of questions need to be addressed. Determine the business and technical requirements in order to define the desired functionality.

If the agency does not have technically qualified personnel, then hire a consultant to assist in developing the technical sections – do not take a casual attitude when formulating the RFP. From determining the type of acquisition (*e.g.* sole source, sole product acquisition, open competitive acquisition, multi phased procurements or staged acquisitions, etc.) to selecting the type of RFP (*e.g.* equipment acquisition, software acquisition, professional services, etc.), SMEs are invaluable.

12.3.2.1 Technical Merit vs. Cost of Technology

Regardless of the type of procurement, cost should not be the sole factor in selecting a vendor. Agency representatives must examine the relationship between points that might be awarded for technical merit versus the cost of the technology. When looking at a massive hardware and software integration and justice information exchange project, appropriate, cost is only one factor in sustainability; however, the jurisdiction may have procurement rules that favor selection based upon lowest cost. This must be discussed and built into the requirements so that the lowest cost option is also technically feasible.

- Assuming that funds are in place, what is the next step?
- Does the agency have sufficient in-house expertise to establish the conceptual design of the tasks to be accomplished (*i.e.* hardware, software, architecture, methodology)?
  - If the answer is "no," then hire a technical consultant to develop the specifications.

Even if hiring a consultant, technical staff and management from the participating agencies should be involved in the development and review or the procurement vehicle requirements and technology descriptions. Remember, the IJIS technical staff will have to live with the selected system, so they need to be involved and have a stake in the selection process. When hiring a consultant, make sure the

consultant is not product-biased; and, follow hiring protocols to ensure that legal difficulties and challenges do not arise. If the agency and its information sharing partners cannot dedicate funds to the collaborative development of detailed system specifications, then they need to seriously consider placing the project on hold or proceed and consider using multiple award contracts.

12.3.3 Multiple Award Contracts

MACs and responsive proposals, which provide a team of companies and respondents are common, may provide a more efficient way to address the multiple services and technology requirements of an IJIS procurement vehicle. From a cost standpoint, they more be more in line with available agency budgets and state fiscal mandates, and may also provide the opportunity for fluidity and change management to adapt the IJIS over time. A MAC helps a jurisdiction to stay technologically current and inherently integrated over time, *if* the process is controlled and staged.

A multiple-award contract confirms that multiple companies have the basic qualifications to perform a general type of work. This type of contract puts into effect the local/state procurement/government unit's preference(s) for multiple awards for Indefinite Delivery, Indefinite Quantity (IDIQ) type contracts in order to maximize competition and choice for specific supplies and services.

FedMarket points out MACs have several characteristics, including[72]:

- Awards are made to a number of vendors and the winning vendors compete among themselves for business.
- Task Orders or Requests for Quotes (RFQs) are issued to one or more of the vendors to meet specific agency requirements. The minimum number of bids requested is usually three.
- Approved vendor price lists are negotiated as part of proposal evaluation and contract award process. The price lists become part of the contract and are used to price Task Orders or RFQs.

The Small Business Administration affirmed that the use of multiple award contracts (MACs) is primarily the product of acquisition reform. Agencies are using these tools to quickly fill requirements by simply issuing orders against these contracts rather than starting a new procurement action. It is important to note that MACs reduce opportunities for small business in part because they are usually too large in scope for small businesses to participate in the competition. Moreover, this procurement tool makes it particularly difficult for small businesses to increase capacity and capabilities because the smaller contracts, which traditionally allowed them to gain a foothold in the Federal market, are disappearing; however, there are ample opportunities for small businesses to participate in MACs, either directly in niche markets (*e.g.* domain expertise) or through subcontracting.

The legal aspects of these procurement factors vary by jurisdiction. It is critical to understand any small business or minority set aside requirements in the jurisdiction's procurement process prior to setting up

[72] "Multiple Award Contracts: The Wave of the Future," FedMarket, http://www.fedmarket.com/contractors/Multiple-Award-Contracts:-The-Wave-of-the-Future-; see also, "Multiple Award Contracts: A Necessity in Today's Market," FedMarket, http://www.fedmarket.com/whitepaper_download.php?which_one=gwac

the procurement vehicle, and to review all fiscal policies regarding MACs, blanket contracts, or itemized purchasing/multi-vendor awards prior to developing a procurement plan and RFP.

12.3.4 The Bedrock of a Successful Implementation

This section addresses issues of legal centrality. What about practical issues? If the legal advisers have done their job, then agency leaders and representatives may later ask why money was spent money on counsel but there are reasons: to prevent the lawsuit; to address the practical question – What are we trying to accomplish?; and, to comply with Federal, state, and local mandates regarding data sharing, privacy, confidentiality, and security. Remember, the objective is a successful implementation that enables, rather than restricts, data sharing.

12.3.4.1 Content

In a public procurement, the words begin to flow in the RFP. Without a clear RFP, the agency purchasing the system and services is at the mercy of the vendor. From the vendor's point of view, it is equally important to know what it is they are bidding for. Industry representatives often complain about RFPs that are unclear, ambiguous, amorphous, and lack direction. Thus, when agencies begin the process of procurement for an integrated justice information system, clarity is the goal.

From the perspective of the government buyer, an RFP needs to be crafted in a manner that binds the vendor to the words contained in its proposal and addresses the needs for technology in a clear comprehensible fashion. From the perspective of a justice agency official, the RFP document should be objective in its evaluation criteria to provide the best value. A well-crafted RFP should: delineate mandatory and optional system and service requirements; lay out technical issues, goals and objectives; and, set forth the intended plan for use.

12.3.4.2 Objective

If the RFP clearly sets forth the objectives, mission, requirements, scope and goals, then the vendors should be able to respond in a detailed and specific way to the requirements.

Remember, the RFP and vendor responses are the first steps in the negotiating process. The response provided by the vendor to the RFP should be clear on what the vendor is proposing, be easy to evaluate against the RFP requirements, contain solid statements of technical functionality, proposed applications, requirements and flow and not a "form response" that is rife with sales puffery, glossy marketing brochures or vague and generic responses). Wherever possible, template response documents (*e.g.* requirements checklists, mandatory cost breakdowns, and proposed time schedules) should include details to not only ensure the vendor proposed a complete solution but also to allow for equitable comparison of the vendors' responses.

12.3.4.3 Process

It is critical to adhere to the process. Pay attention to the procedural, legal, and regulatory issues posed, and stick to the process to ensure the evolving competitive procurement is structured, objective, and time sensitive.

At the risk of over-simplification, the keys to the early phases of competitive negotiation include:

- Establishing protocols for a thorough review of vendor proposals, with an eye toward achieving a fair and balanced contract.

- Advising the prospective vendors about the statutory and regulatory requirements of the competitive negotiation process and inviting inquiries regarding any perceived ambiguities in the process.
- Holding the successful vendor to the words and proposed solutions, time frames and costs used in its responses.

These points cannot be over-emphasized. Bear in mind that post-selection litigation is driven not by the substance of the technology, but rather by any deficiencies in following the established procurement procedures.

12.3.4.4 Procedural Clarity

In addition to substantive clarity, efforts should be made to ensure that the procurement is not vulnerable to procedural attack or critique.

First, define and reinforce the procedural requirements of the competitive procurement process. Control and manage the RFP development. Communicate and correspond with the vendors to increase their understanding of the requirements of the process and the rules governing it. Have them endorse the process by soliciting criticism before taking any subsequent steps. The project counsel achieves this by uniform and methodical communication during the transaction. Stress the need for objective and uniform evaluations with the procurement team. Chances are, the IJIS team has limited experience in competitive procurements and will need advice and oversight by the IJIS management team.

Second, control the evaluation process. Establish clear and verifiable evaluation criteria, review thoroughly with the team to ensure full understanding, validate the requirements, and publish the information in the RFP. The evaluation team's decision must be legally and technically justified. The team must understand the need to establish scoring criteria and to apply the standards equally to all vendors.

Third, control the negotiation process, issue the RFP, evaluation and selection process, and stay on schedule. Use the evaluation process to better understand the proposal and to clarify ambiguities that may exist in the desired system requirements before the selection and the negotiation stage. The RFP evaluation criteria are discussed further in Section 13 of this toolkit.

12.3.5 Contract Negotiation

12.3.5.1 Integration

Any contract entered into as a result of the RFP process should include specific terms and conditions and a scope of work between the government and the vendor. Standard form contract terms and conditions, formats, and mandated procurement forms required by the jurisdiction should be incorporated by reference and addendum. The RFP and response from the vendor should also be included in the contract document. The first draft of a contract should reflect the elements of the transaction (*i.e.* terms, conditions, and specifications contained in the RFP), the successful proposal (including the vendor's technical and cost proposals), and any agreements, letters, memoranda, written clarifications, modifications, and any other changes agreed to by both parties, or added by addendum to the RFP and procurement process documentation.

During the preparation of a first draft of the base contract, both sides should review proposed contract language proposed by the vendor; or, review other contracts entered into with the vendor and determine if any of the vendor provisions could be accommodated in the draft contract. This would

include schedule changes, revisions to the proposed SOW, and any pricing, licensing, warranty or support language that may be beneficial and improve the IJIS project.

Draft contract terms and conditions, sample standard contract terms, and mandatory government contract addenda and language should be included in the RFP documents. These items can be referred to as:

- Standard contract provisions
  - These are mandatory for the jurisdiction, will be included in the IJIS contract, and can be labeled as mandatory terms and conditions
- Proposed contract langue, terms and conditions
- These items, while required, are subject to revision during the procurement process.
- Vendor suggested terms and conditions that the proposer is not willing to accept or would require amendment before the proposer would agree to it
  - If any subsequent changes are made to the draft contract by the issuers of the RFP, then the proposer should be offered an opportunity to negotiate alterations to those terms and conditions; however, the proposer would only have this opportunity to object to the non-mandatory terms and conditions contained in the draft contract.

The process helps vendors to determine if they can meet and accept the mandatory processes and offers the IJIS team the opportunity to consider suggestions from proposers that would enhance the IJIS contract.

12.3.5.2 Vendor Team

Before negotiations begin, determine the identity of the vendor's negotiating team and obtain assurances of the team's ability to negotiate binding agreements. This is essential and should be preceded by a requirement in the RFP for the vendor to provide the name and title of the signatory authority in their proposal.

Insist on dealing with corporate representatives who have the requisite authority to bind the vendor. If not, agencies may be subject to one, and perhaps more, negotiating teams higher up in the vendor's hierarchy, which can cause unnecessary delay and may affect any prior agreements reached. Initial assurance of bargaining authority and detailed notes of the negotiations sessions assists in building a strong case if the agency or its representatives must formally request that the purchasing authority disqualify the vendor from its representation because a fair bargain cannot be reached. Insist on authoritative negotiators and include as much of the identification and prequalification in the RFP documents and process in order to minimize delays after selection.

It is critical that the agency representative ensure they have the requisite bargaining authority as well. While it is entirely possible that the agency representative will have to go back to the final signatories for sign-off, every other department that is on line should either have representatives at the table or clear channels of communication up the chain of authority to make sure the people at the table can speak credibly, approach the negotiation in good faith, and reach agreement on the essential issues.

This principle works both ways. Expect the most of the vendors but make every effort to prepare, plan, strategize, and do all the necessary "homework" – it is absolutely critical. A multi-stage evaluation

process—a review for acceptance of mandatory terms and conditions, for format and authority requirements, and for validating the structure of the vendors' proposals—is helpful.

12.3.6 Contract Priorities

12.3.6.1 Contract Drafts

If merely purchasing equipment, then a vendor's "form contract" may contain all necessary items, but should still be reviewed to ensure it is acceptable to the agency's purchasing authority and includes the following:

- The base contract contains the essential legal terms, including those mandatory contractual requirements in the RFP (*i.e.* installation, testing, life cycle, indemnification, copyright and patent protection, and software escrow requirements, maintenance and support – if included, licensing/ leading and operating software provisions), which will be included in the final contract.
  - The base contract also contains the product and service warranty provisions proposed by vendors, as well as recasting of the RFP requirements as a comprehensive "representations and warranties" enumeration (*i.e.* one of the key representations will address the issue of system integration).
- The descriptions or documentation corresponding to specific system design requirements, sizing, pricing, project plans, deliverables, and milestones.

If the vendor is obligated to design, complete requirements mapping, software modifications, and/or implement, and maintain an IJIS system, then the RFP must define all components that will be included in the contract (*e.g.* services, support, training, testing, maintenance, etc., as well as software, hardware, and network products or components). The RFP and contract should clearly delineate the services responsibilities and obligations of the vendor including their role as the integrator, project manager, and all tasks in the RFP that the vendor is responsible for, as well as all tasks that are the responsibility of the IJIS team. If there are any tasks that are shared (*e.g.* testing, training, operations, requirements mapping, etc.), then the primary responsibility for each should be defined in the RFP and described and priced in the response, which is include in the contract. Any modifications to the vendor's proposal response that impact the original RFP terms regarding time, materials, services and costs, must be identified in the contract, and agreed to by both parties to be binding.

While separate contract provisions and schedules may be used to address licensing and escrow agreements for software and products, services and the acceptance process for all services, deliverables, and milestones should be included with a detailed SOW requirement and mapped to the acceptance process for the integrator.

12.3.7 Major Contract Issues

12.3.7.1 Vendor Accountability

One of the critical contract negotiation issues for both parties revolves around the issue of due diligence. What is *due diligence*? For the government, it is an attempt to create clarity for the parties to assure: that the vendor truly understands its obligations; that the functionality of any pre-existing systems or earlier IJIS project phases are still valid; and, that there will be no surprises in the field during testing, installation, training, acceptance, and implementation. For the vendor, due diligence can be perceived to potentially shift additional risk to the vendor. The government wants to avoid surprise and

over-runs. The vendor wants to avoid unnecessary risk – especially if the risk is not clearly defined in the RFP.

A strong due diligence provision in an RFP should set forth an honest recitation of the facts and conditions that a vendor needs to understand. On the other hand, the vendor needs to feel comfortable raising questions about the underlying assumptions and conditions at the earliest possible moment and should address those issues in its RFP response so they are identified before the parties sit down at the negotiating table.

A vendor should not ignore a material factual misstatement and assume it can work it out in the contract or the field. If there is a strong due diligence provision in the RFP, then this could create grounds for rejection of the proposal, and, if egregious, exclusion from further participation with the governmental entity.

Due diligence should be protective but not so burdensome that vendors shy away from participation in the competitive process.

12.3.8 Warranties and Representations

It is critical that the contract establishes accountability standards. First, the agency is expending huge sums of public money. Second, there are issues of public trust, health, safety, and justice. Moreover, any new technologies and project practices contain risks. One of the most important legal issues in commercial contracts that need to be addressed is the warranty. Vendors must state in their RFP response and include in the contract documents any:

- Warranty of title to any software it markets;
- Implied warranties of merchantability and fitness for purpose;
- Disclaimers on software, services or hardware products;
- Secondary or pass through licenses, warranties or disclaimers regarding third-party products and software;
- Required insurance and waivers;
- Financial stability of the firm and contractor; and,
- Outstanding liabilities, lawsuits or company conditions/stability, including financial and corporate instabilities which could impact or prevent the completion of the IJIS contract.

Accountability is the key.

12.3.9 Procurement Summary

When hiring a vendor to build an IJIS system, there can be tension between the parties over the issue of who is responsible for what. Using words like integrator versus prime vendor and mandatory versus required, and failure to clarify terms, conditions and terminology early on in the process will delay and probably disrupt the RFP process and legal review. Providing legal, technical, and functional terms, conditions, and requirements prior to release of the RFP will help ensure that when the bids are opened, the appropriate contract language was included in the RFP, and that the vendor has read and understood all of the requirements and specifications of the RFP. In other words, after the responses are opened, any questions with respect to the RFP, including local operations, equipment configurations, and operating systems, should be presumed to have been already answered to the vendors' satisfaction, and will result only in limited clarification or review.

However, the process starts well before pen is put to paper in the RFP process. Clarity and preparation are the keys to a fluid collaboration and a successful implementation, and begin in the strategic planning process and continue through the development of the vision for the IJIS project.

12.4 Toolkit Tools Summary

TABLE 8. TOOLKIT TOOLS SUMMARY – PLANNING PROCUREMENT

- RW = Referenced Works

ID #	DESCRIPTION / PUBLICATION INFORMATION
RW 12-1	*Contract Types: An Overview of the Legal Requirements and Issues*, Congressional Research Service, 2010
RW 12-2	*Leaving Performance Bonds at the Door for Improved IT Procurement*, NASCIO / IT Procurement Modernization Series: Part II, August 2010
RW 12-3	*Gaining Traction on the Road To Win-Win: Limitations on Liability in State IT Contracting*, NASCIO IT Brief, 2010
RW 12-4	*Getting What You Need on the Way to the Win-Win! Leveraging the RFP in State Technology Procurements*, NASCIO Research, 2005
RW 12-5	*Procurement-Guide Final*, APPA
RW 12-6	*Contracting Guidance to Support Modular Development*, OMB, 2012
RW 12-7	*The Department of Defense (DoD) Open System Architecture Contract Guidebook for Program Managers*, DoD, 2011
RW 12-8	*"Myth-Busting": Addressing Misconceptions to Improve Communication with Industry during the Acquisition Process*, OMB, 2011
RW 12-9	*"Myth-Busting 2": Addressing Misconceptions to Improve Communication with Industry during the Acquisition Process*, OMB, 2011

13 Developing RFP Evaluation Criteria

An important part of the procurement process occurs prior to issuing the RFP, when project participants set forth the project vision and goals in a written form (see Section 3). If the project vision, goals, and specific requirements are not clearly defined and if evaluation planning does not occur before the RFP is issued, then misunderstandings could arise, causing confusion, cost, and delay. Evaluating an RFP can be the hardest part of the procurement process and is the most important. A well-crafted evaluation plan can make this process go much smoother and result in a contract agreeable to both parties. As part of the RFP construction, evaluation criteria are identified and a point or rating system and steps in the process defined. An evaluation team needs to be selected and trained on the evaluation process and their roles. This section will discuss the actual evaluation process in detail.

Proper evaluation planning can ensure that the project vision, goals, and requirements are clearly articulated and understood by all potential responders and evaluators. Evaluation planning will also aid in developing consensus among the evaluators and ensures that all proposals are evaluated as fairly and uniformly as possible. The below sections contain information designed to help develop evaluation criteria in a way that ensures better communication of expectations to all involved.

While sample evaluation plans and criteria are included as references, RFP developers should also consult their relevant procurement agencies to ensure inclusion of any mandatory evaluation criteria or processes required by the jurisdiction. This information is often available on the state or local agency's procurement website.

- The *Pre-RFP Release Planning Steps* section discusses essential first steps, including a communication plan, evaluation team selection, and bidder conference planning.
- The *Evaluation Process and Plan* section provides a roadmap for preparing and conducting an objective evaluation of the RFP process
- The *Evaluation Criteria* section guides responders and evaluators in developing evaluation guidelines.
- The *Evaluations and Responses* section is discussed in relation to well-articulated evaluation criteria.

13.1 Pre-RFP Release Planning Steps

Prior to developing the evaluation criteria and process, there are some actions that should be completed prior to the RFP release to encourage an objective and successful evaluation process. These include RFP communication processes, evaluation team selection, and training. As these steps are essential to coordinating the criteria for evaluation with the scoring process and with the scorers, communication of the criteria to the vendors—through email, public media and formal sessions (*e.g.* bidder conferences)—helps ensure a consistent message is provided from the start through the end of the RFP process.

13.1.1 Communication

Communication at all junctures is critical, and through the RFP development, issuance, evaluation, and selection actions, agencies and their representatives should consider electronically communicating by using the Internet and the IJIS or jurisdiction's procurement website. Organizations can and should keep all parties informed by posting and updating relevant information required to respond to the RFP for both legal and stakeholder communication purposes. The Internet website can also be used to publishing the RFP and to receive proposals from respondents.

With the widespread availability and use of the Internet, IJIS procurement agencies are strongly recommended to deploy their procurement documents (*i.e.* RFI, RFP, or RFQ) or other procurement activity utilizing the web.

An IJIS project webpage, linked to the agency homepage, could be used not only to deploy the requests but also any related and pertinent documents (*e.g.* strategic plan, architecture plan, or vision statement). Use of the Internet significantly reduces the time and cost factors associated with creating and mailing hard copies of documents to multiple vendors, and assures the widest possible exposure for the requests.

Web conferences linking both the agency and prospective vendors are replacing "in person" mandatory bidder's conferences. Because this approach reduces the expenditures of both time and money, a greater number of vendors may participate than would otherwise be automatically eliminated by the "in person" requirement of transiting to the agency venue.

Web conferences also eliminate or reduce the need for the agency to spend time on some of the logistical issues associated with hosting an "in person" bidders' conference, such as scheduling locations or providing hardcopies of the documents at the meeting.

Questions from vendors related to the request can be submitted to a common email address. The questions and answers can then be shared via Internet for all vendors to review, as can addenda to the RFP.

Specific vendor solicitations can be requested via email to notify them of the website, and e-submittal of electronic copies of vendor proposals is becoming common in this green environment. Electronic submission of vendor responses does not preclude the need or desire of the procurement agency from specifying a specific date and time for responses to be submitted, nor does it preclude the submittal of separate technical and cost proposals. The date/time stamp and return receipt features of email systems guarantees that proposal deadline requests can be determined. Separate technical and cost proposals can be submitted as separate emails. Email systems easily show when an email is opened, thereby determining whether a cost proposal is opened and read prior to reading all technical proposals.

Electronic submission of proposals saves time and money for both the procurement agency and the vendors. Procurement agency staff no longer have to "man" a room, waiting for vendor proposals; and, vendors no longer have to pay additional money to guarantee mail delivery of multiple hard copies of a proposal. The only limiting factor in utilizing technology to submit "soft copy," or electronic requests and their responses, is document size. Both procurement agencies and vendors should be cognizant of email limitations related to document size when utilizing this approach.[73]

13.1.2 Evaluation Team Selection and Training

The evaluation team should be composed of IJIS stakeholder agency staff, other state/local staff, and/or other mandatory parties according to the purchasing rules for the jurisdiction and selected before the release of the RFP.

An evaluation team chairperson or manager should be appointed and may be from the purchasing division staff, the department management, or other IJIS staff. The evaluation team chairperson will:

- Be responsible for receipt of the raw scores from the evaluation team;
- Conduct the final scoring calculations;
- Ensure the evaluation plan is followed and that scoring decisions are sound and defensible;
- Work closely with legal or purchasing staff;
- Resolve any compliance issues;
- Perform the final ranking of the proposals; and,
- Make a recommendation to the IJIS lead for the award of the contract.

While other external agencies may observe or participate in the evaluation and selection activities, and consultants may support evaluation activities, the evaluation should be managed to ensure an objective process. Training of the team ensures the Individuals selected as evaluators understand they are responsible for the execution of the technical components of evaluation scoring. Any guidelines or purchasing requirements should be provided and reviewed with evaluators prior to the proposal evaluation process starts. Evaluators should be reminded of the need to maintain an objective process; and, throughout all phases of the evaluation, the confidentiality and security of proposals and the

[73] "Integrated Justice Information Systems Guidelines for Procurement," OJP, http://it.ojp.gov/procurement/files/IJIS-Procurement.pdf

scoring process must be maintained. To ensure confidentiality and security, evaluation sessions should be closed to the public and agency staff not supporting the evaluation team. The evaluators should also be reminded to not discuss the contents of the process, submitted proposals, or the procurement activities with any persons outside of scheduled meetings of the evaluators.

Prior to the RFP release, all evaluators and all other staff involved in the evaluation effort should be informed of the no contact polices and the need to strictly adhere to the following requirements:

- Communications between evaluators and the potential bidders should be restricted from the date of RFP release through contract signing, except as necessary to complete evaluation activities (*e.g.* clarifications of proposal components, reference checks and any on site demonstrations or presentations).
- Evaluators should not be permitted to discuss the procurement or evaluation process with anyone outside of the evaluation team, including other IJIS staff or potential or actual bidders.
- Evaluators should not communicate the scoring outcomes or content of proposals and or disclose the status of any proposal.

Remember, the evaluation team is not engaged daily in an evaluation process but may have contacts with outside vendors in the course of their daily business activities. To keep the process objective and to prevent unfair advantages or improper disclosures, all staff must understand the privacy and communication restrictions in the evaluation process. Some may choose to not participate—and, if these requirements are discussed up front, then there will be ample time to find a substitute evaluator.

13.1.3 Bidder Conference Planning

Bidders' conferences are informational meetings hosted by procuring organizations. These meetings are typically held shortly after the issuance of the RFP. Bidders' conferences provide a forum where all potential RFP responders can meet as a group with representatives of the procuring organization to ask questions and to receive answers that will aid them in clarifying RFP requirements, as well as gaining a better understanding of the overall project vision.

Conferences that provide a "walk-through" of each participating department or agency are especially helpful in meeting this objective but can be disruptive to the agencies if there are a large number of vendors with interest in the RFP.

Logistics surrounding the bidders' conference (*e.g.* date, time, location, and number of representatives from each prospective RFP respondent allowed at the conference and pre-registration for the conference) must all be detailed within the RFP and published with the RFP. If there is a pre- RFP release conference, then the agency website is the best way to provide this information.

The RFP should clearly articulate the format and content for any and all conferences and vendor contacts, and describe the specific procedures for asking and answering questions. Any "walk-throughs" should also be described in the RFP.

Particular attention should be given to when the bidders' conference is scheduled. Procuring organizations should allow sufficient time for receipt following the release of the RFP and enough time in advance of the proposal due date to allow prospective responders sufficient time to incorporate what they learn at the conference into their proposals. The RFP should also clearly state that vendors are responsible for their own costs associated with attending a bidders' conference.

The procedures for hosting the bidders' conference and the logistics of providing written questions and answers should be predetermined internally before the RFP is issued, and an attendee list should be distributed to each prospective responder following the bidders' conference.

In the age of web meetings, mandatory on-site bidders' conferences are discouraged. Mandatory bidders' conferences can have the effect of eliminating potential responders due to the time and expense of traveling to the conference. Responders often send representatives (who will not be involved in developing the proposal or who may not be involved in the project if the vendor is awarded the contract) to bidders' conferences comprised of a question-and-answer-only session. The reason for this is that the responders' best employees are usually the busiest employees; therefore, the quality of questions and the responders' level of understanding may not be all that is expected for the time and expense expended by the agency or jurisdiction.

Of course, if a mandatory or question-and-answer-only conference is desired or required by the jurisdiction rules, then consider using technology such as the Internet or the telephone to host a virtual conference, which will enable a greater number of responders to participate. More and more bidder conferences are being conducted as conference calls and on-line sessions, limiting the cost and amount of travel required, while increasing the number of participants; however, if teleconferences are used, it is important to stress what will and will not be considered as binding, to maintain a recording or transcript that can be provided, and to limit or schedule the process by which participating vendors can ask questions with on-line question submittal or conferencing capabilities.

13.2 Evaluation Process and Plan

The evaluation process is normally divided into four main phases and two or more optional ones. The evaluation process phases include:

- Evaluation of Mandatory Technical Requirements
- Evaluation of Technical Proposals
- Evaluation of Cost Proposals
- Ranking and Selection
- Optional Discussions and Demonstrations (optional)
- Best and Final Offer (BAFO) (optional)
- Optional Negotiations (optional)

Depending upon the size and scope of the RFP and jurisdiction specific procurement rules, the names and number of phases may vary.

Following the deadline for receipt of proposals at a designated time and location defined in the RFP, each proposal package is opened. It is recommended that the proposals submitted include two distinct sections: 1) a Business/Technical Proposal; and, 2) a Cost Proposal – separately packaged. The Cost Proposal is normally evaluated after the total points have been calculated for the Business/Technical Proposal, unless there are jurisdictional requirements that define a different process.

It is recommended that each proposal received be assigned a bidder ID that is then used on evaluation documents to track completion of each proposal throughout the evaluation process and to ensure adequate control.

13.2.1 Evaluation of Mandatory Technical/Procurement Requirements

The purpose of this phase is to determine whether each proposal is sufficiently responsive to the RFP to permit its complete evaluation. Selected evaluators or a person designated by the jurisdiction will

review each proposal to determine whether it complies with the basic format and structural requirements of the RFP, including:

- Number of copies
- Signed letter of transmittal
- Bid bond (if required)
- Completed checklists
- Signed templates or forms
- Required acceptance of any mandatory terms and conditions
- Attachment of bid bonds or certifications

Using predefined checklists, compliance criteria are evaluated on a 'PASS' ("Yes")/'FAIL' ("No") basis. This phase does not include detailed review of the proposal contents but looks instead to ensure that time is not wasted evaluating proposals that are incomplete or improperly submitted. Often, this stage of the evaluation is completed by a procurement staff member or legal staff using checklists to determine if the proposal is complete enough to be submitted to the evaluation team.

Normally, in a mandatory review, the compliance requirements are not assigned a point score; reviewers simply record 'PASS' or 'FAIL' for each numbered item. A PASS score is assigned to each item for which the response to the question(s) defined in the item is "Yes." In the event that any item receives a FAIL score or for some reason cannot be evaluated, an explanation of the problem or concern and the corresponding question number must be provided and made part of the record. For example:

- Cover letter signed by official authorized to bind the corporation YES ___ NO ___

If any component receives a FAIL score (a "No" response) on any item, or contains an item which for some reason cannot be evaluated, then it shall be deemed as non-responsive. Any technical component that is non-responsive, or in which there are inconsistencies or inaccuracies, may be rejected. The mandatory reviewer should be responsible for examining any discrepancies found in the mandatory review, and determining whether a proposal will be rejected as non-responsive or if it will request corrective action, clarification, or compliance from the bidder. The reviewer may have to notify the procurement division or legal staff for a final determination and action if there is a question as to completeness or the wording. Often, bidders will accept the mandatory terms and conditions by signing a required form, and then include in their cover letter or executive summary a disclaimer, which could impact the determination of the proposal as responsive. So, while the mandatory review stage is an overview process, it still requires a careful reading and review of the RFP requirements.

Corrections to proposal material may be requested, in writing, and a limited time period for their receipt may be defined to ensure timely evaluation of the full proposal or to allow for its rejection for noncompliance. A correction requested from one bidder does not establish a right or opportunity for any other bidder to submit questions or clarifications. Corrections should only be those requested by the review team, and not additional materials sent after the due date by a bidder. And, if no resolution is determined, the entire proposal may be rejected as non-responsive.

The mandatory review phase allows the team to waive minor irregularities or to request compliance from bidders with the mandatory proposal submission requirement; however, generally, any proposal that fails to comply with proposal submission requirements may be rejected and removed from consideration. The results of the mandatory review are summarized on the evaluation checklists and all completed checklists are kept as part of the purchasing record. Those proposals that pass the compliance review will advance to the next phase, which is a complete evaluation of the technical

response criteria; those that fail are removed from consideration and not available to the evaluation team.

Following the mandatory review, the proposals still in contention should be distributed to the evaluation team. The team may work in small groups, be assigned to individually review all or part of a section, or be assigned only to specific aspects of the evaluation. In no cases should the cost and technical review occur at the same time, as the cost proposals are normally reviewed after the technical solution is evaluated – unless jurisdiction procurement rules define a different process.

Individual scoring sheet samples should be distributed to the evaluators during evaluation training prior to the actual evaluation of proposals and as part of the training. The evaluators should be instructed to read through the proposal Executive Summary (if present) before beginning to evaluate and score detailed criteria. The material in the proposal introduction should provide all evaluators with a broad understanding of the entire proposal. In scoring individual responses within a section, evaluators may elect to review related topics within other sections of the proposal. Evaluators are restricted to evaluating information contained within the "four corners" of the proposal. Information not part of the proposal may not be considered and evaluators, like a jury, should be reminded to make their decisions and conduct their review based upon the material contained within the evaluation process documents and proposals, not outside contact or external sources.

13.2.2 Evaluation of Technical Proposals

The purpose of this phase is to measure the individual merits of the technical components of the technical proposal against pre-established criteria. Members of the evaluation team should review and score all technical proposals that pass the mandatory technical requirements. The technical proposal evaluation process includes:

- Initial evaluation and scoring of the technical components
- Requests for clarification and questions on specific proposals
- Reference checks for company and proposed key personnel
- Final scoring of the technical components
- Application of scoring weights and final technical points

The initial evaluation and scoring of the technical proposal includes reviewing and scoring each proposal based upon the technical components included in the evaluation sheets and involves point scoring in each of the general areas. A maximum of (XXX) points made available for award should be based upon the contents of the technical portion of the bidder's proposal. The categories and the maximum points available for each category are defined in the evaluation criteria but will include a weighting of points for:

- Corporate Background
- Experience Organization and Staffing
- Description of Approach
- Project Management
- Reporting Process
- Implementation Criteria
- All technical components and checklists

The evaluators will independently read and score the criteria in each of these categories to assess the completeness, quality, and desirability of bidder responses in the above areas and the components parts. In some cases, small teams or subgroups of the evaluation team, or individuals on the team with

specific expertise (*e.g.* PM, technical design, etc.) may be designated to review and score certain sections; or, all members of the evaluation team can be provided the opportunity to score on all areas. Any questions or parts of the proposal that require clarification are identified, in writing, for discussion and provided to the evaluation team manager or oversight official for communication to the vendor for clarifications.

In no circumstances should the evaluation team members scoring the proposal be in direct contact with the vendors on questions; and, any contact should be controlled to keep the process objective as the initial scoring reflects individual, independent evaluations of a proposal and responses to the evaluation criteria (discussed in Section 13.3 below) criteria. Any clarifications received should be applied to the scoring by all individual scorers.

13.2.3 Reference Checks

The purpose of contacting references is to verify the corporate capabilities and prior performance of the bidder and the qualifications of proposed key project personnel. Reference checks are made by telephone or by email and should involve a formal script and list of questions that will mirror the evaluation criteria. The results of the reference checks are compiled and provided to each evaluator to assist in scoring specific criteria for each proposal. All questions asked in reference checks: must be the same for all proposers; should be structured to assist the evaluators as they gather information from each reference; and, should support follow-up questioning on selected reference responses.

Reference checks should be performed early during the technical evaluation phase since their results will be applied to some of the evaluation criteria items. A sample guideline for reference checks is provided in the toolkit. All of these activities provide input to the evaluation process to clarify the proposal material.

In many instances, a partial or full criminal background check may be required by the jurisdiction. If so, then the reference checks in the evaluation process may be two step, with background checks conducted for proposed key personnel after/or prior to final selection of winning proposals.

13.2.4 Scoring Review

After scoring all criteria for each proposal and using input from reference checks, each evaluator has the opportunity to review the scoring results for each evaluated proposal and to adjust his or her proposal scores, if necessary. When all evaluators have finalized their individual scoring, it is recommended that a review session is held for the team of evaluators to discuss findings. Any inconsistencies among sections or proposal material should be pointed out or become apparent during this review session. At the end of this review session, evaluators have the opportunity to adjust their scores. It is acceptable for scores to remain unchanged. Any revised scoring should be explained in the comments section. No attempt is made to establish a consensus in the scoring. This process allows the evaluator to confirm or adjust the relative scores given to each proposal and to neutralize the effects that may have developed based on the initial order in which proposals were evaluated.

The purpose of this final review is to ensure that the evaluators have neither misunderstood nor missed information in a proposal or reference check. Evaluators should be given the opportunity to revise their scores based on discussions during the final review discussion if they choose; however, the purpose of the review process is to share information, not to obtain consensus scores. This should be stressed with all evaluators; and, it is recommended that the discussion be mediated by the evaluation team lead, or an outside official (*e.g.* legal counsel or representative from the jurisdiction's procurement or purchasing staff).

After the final review, the evaluation team lead or proposal lead can record the raw scores from each evaluator, calculate an average score, and multiply the result by the pre-assigned weight for each criterion to yield a weighted score. The weighted scores can then be summed for each evaluated area to yield the total weighted score for each proposal. The total technical scores are then ranked and can be mathematically averaged or normalized to the maximum points available for the technical components. Comparative analysis of the points awarded should not be done prior to the completion of the scoring in order to ensure the evaluation team members maintain objective. Remember, evaluation team members are not, by nature, professional IJIS evaluators, and may need to be trained in how to conduct an evaluation of IJIS proposals.

Technical proposals should be scored one at a time, with the scores recorded for all team members on a specific vendor's score sheet.

13.2.5 Alternative Consensus Method

An alternative methodology for evaluating proposals is by using consensus. All evaluators would meet at the same time and place, and would review the proposals one at a time. The evaluation team would reach a consensus score for each criterion being evaluated, and would only fill out one evaluation score sheet. The evaluation team chairperson would be responsible for totaling all scores and applying any weighting factors. If this consensus process is used, then the sections evaluated by consensus should be manageable and may be segmented by different teams. This method is often used for reference checks and standardized material (*e.g.* PM or status reporting processes), where the proposal responses are very similar.

13.2.6 Evaluation of Cost Proposals

After the final scoring of the technical components, usually the cost evaluation team or an assigned procurement officer will begin its review of the cost components. Specific procedures for reviewing cost proposals and scoring these sections are normally contacted in a jurisdiction's procurement regulations, and may require cost proposal examination to happen earlier or as part of a pre-screening/mandatory review.

The evaluation team chairperson may designate specific staff, legal staff, or procurement division personnel to perform some of the cost evaluation. Cost components are examined to determine whether:

- They meet compliance requirements.
- They are consistent with the corresponding technical components, as defined in the cost proposal response sheets and categories in the RFP.
- All calculations are correct.

If any bidder's proposal is incomplete, contains inaccuracies, or deviates from the RFP and or procurement-prescribed format, then the proposal may be rejected. If no discrepancies are found on any of the cost components, then the cost evaluation team will evaluate the cost components to calculate the total cost. Jurisdiction procurement regulations normally assign a point value for the bidder with the lowest total cost. Points for the other bidder's cost are normalized to this bidder and point scores are accordingly assigned. Increasingly, IJIS procurements include a "Best Value" scoring criteria, which ensures that cost is not the sole deciding factor, and more heavily weights technical conformity and standards adherence.

13.2.7 Applying Reciprocal Pricing or other Procurement Specific Preferences

Some states and counties provide a preference for vendors within their borders and add a percentage to bids received from outside locations. Where that happens, the jurisdiction responds (reciprocates) in like manner by adding the same percentage to bids received from vendors who are "domiciled" in those states or countries. This applies to the purchases of materials, supplies, equipment, or services. Additional preferences or discounts based upon the inclusion of a mandatory percentage involvement of disadvantaged, small business, minority business, or other special categories may be required in the procurement regulations. In all cases where this will impact the cost calculations, the requirements should be specified and included in the RFP. Cost reporting sheets and cost evaluation criteria address these preferences.

After the total cost has been calculated for each bidder, the evaluation team chairperson will review the results and then determine the final cost components evaluation points. It is recommended that the RFP include template sheets in a spreadsheet or other fiscal tool format to help ensure the easy comparison of costs from different vendor proposals on an electronic basis.

13.2.8 Ranking and Selection

Following the technical and cost evaluations, the normalized scores for the technical and cost components for each bidder are summed and the proposals are ranked by final total score. The ranking and selection of proposals begins after the cost section evaluation and scoring are complete.

At this point, the team may be ready to make a contract award recommendation, or a decision to move forward with additional reviews, demonstrations, request for clarifications, or BAFOs, depending upon the specific jurisdiction's defined process and the evaluation process included in the RFP. The selection team should NOT revisit scoring individual proposals, or include vendor proposals that were previously removed due to inadequacy or failure to pass mandatory review. The team can choose to go forward with additional clarifications or best and final presentations from one or more of the scored vendors, depending upon the criteria contained in the procurement process.

It is recommended that the RFP evaluation criteria be stated in such a manner to enable these post scoring steps to occur, if needed, and to make them optional steps for consideration. This is the step at which most protests from bidders occur, so any choices to engage in additional reviews, clarifications, or BAFOs following the ranking of proposals should be documented and reviewed by legal and procurement officials.

13.2.9 Optional Discussions and Demonstrations (Optional)

After scoring the proposals, the evaluation team may determine that the proposals need further clarification and possible revision. Usually this happens because the RFP was not clear in communicating the needs or, all or some of the proposals received were unclear, or cost prohibitive. But is can also be a way of getting more details and on site contact with one or more vendors when the calculated scores are close in range. Demonstrations should be scripted and the same time period allotted for each demonstration. Scoring revision discussions should occur after each vendor's presentation and the scores added to the current vendor's calculated score.

If it clearly is in the best interests of the IJIS team, then discussions with vendors and requests for BAFOs are employed and the following procedures followed. After the proposals have been scored, they may be classified as *acceptable*, *potentially acceptable* (*i.e.* reasonably susceptible of being made acceptable), or *unacceptable*.

Discussions with vendors post scoring should only be conducted with proposals determined as being acceptable or potentially acceptable. After discussions are concluded, it may be necessary to reunite the evaluation team and rescore the proposals.

Discussions are held to facilitate and encourage an adequate number of potential vendors to offer their "best proposal," by amending their original offers, if needed. It is important to note that discussions are not negotiations, and may be face-to-face meetings to obtain clarification (s) of the proposals, or a request for "best price" or a revised proposal.

If discussions are conducted, then all vendors should be accorded fair and equal treatment with respect to any opportunity for discussions and revisions of proposals. Procedures and schedules for conducting discussions should be established. If during discussions there is a need for clarification or change of the RFP, then it shall be amended to incorporate such clarification or change. Auction techniques (revealing one vendor's price to another) and disclosure of any information derived from competing proposals are prohibited by law.

Any oral clarification or change of a proposal must be reduced to writing and recorded in the vendors' proposal file to maintain clarity and objectivity in the process.

13.2.10 Best and Final Offer (Optional)

A time and date for submission of BAFOs should be set, and the criteria equally defined for all vendors who are included in the request. BAFOs should be submitted only once unless there is a written determination before each subsequent round of BAFOs demonstrating that another round is in the best interest of the IJIS system, or it is part of the jurisdiction's procurement process and additional discussions will be conducted or the agency's requirements will be changed. Otherwise, no discussion of, or changes in, the BAFOs should be allowed prior to the announcement of the intent to award. Vendors should also be informed that if they do not submit a notice of withdrawal or another BAFO, their immediate previous offer will be construed as their BAFO and will be used for final selection and contract award.

A BAFO may also include a presentation, if that is appropriate, and the same time frame and process must be given to all vendors from which a BAFO is requested.

13.2.11 Negotiations (Optional) and Intent to Award

Negotiation processes are generally used in an RFP when it has been determined, during the evaluation process, that more than one vendor has submitted an acceptable proposal and negotiations could secure advantageous terms or reduced cost for the state. In other words, there is no clear winner that the jurisdiction seeks to contract. The conditions of use for negotiations require that:

- The RFP and procurement regulations specifically allow for the possibility of negotiation, and describe, with as much specificity as possible, how and when this option would be conducted.
- Negotiation happens only after the proposals have been evaluated and ranked based on the cost and technical evaluation criteria in the RFP as a final step prior to award of a contract.
- Only those vendors, whose proposals or bids are determined to be acceptable, in accordance with criteria for negotiations set forth in the RFP, shall be candidates for negotiations.
- Negotiations will be conducted first with the vendor that has submitted the lowest cost responsive proposal.

- Negotiations will be against the requirements of and evaluation criteria contained in the RFP, and will not materially alter those criteria, the RFP's specifications or SOW requested.
- Auction techniques (revealing one vendor's price to another) and disclosure of information derived from competing proposals is prohibited by law and will not be used.
- Any clarifications or changes resulting from negotiations shall be documented in writing and included in the vendor's proposal file.
- If the parties to negotiations are unable to agree, then the negotiations leader will formally terminate negotiations and may undertake negotiations with the next ranked vendor.
- If negotiations, as provided for, fail to result in a contract, the solicitation may be cancelled and the jurisdiction may negotiate in the best interest of the state with any qualified vendor.

Negotiations are the last step in the procurement process prior to notice of intent to award a contract.

13.2.12 Contract Award

After the completion of all evaluation steps, any optional discussions and or BAFOs and negotiations, if used, the chairperson of the evaluation team will tabulate and submit award recommendation to the IJIS steering committee or the procurement authorities charged with producing all final contract documents and contacting the winning vendor. At this point contract negotiations with the selected vendor will begin in accordance with the jurisdiction' contract processes.

13.3 Evaluation Criteria

Evaluation criteria are guidelines that aid procuring organizations in assessing responses to an RFP. These criteria serve two primary purposes:

1) They enable project participants to standardize the project criteria to be considered during each reviewer's evaluation of a proposal; and,
2) They provide potential responders with an understanding of how proposals will be reviewed, both individually and in comparison with other proposals.

The RFP must state, in general terms, all of the evaluation factors and their relative importance, including price. If points are to be assigned to each criterion, then the totals should be included in the RFP. By including point estimates, the vendors will understand the priority of different categories in the preparation of their RFP response. Evaluation criteria should be stated clearly in the RFP so that they can be understood both by those responding to the RFP and by those evaluating the proposals received in response to it. Ideally, evaluation items should be listed in order of importance, with an introductory statement indicating that the requirements are organized according to priority. One of the most common procurements challenges is the inability of a group of evaluators without sufficient technical skill being called upon to determine how well a proposal meets the technical requirements. Potential evaluators should have the requisite knowledge to address these concerns. If the agency does not have these skills in house, then representatives may need to consider seeking assistance from the IEPD Clearinghouse or the NISS Help Desk. To further aid potential responders and evaluators, the wording around the evaluation criteria should be strong, and should indicate how the criteria listed will be used to evaluate proposals for the purpose of ranking them in relative position based on how fully each proposal meets the requirements of the RFP.

Sample evaluation criteria to consider include:

- Compliance with minimum, mandatory requirements
  - *E.g.* Signed binding offer letter; acknowledgement of addenda; adherence to local, state, and Federal standards; etc.
- Technical capability and solution approach
  - Compliance with the desired technology
- Understanding of project requirements
  - Completion of any requirements checklists
- Project management methodology
- Ability to meet timelines
- Managerial and staff capability (*i.e.* experience and skills)
- Past performance (*i.e.* experience of the firm)
- Key personnel
- Firm references (*i.e.* current and prior IJIS customers)
- Project implementation schedule and plan
- Vendor vs. IJIS team responsibilities and time commitment
- Compliance and conformity to standards
- Conformity to local and state fiscal requirements
- Innovative technologies and alternative implementation strategies
- Support and training services
- Cost

Each evaluation item should be described in adequate detail, with an eye toward assuring that all of the requirements stated within the RFP (including the project scope) are not only included but can be later reviewed on a standardized and more than cursory level once the proposals are received.

Criteria may also include questions or items for consideration for evaluators to use as a guide in determining their raw score assignments, and should be provided as part of the evaluation criteria. In addition, each criterion should carry a pre-assigned weight that defines its relative importance to other criteria within an area. The evaluation team will not have access to the weighting structure but should know how many points each major section contains and should have the key criteria defined for each section. A standard IJIS evaluation process for each question should include the following to evaluate responses to each criterion:

1) Review the appropriate section of the RFP.
2) Locate the section(s) of the proposal where the criterion is addressed.
3) Note the RFP sections referenced in this document for each criterion.
4) Review and evaluate section(s) of the proposal against the scoring criterion provided for evaluation.
5) Evaluate and score the each criterion based on the bidder's overall response to the requirements indicated for the criterion.
   - Some of the criteria may include additional questions that may be considered in the evaluation.

6) Evaluate how well the bidder's responses in the referenced sections correlate with other pertinent sections of the RFP and the overall approach taken to address the technical components of the proposal.

7) Evaluate the criterion based on all information available that pertains to it directly or indirectly, including reference checks.

8) Assign a score to the criterion based on the evaluation of the bidder's capability to meet that criterion.

Proposals cannot be evaluated on criteria not listed in the RFP or with a different level of importance than stated in the RFP. Evaluations based on unstated criteria or bearing more significance than was set out in the RFP could constitute grounds for a grievance by a respondent who adhered to the RFP guidelines but was not awarded a contract or provided the opportunity to advance in the evaluation process.

13.4 Evaluations and Responses

Evaluations are somewhat subjective by nature, and the evaluation of proposals submitted in response to an RFP is no exception; however, the goal is to compare each proposal to the stated requirements in the RFP, as objectively as possible. The best way to accomplish this goal is to develop a weighted evaluation matrix, using the evaluation criteria specified in the RFP. This approach will not only help assure that the proposal evaluation is fair to all responders but it will also provide a uniform tool to aid the evaluation committee in selecting the responder whose proposal best meets the needs of the jurisdiction or agency. The process builds consensus, and the resulting documentation provides a tool for debriefing responders that were not awarded a contract. This documentation also provides support against any potential grievances.

> Please note that any documentation developed during the evaluation process, including the weighted evaluation matrix, notes, and even emails, may be part of the ***public*** record and thus subject to scrutiny during any grievance proceeding by a non-winning responder.

A sample weighted proposal evaluation matrix is included in the toolkit. The tool provides a template that can be used to develop an evaluation spreadsheet customized to a particular RFP. The criteria listed are not intended to be comprehensive but rather to illustrate some examples on which a proposal might be evaluated. In this case, the proposals are for a server acquisition project.

The "Weight (0-5)" column shows the relative importance of each criterion. The spreadsheet user can choose any desired scale. In this case, a scale from zero to five was chosen. The formulas in the "Calculated Weight (%)" column automatically convert the raw weights into percentages.

This model allows for a hierarchy of criteria to be established. At the highest level, in this example, are three criteria, with relative weights of 33.3%, 50.0%, and 16.7%. Each of these three is broken into a lower set of sub-criteria having their own calculated relative weights.

The model user would enter scores for each proposed option on each criterion at the lowest level of the hierarchy. A scoring scale of zero to three was selected for this example. As with the raw weights, the user can utilize any desired scale for scoring; what is important is that an identical scale be used for each option.

Each "Score" is then multiplied by its corresponding "Calculated Weight" to arrive at a "Weighted Score" on each criterion.

The weighted scores are then summed to arrive at an overall score for all the criteria within a given sub-category. For example, Option 1 has earned a score of 2.6 in the sub-category "IT Infrastructure Setup." Option 2 earned a score of 1.8 in this sub-category.

The worksheet is structured to automatically roll up the scores from the sub-categories to the major categories at the topmost level. There is no need for the user to enter any original scores at this higher level. The scores are all derived from the corresponding sub-category scores.

13.4.1 BAFOs (Optional)

The IJIS team may, as an option, or by state or local procurement regulations, be required to either accept the vendor's initial proposal by award of a contract or to enter into discussions with vendors whose proposals are deemed to be reasonably susceptible of being considered for award. After discussion are concluded, a vendor may be allowed to submit a BAFO for consideration.

13.5 Toolkit Tools Summary

TABLE 9. TOOLKIT TOOLS SUMMARY – DEVELOPING RFP EVALUATION CRITERIA

- T = Tools
- RW = Referenced Works

ID #	DESCRIPTION / PUBLICATION INFORMATION
T 13-4-A	Sample Weighted Evaluation Matrix
T 13-5-A	Integrated Justice Information Systems Guidelines for Procurement
RW 13-1	Idaho Procurement Regulations for State Bids
RW 13-2	*Government Evaluation Criteria*, Fairfax County, VA, 2010
RW 13-3	*Preparing and Evaluating A Request for Proposals: How to Select a Vendor Andrew Ness*, NAGDCA / Mercer Investment Consulting, 2006

APPENDICES

The following appendices contain supporting information and/or documents referenced in the report.

14 APPENDIX A: Acronyms and Abbreviations

TABLE 10. ACRONYMS AND ABBREVIATIONS

ACRONYM OR ABBREVIATION	DEFINITION
ANSI	American National Standards Institute
APCO	Association of Public-Safety Communications Officials
APPA	American Probation and Parole Association
ASCA	Association of State and Correctional Administrators
BAFO	Best and Final Offer
BJA	Bureau of Justice Assistance
BJS	Bureau of Justice Statistics
CAD	computer-aided dispatch
CBRN	Chemical, Biological, Radiological and Nuclear (NIEM)
CITA	*Crime Identification Technology Act*
CJCC	Criminal Justice Coordinating Council
CJIS	Criminal Justice Information Sharing
CJIS	Criminal Justice Information Services (FBI)
COPS	Community Oriented Policing Services
COTS	commercial off-the-shelf
CSCA	Conference of State Court Administrators
CTG	Center for Technology in Government (SUNY, Albany)
CYFS	Children, Youth and Family Services
DHS	Department of Homeland Security
DoITT	Department of Information Technology and Telecommunications (New York City)
DOJ	U.S. Department of Justice
ECF	electronic court filing
ESB	enterprise service bus
FAC	federal advisory committee
FACT	Forum on the Advancement of Court Technology
FBI	Federal Bureau of Investigation
FEMA	Federal Emergency Management Agency
FY	Fiscal Year
GDP	Grant Preparedness Directorate
GFIPM	Global Federated Identity and Privilege Management
GIST	Global Information Sharing Toolkit
GITA	Government Information Technology Agency (Arizona)
GJXDM	Global Justice XML Data Model
Global	Global Justice Information Sharing Initiative (DOJ)
GPTF	Global Privacy Technology Framework
GRA	Global Reference Architecture
GSP	Global Standards Package
HHS	Department of Health and Human Services

ACRONYM OR ABBREVIATION	DEFINITION
IAFIS	Integrated Automated Fingerprint Identification System
ICOTS	Interstate Compact for Probation and Parole
IDIQ	Indefinite Delivery, Indefinite Quantity
IEPD	Information Exchange Package Documentation
IIJIS	Illinois Integrated Justice Information System
IJIS	Integrated Justice Information Sharing
IRI	Inmate Release Information (SSP)
ISE	Information Sharing Environment
ISO	International Organization for Standardization
IT	information technology
ITS	State Office of Information Technology Services (New York)
IWG	Industry Working Group (IJIS Institute)
JAG	Justice Assistance Grant
JIEM	Justice Information Exchange Model
JISP	Justice Information Sharing Practitioners
JTC	Joint Technology Committee (NCSC)
LEITSC	Law Enforcement Information Technology Standards Council
MAC	Multiple Award Contracts
MOU	Memorandum of Understanding
NACM	National Association of Court Management
NACo	National Association of Counties
NARIP	NICS Act Record Improvement Program
NASBO	National Association of State Budget Officers
NASCIO	National Association of State Chief Information Officers
NCHIP	National Criminal History Improvement Program
NCIC	National Crime Information Center
NCJP	National Center for Justice Planning
NCJRS	National Criminal Justice Reference Service
NCSC	National Center for State Courts
NDR	Naming and Design Rule (NIEM)
NGA	National Governors Association
NIBRS	National Incident Based Reporting System
NIC	National Institute of Corrections
NICS	National Instant Criminal Background Check System
NIEM	National Information Exchange Model
NIEM-PMO	National Information Exchange Model – Project Management Office
NIEM-UML	National Information Exchange Model – Unified Modeling Language
NIJ	National Institute of Justice
NIST	National Institute of Standards and Technology
Nlets	The International Justice and Public Safety Network
NPD	National Preparedness Directorate
NPG	National Preparedness Goal
NSI	Nationwide SAR Initiative
NSOPW	National Sex Offender Public Website
OASIS	Organization for the Advancement of Structured Information
ODNI	Office of the Director of National Intelligence
OJJDP	Office of Juvenile Justice and Delinquency Prevention

ACRONYM OR ABBREVIATION	DEFINITION
OJP	Office of Justice Programs
OMB	U.S. Office of Management and Budget
OMG	Object Management Group
OVC	Office for Victims of Crime
PART	Program Assessment Rating Tool
PM	Project Manager
PMBOK® Guide	*A Guide to the Project Management Body of Knowledge*
PMI	Project Management Institute
PM-ISE	Program Manager – Information Sharing Environment
PMO	Project Management Office
PMP®	Project Management Professional
RFI	Request For Information
RFP	Request For Proposals
RFQ	Requests For Quotes
RMS	records management systems
ROI	Return On Investment
SAA	State Administering Agency
SAR	Suspicious Activity Reporting
SEARCH	The National Consortium for Justice Information and Statistics
SLA	Service Level Agreement
SLGCP	State and Local Government Coordination and Preparedness (DHS)
SME	Subject Matter Expert
SOA	Service-Oriented Architecture
SSP	Service Specification Packages (GRA)
TA	Technical Assistance
UCADFR	*Unified CAD Functional Requirements*
UCR	Uniform Crime Reporting
UML	Unified Modeling Language (NIEM)
VITA	Virginia Information Technologies Agency
VOCA	*Victims of Crime Act*
XML	eXtensible Markup Language

15 APPENDIX B: Disclaimers

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