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About the State IBR Playbook

This State IBR Playbook was developed by the National Crime Statistics Exchange (NCS-X) Implementation Team with input from the Bureau of Justice Statistics (BJS) and the Federal Bureau of Investigation (FBI). The NCS-X team used the U.S. Digital Services Playbook as the foundation for this resource, customizing it to focus on incident-based crime reporting. Its goal is to help state-level Uniform Crime Reporting (UCR) programs establish capabilities for receiving and reporting incident-based crime data from local law enforcement agencies (LEAs). This Playbook incorporates a number of existing resources and methodologies in the “plays.” The NCS-X Initiative recognizes that states are at different points of readiness for collecting and reporting incident-based data. As such, states should use the plays from the Playbook that are most applicable to their situation.

This Playbook is not intended to be a stand-alone guide for state-level conversion to the National Incident-Based Reporting System (NIBRS). Instead, users should refer to the supporting references and materials listed for each play. More detailed information and guidance about any specific step is available from the NCS-X Implementation Team. Use the Playbook to organize play-by-play strategy at a high level; use the additional resources to help inform specific activities. While the Playbook refers to a “statewide” incident-based reporting (IBR) system, the NCS-X Initiative’s goal and funding focus are to increase the capacity of state IBR programs to enable them to enroll and accept data from the NCS-X sampled agencies in their state.

Your feedback is always welcome, and we are especially interested in hearing from UCR Program managers and staff about resources that we can add to each of the plays. Please contact us by e-mailing ncsx@rti.org.
What Is the National Incident-Based Reporting System?

The FBI’s UCR Program is a nationwide, voluntary reporting program to which more than 18,000 municipal, county, state, university/college, tribal, and federal LEAs report data on crimes known to law enforcement. Created in 1929 by the International Association of Chiefs of Police (IACP), the UCR Program has been administered by the FBI since 1930 to gather information regarding the nature and volume of crime throughout the United States. The primary objective of the UCR Program is to gather reliable information regarding common crimes (often referred to as Index offenses)—murder, rape, robbery, aggravated assault, burglary, larceny/theft, motor vehicle theft, and arson—for use by law enforcement operations and management. Over the years, UCR data have evolved as one of the country’s leading social indicators. Criminologists, researchers, mayors, municipal planners, the media, and the general public rely on UCR data for research and planning purposes as well as for understanding the changing nature of crime and society’s responses.

Besides gathering basic information on the eight Index crimes reported to police, the UCR Program also gathers data on arrests, case clearances, and attacks on and deaths of law enforcement officers. These data are used to produce an annual report, *Crime in the United States*, which has been published since 1930. In nearly every state, UCR data are collected by state UCR Program offices, which collect and process the data from state and local LEAs and then submit the aggregate data to the FBI. State UCR programs typically produce local versions of *Crime in the United States* annually, reporting on crime trends in their respective jurisdictions.

The UCR Program gathers summary data on the eight Index offenses according to established rules, such as the hierarchy rule, which specifies that only the most serious offense in an incident is reported. That is, multiple offenses within an incident are not reported, which may obscure the number of crimes actually reported. This and other limitations of the Summary Reporting System (SRS) of the UCR Program triggered research exploring alternative ways of gathering crime data. Recognizing the need to collect more complete data regarding criminal incidents, in 1989 the FBI proposed the use of a detailed incident-based data collection program, the NIBRS, which would capture information on all offenses occurring within an incident. The NIBRS was also designed to capture detailed information about each incident and every crime, including victim and offender demographics and relationships; date, time, location, and circumstances of the incident; weapons used; nature of victim injuries; property stolen or damaged; and whether an arrest occurred. Unlike the SRS, the NIBRS collects information on all crimes within a jurisdiction without applying a hierarchy rule. Through the NIBRS, LEAs report data on each offense and arrest across 24 offense categories composed of 52 specific crimes, called Group A offenses. NIBRS Group A offenses include all Part I Index crimes, in addition to many other types of offenses not included in Part I Index crimes (although some of these are included in Part II Index crimes from UCR). For each Group A offense that comes to their attention, law enforcement staff collect administrative, offense, property, victim, offender, and arrestee information. The NIBRS also gathers arrest data for an additional 10 Group B offense categories. Group A and Group B offenses are primarily determined on the basis of the seriousness or significance of the offense, frequency or volume of occurrences, and nationwide prevalence.

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Most LEAs generate UCR crime statistics (either summary or incident-based UCR data) as a by-product of internal records management systems, which are designed to support internal agency planning and operations. The agency forwards extracts of the incident report, typically monthly, to the state UCR program, either as summary statistics or as incident-based records. The state UCR program reviews the agency submissions, validates the data according to established edits, compiles the data into state-level reports, and forwards the data to the FBI for national statistical compilations.

The FBI has committed to retiring summary UCR reporting and transitioning to NIBRS-only data collection by January 1, 2021. The IACP, in conjunction with the Major Cities Chiefs Association (MCCA), National Sheriffs’ Association (NSA), and the Major County Sheriffs’ Association (MCSA), released a joint position paper on August 26, 2015, supporting the need to modernize the U.S. crime reporting system and expressing their strong support for the adoption of the NIBRS to replace the SRS within the UCR program. In December 2015, the FBI Criminal Justice Information Services Systems (CJIS) Advisory Policy Board supported the recommendation to transition to a NIBRS-only data collection and recommended that all law enforcement agencies transition to NIBRS by January 2021, with an annual re-evaluation of the transition effort. FBI Director James B. Comey accepted this recommendation on February 9, 2016.

Incident-based crime reporting built on NIBRS standards offers a number of benefits that make it the preferred standard for law enforcement nationwide:

- The NIBRS takes advantage of the information already collected by LEAs using modern records management systems, most of which capture incident-based crime data.
- The NIBRS provides a standardized framework, thereby enabling LEAs across the nation to report detailed crime data in a consistent and accurate manner.
- The NIBRS standard enables more detailed analyses of reported crime and victimization, including the ability to examine crime across jurisdictions using the same comprehensive set of data.
- The NIBRS supports LEAs and reflects their need to develop sophisticated crime analysis capabilities to support tactical deployment and strategic interventions.
- The NIBRS reporting standard produces more robust data, which contributes to the knowledge base for evidence-based research and practices; supports data-driven policing; and facilitates best practices in alignment with Commission on Accreditation for Law Enforcement Agencies, Inc. (CALEA®) accreditation standards.
- Participating in the NIBRS reveals a commitment to transparency and accountability that results in more useful information for better decision making and policy formulation across systems, organizations, jurisdictions, and domains.
What Is the NCS-X and How Does It Relate to the NIBRS?

The BJS and the FBI are partners in the NCS-X Initiative, which is an effort designed to generate nationally representative, incident-based data on crimes reported to LEAs. The goal of the NCS-X is to provide timely and accurate detailed national measures of crime from state and local LEAs. The NCS-X Implementation Team includes representatives from the following organizations: RTI International; the International Association of Chiefs of Police (IACP); the Police Executive Research Forum (PERF); the Integrated Justice Information Systems (IJIS) Institute; and SEARCH, the National Consortium for Justice Information and Statistics. The NCS-X Implementation Team is responsible for coordinating efforts with local law enforcement, state UCR programs, relevant national associations, and the software industry to support transitioning the NCS-X sampled agencies to the NIBRS.

The NCS-X Initiative is leveraging the existing infrastructure of the NIBRS and is expanding participation by combining data from the approximately 6,600 LEAs reporting NIBRS data with data from a scientific sample of 400 additional agencies, including the 72 largest LEAs in the nation. When completed, this initiative will increase our nation’s ability to monitor, respond to, and prevent crime by allowing the NIBRS to produce timely, detailed, and accurate national measures of crime incidents.

The NCS-X Initiative is also supported by other Department of Justice agencies such as the Office for Victims of Crime, as well as by major law enforcement organizations including the IACP, the Major Cities Chiefs Association (MCCA), the Major County Sheriffs’ Association (MCSA), and the National Sheriffs’ Association (NSA). These organizations support the NCS-X and the transition to the NIBRS as the single crime reporting standard for the United States.
Resources

- **Overview of the NIBRS**: [https://www.fbi.gov/about-us/cjis/ucr/nibrs-overview](https://www.fbi.gov/about-us/cjis/ucr/nibrs-overview)
- **BJS’ NCS-X Web Site**: [http://www.bjs.gov/content/ncsx.cfm](http://www.bjs.gov/content/ncsx.cfm)
- **NCS-X Sampled Agencies**: [http://www.bjs.gov/content/pub/pdf/NCSX_sampled_agencies.pdf](http://www.bjs.gov/content/pub/pdf/NCSX_sampled_agencies.pdf)
- **IACP NCS-X Web Site**: [http://www.iacp.org/ncsx](http://www.iacp.org/ncsx)
**Playbook Principles**

The *State IBR Playbook* is intended to articulate best practices to create or enhance an effective and efficient state-level IBR program. The *Playbook* can be used at any point in the life cycle of the state’s IBR program. The plays included in the *State IBR Playbook* were designed with the following principles in mind:

- The NIBRS standard is the basis for making a state IBR system workable.
- Engage stakeholders throughout the program, from planning to implementation and long-term support. Taking an *if-you-build-it, they-will-come* approach often does not work and can be a costly failure that damages the anticipated commitment of others to the project goals. The continuous engagement of stakeholders throughout the entire process will increase the probability of NIBRS success; engaging stakeholders early in the process, and keeping them informed throughout, is critical to the successful implementation of IBR.
- Throughout the life cycle, make decisions using feedback from personnel at all levels of the organization to ensure individual commitment to the goals and objectives of the project.
- It pays to use advanced program and development methodologies that emphasize the importance of actively engaging users in making incremental and iterative progress throughout a project’s life cycle and beyond.
- Almost every play in the life cycle is iterative, which results in a more successful implementation. Converting to the NIBRS is best accomplished by taking large sets of action items and organizing them into smaller, achievable tasks that can be clearly understood and quickly accomplished.

Keep the following in mind when using this *State IBR Playbook*:

- The *Playbook* is designed to be functional from the earliest stages of IBR implementation; organizations having varying levels of experience or at different stages of implementing a state IBR program will all benefit from these plays. For beginning users, consider the plays as a suggested roadmap that incorporate the tried-and-tested processes of experienced personnel. For intermediate and advanced users, the *Playbook* offers an opportunity to improve or augment the current process by incorporating plays that may be missing or incomplete.
- Users will encounter a number of challenges while pursuing a statewide IBR system, including the interaction between government and solution providers during procurement. Program stakeholders should follow their applicable state contracting guidelines when communicating with industry to safeguard against giving unfair advantage to one solution provider over another and to safeguard against imposed contract limitations.
- This document is not written to be a stand-alone user guide for state-level conversion to the NIBRS. Each play is augmented with supporting references and materials. More detailed information and guidance about any specific step can be provided by the NCS-X Implementation Team upon request. Use the *Playbook* to organize play-by-play at a high level and use the additional resources to help inform specific activities.
- When you discover a resource that others can use in their quest for the NIBRS, please share it with us! For the NIBRS to become the single nationwide standard for crime reporting, there must be a collaborative community where all members contribute their experience and artifacts for the benefit of future projects.
Overview of Plays to Plan and Implement Statewide Incident-Based Crime Reporting Systems

Play 01
To Build the Business Case, Ask Stakeholders What They Need from IBR Systems

Play 02
Establish a Governance Structure for Implementing the IBR System

Play 03
Develop the Concept of Operations

Play 04
Identify Critical Sponsors and Gain Their Support

Play 05
Define the State IBR System Requirements for the NIBRS Programs

Play 06
Identify Relevant Standards

Play 07
Put Together the Project Management Strategy

Play 08
Procure Resources

Play 09
Manage Implementation

Play 10
Coordinate State and Local Rollout Plan

Play 11
Roll out the System (Go Live!)

Play 12
Measure and Report the Impact

Play 13
Share Your Experiences

Play 14
Maximize Responsible Data Transparency

Play 15
Make It Scalable and Sustainable
Play 01 – To Build the Business Case, Ask Stakeholders What They Need From IBR Systems

Too often in the past, the implementation of such statewide systems was focused on getting data from practitioners, not delineating the value or business case that this information could provide to them and other stakeholders. The needs of people and their organizational missions—not the constraints of government processes or legacy systems—should inform technical and design decisions.

A state IBR implementation project should build a business case for IBR by exploring and pinpointing the needs of the people who will use and participate in the program and the ways in which a state-level IBR system will help them fulfill their missions. Building the business case should include reviewing and understanding the limitations of the state’s existing summary UCR program and the types of requests being made of stakeholders (e.g., for more detailed crime data or greater accountability in crime reporting). Soliciting this information up front, before the business case for the NIBRS is communicated to local agencies, will help to ensure buy-in and empower local agencies to feel part of a larger statewide process.

Contact the NCS-X Implementation Team to access marketing and educational materials that can be shared with local jurisdictions. These materials offer detailed information that will help build a strong business case for the NIBRS at the local and state levels.

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**Checklist**

- Early in the project, spend time with current and prospective stakeholders to understand what they need from the data.
- Identify state-specific statutory requirements to determine whether additional data elements or requirements will need to be included in your state IBR system.
- Identify the three key levels of stakeholders: (1) the state agency responsible for operating the state IBR system; (2) the contributing LEAs; and (3) the consumers of the data and products produced by the system, which may include elected officials, local LEAs, the media, and advocacy groups.
- Determine people’s goals, needs, and behaviors. The NCS-X Implementation Team has surveys and assessment forms that states can use to better understand the needs and capabilities of local agencies.
- Create user stories so that stakeholders at all levels can describe how an IBR system will help them meet their organization’s goals.
- Develop processes to identify and resolve stakeholders’ conflicts regarding needs.
- Identify the impediments—historical, cultural, and budgetary—that could keep stakeholders from supporting a statewide move to an IBR system.
- Share these findings with the team, the stakeholders, and agency leadership.
Questions to Consider

- Who are or would be the primary stakeholders of a statewide NIBRS program? Why is an IBR system valuable?
- Why is it useful to local and state agencies? Is there a common need among potential users?
- What user needs will an IBR system address? Is there consistency across the various user groups on the user needs? If not, which ones are the most important to the state’s effort for IBR implementation?
- What are the major objections to implementing an IBR system? Can specific strategies be identified for overcoming those objections?
- Does a reporting system already exist, and can it be leveraged for this effort?
- Can the state verify that the state IBR system under development will meet the needs of the different stakeholder groups? Have formal feedback loops been established to track issues and concerns as they are raised in order to ensure that the needs of stakeholder groups are properly understood and met?

Resources

- BJS’ NCS-X Web Site: http://www.bjs.gov/content/ncsx.cfm
- IACP NCS-X Web Site: http://www.iacp.org/ncsx
- IJIS Institute Pre-RFP Toolkit: http://www.ijis.org/?page=PreRFP_Toolkit
- Sample Business Case for Incident-Based Reporting from Minnesota: http://www.theiacp.org/Portals/0/documents/pdfs/NCSX/MN_CRS_Scope_Statement.pdf
Play 02 – Establish a Governance Structure for Implementing the IBR System

Establishing an advisory committee or governance process where all stakeholders are represented in making key policy decisions is the fastest way to get acceptance and support for implementation of a statewide IBR system. A governance body can be created by executive order, legislative action, or a consensus of leadership from sponsors or leading stakeholders.

The formal assignment of responsibility to individuals who are selected to represent the participating organizations is essential to success. Governance bodies need a charter to define the boundaries of their responsibility and authority, as well as the processes for making decisions that affect all participants. Such a body is essential during early policy discussions on issues such as selection of standards, responsibilities for implementation, and other critical decisions shaping the state’s IBR system. The governance body should remain in place and active. With full stakeholder participation, the members of the governance body can help ensure widespread acceptance and engagement of agencies.

Checklist

- The governance body should include representatives of all stakeholder organizations affected by the development of the state’s IBR system (e.g., local police, sheriffs, state police, state UCR program, state administering agency, statistical analysis center, legislature, governor’s office).
- The members assigned to the governance body should be formally appointed to serve by their respective agencies’ executives.
- The governance body should be empowered to make the important decisions that will shape the implementation of the state’s IBR system.
- All members of the governance body should understand the purpose and objectives of the state’s IBR system.
- All meetings should be issue driven, thoroughly documented, and transparent to the rest of the department.
- The governance body should have adequate staff support to accomplish its mission.
- The governance body should develop its own charter and other organizational documents and appropriately disseminate them.
- To expedite decision making, work can be delegated to operational committees.

Questions to Consider

- Who are the stakeholders and who represents them in the governance process?
- Do the stakeholders believe they are represented in the governance process?
☐ Have leadership roles and responsibilities been established?
☐ Have boundaries of authority been defined?
☐ What is the governance plan for the long term?
☐ Is the decision-making process well understood and documented?
☐ Is there a communications plan to explain the governance process to interested external parties?
☐ Do committees understand their responsibilities and deliverables?
☐ What policy implications need to be addressed? How can these implications be delegated and communicated to other stakeholders?

Resources

- **FBI Director James Comey’s Remarks at IACP 2015:**
  [https://www.youtube.com/watch?v=wxNnCpOX90M&feature=youtu.be&t=23m4s](https://www.youtube.com/watch?v=wxNnCpOX90M&feature=youtu.be&t=23m4s)
- **The Good Governance Standard for Public Services** (2004), The Independent Commission on Good Governance in Public Services:
- **Governance Documentation: Article, Bylaws, and Policies** (2012), BoardSource:
- **Governance Guidance for Horizontal Integration of Health and Human Services** (2012), American Public Human Services Association:
  [https://pdfs.semanticscholar.org/6395/a555ea1296cd23933140b02efd277231afa5.pdf](https://pdfs.semanticscholar.org/6395/a555ea1296cd23933140b02efd277231afa5.pdf)
- **Information Sharing Environment Common Profile Framework Description:**
Play 03 – Develop the Concept of Operations

It is important to understand how stakeholders will interact with the state’s IBR program. The concept of operations spells out the data that will be provided to the state about incidents, the format for submitting the data, the protocol to be used for electronic submission, the timeliness of submission, and other factors that describe how the system will operate and what roles participating organizations will play. The state program can provide this information to participating agencies as a roadmap for managing interactions and delivering information. Further guidance and documentation, contained in the NCS-X Sample ConOps document currently under development, should be consulted in conjunction with the information relayed by the state.

Checklist

✓ Document both the as-is model of how crime reporting is currently handled and the to-be model of how the state’s IBR system will enable a more productive exchange of information.
✓ Research and understand the crime-reporting practices of local agencies within the state. Document unique or incompatible reporting practices. Identify agencies that are using best practices for their reporting processes and use them as models.
✓ Identify the agencies and organizations that will be part of the workflow for the collection, analysis, and submission of IBR data to the state and to the FBI’s UCR Program.
✓ Specify the role of each participant in terms of the output that is passed to the next organization in the workflow.
✓ Identify impediments to reporting.
✓ Communicate cooperatively with stakeholders to identify any additional difficulties and obstacles to participating in a state IBR system.
✓ Create a business plan for the IBR system implementation, covering authorities, responsibilities, funding sources, and objectives.
✓ Identify the privacy and safeguarding constraints that must be met by any ultimate implementation of IBR.
✓ Develop metrics that will measure how well the state’s IBR system is meeting business and user needs at each step of the process.
✓ Develop a change management process.

Questions to Consider

☐ Where are user difficulties and obstacles in the transition to an IBR system?
☐ What are the business requirements for an IBR system?
□ What kinds of output reports will be supported by an IBR system?
□ How will the data be collected, edited, and transmitted to the state repository?
□ How and by whom will the NIBRS extract from the state IBR data be transmitted to the FBI?
□ How will the state IBR data be published at the state and local levels?
□ What services will be provided in explaining the state’s IBR data?
□ How will training be delivered from the state to local agencies?
□ What are the technology considerations?
□ What are the funding constraints?
□ How will any potential risk be addressed and managed?
□ How will privacy be protected and security assured?
□ What metrics will best indicate how well the state’s IBR system is working for its users?

Resources

★ MITRE Concept of Operations Description: https://www.mitre.org/publications/systems-engineering-guide/se-lifecycle-building-blocks/concept-development/concept-of-operations


★ N-DEx: Understanding the National Data Exchange (N-DEx) System, Mark A. Marshall (Chief of the Smithfield, Virginia, Police Department; Vice President, IACP): https://www2.fbi.gov/hq/cjisd/ndex/ndex_understanding.htm


★ Information Sharing Environment Common Profile Framework Description: http://project-interoperability.github.io/common-profile/
Play 04 – Identify Critical Sponsors and Gain Their Support

Obtaining support, resources, and funding to implement a statewide IBR program is one of the most significant obstacles to overcome. Identify the key sponsors who support this mission-critical endeavor and are willing to help fund the project. Then collaborate with these key sponsors to develop a funding strategy built on a strong and well-defined business case that demonstrates the mission problem a state IBR system will solve.

Checklist

- Identify the diverse set of user groups and organizations that care about collecting more detailed data on crimes known to law enforcement, including victim services organizations, criminal justice advocacy groups, criminal justice professional organizations, local government and elected officials, and those committed to supporting data-driven policing.
- Gather small groups of stakeholders who care about improving crime reporting.
- Develop a clear cost plan, including interim milestones to be achieved.
- Identify and pursue all potential funding options from state and federal sources. Contact members of the NCS-X Implementation Team to learn about funding options focused on achieving the goals of the NCS-X Initiative.
- Develop a phased funding plan to share with potential sponsors.

Questions to Consider

- Have you accurately identified potential stakeholders and defined the roles they will play in a statewide IBR system?
- Which stakeholders are also potential sponsors? Which stakeholders can serve as resources for identifying potential sponsors?
- What is the start-up cost in terms of budget and resources?
- Have you developed an approach for critical sponsor support that clearly defines the return on investment?
- How will you document critical sponsor support commitments (e.g., memoranda of understanding)?
Resources

* Funding Sources and Programs, Bureau of Justice Assistance—Justice Information Sharing: https://it.ojp.gov/implementation/funding/sources


Play 05 – Define the State IBR System Requirements for the NIBRS Program

The capabilities of a state IBR program should be simple and intuitive, with the goal of enabling contributors and users to create a state repository and associated services. Define the functional capabilities that are necessary to have a full-service incident-based repository. Identify those data needs that reflect state-based requirements as defined by legislation or other mandates.

Play 05 is a critical step, and the considerations outlined below are only some of the details that need to be accounted for. Further guidance and documentation, contained in the NCS-X Sample ConOps document currently under development, should be consulted in conjunction with the information relayed in this play.

Checklist

✔ Identify role-based responsibilities for creating the state’s IBR program.
✔ Define the technology required to implement the state IBR program.
✔ Define the services to be provided and the organizational responsibilities for delivery.
✔ Identify the methods to be used to extract and acquire data from local agencies.
✔ Define staffing levels required to implement the program in your state.

Questions to Consider

☐ Beyond the required FBI NIBRS data elements, what additional data elements, if any, should be collected or are required by law in your state?
☐ What are the approach and functionality required to create an incident-based crime data repository?
☐ What standards will be used to validate the accuracy and completeness of the contributions of data?
☐ How will submissions be validated against the standards?
☐ What are the methods for extracting data to submit to the FBI?
☐ What analysis functions need to be carried out on the data for publication at the state level?
☐ What analytical services will be provided to local agencies that contribute to the repository?
☐ What training and auditing services will be provided by the IBR program?
☐ How will the program monitor and communicate with stakeholders if statutory changes related to IBR are pending or are anticipated in the future?
What primary tasks should each participating agency be trying to accomplish?
What capabilities have to be developed?
What technologies are required to implement the solution?
What specific safeguarding measures will be employed?
If users need help while using the IBR data, how do they go about getting it?

Resources

- **FBI NIBRS Information Exchange Package Documentation (IEPD)**: [https://ucr.fbi.gov/nibrs-xml-iepd-v4.0-final](https://ucr.fbi.gov/nibrs-xml-iepd-v4.0-final)
Play 06 – Identify Relevant Standards

Early in the process, identify the specific state IBR standards that will be used. This is a critical step that requires agreement between LEAs in your state and key stakeholder organizations because it will establish the standard that agencies in your state must implement when transitioning to IBR. Please reference the sample ConOps document, currently under development, for more information about this play.

Begin with the standards identified in the FBI’s NIBRS user manual and technical specifications documentation and determine whether expanding these standards is necessary to respond to state law or policy. The NIBRS standards were created to provide a common approach to reporting criminal incident information by tribal, territorial, local, state, and federal organizations. Standards help define business processes; provide a common framework, platform, and language to exchange information; and assist with security and privacy.

Checklist

✓ Adopt and specify inclusion of all FBI NIBRS user and technical standards for creating your state-specific IBR program.
✓ Whenever possible, seek training opportunities to become more familiar with existing standards and their application.
✓ Define a specific list of standards that may be beyond the FBI requirements that will become the basis of the project (e.g., National Information Exchange Model [NIEM]; security, privacy, and geospatial standards).
✓ Review state statutes to determine whether requirements beyond the federal NIBRS standard are needed.
✓ Plan for mapping state statutes to the corresponding NIBRS offense code. Provide this mapping to stakeholder agencies and plan for long-term maintenance of the statute-mapping documentation.
✓ Ensure that the governance body and participating agencies are committed to the use of standards.

Questions to Consider

☐ What state statutes applicable to crime-reporting requirements might require expanding the FBI NIBRS standard?
☐ What standards will be most helpful in expediting crime reporting in less time for development and implementation?
☐ What standards will be applied to ensure privacy and security in the state’s IBR system?
Have large agencies, or other states, created a model that can be emulated?

Resources

- **FBI NIBRS Information Exchange Package Documentation (IEPD)**: [https://ucr.fbi.gov/nibrs-xml-iepd-v4.0-final](https://ucr.fbi.gov/nibrs-xml-iepd-v4.0-final)
- **FBI Conversion of NIBRS Data to Summary Data**: [https://www2.fbi.gov/ucr/nibrs/manuals/nibrsconversion/index.html](https://www2.fbi.gov/ucr/nibrs/manuals/nibrsconversion/index.html)
- **Global Information Sharing Toolkit**, Bureau of Justice Assistance—Justice Information Sharing: [https://it.ojp.gov/about-gist](https://it.ojp.gov/about-gist)
- **IEPD Clearinghouse**, IEPDs that have been submitted by individuals and organizations who have implemented the Global Justice XML Data Model and the NIEM: [https://it.ojp.gov/implementation/niem-iepd](https://it.ojp.gov/implementation/niem-iepd)
Play 07 – Put Together the Project Management Strategy

Building a statewide IBR program is a team effort. Sponsoring organizations should assemble a team to handle all of the disparate tasks involved. A single project manager (PM), with the authority to make critical decisions on behalf of the governance body, is essential. The PM is ultimately responsible for how well the state NIBRS program meets the needs of its users and therefore should have (1) familiarity with the operational objectives of the state’s IBR system, (2) familiarity with the NIBRS, and (3) training and experience in project management. The PM is responsible for ensuring that required features are developed, the timeline is being managed as expected, and all issue logs and bugs are addressed appropriately.

Other key team members will handle subtasks such as training, implementation, procurement, legal, and technology and other tasks. The build or buy decisions will be made in this play. Plans will be developed for the acquisition of in-house talent or contractor services to ensure that all facets of building the state’s IBR repository and the tools for data transmission and publication are being handled by experienced and knowledgeable team players. Contracting officers must understand how to evaluate third-party technical competency so in-house teams can be paired with contractors who are good at both building and delivering effective IBR capabilities. A procurement strategy in keeping with applicable regulatory provisions is essential. Ways to accelerate and establish agility in procurement actions are applicable at this point.

Checklist

- Identify a PM who has a project management background, technical experience to assess alternatives and weigh tradeoffs in implementation and procurement, and experience with IBR systems, including the NIBRS.
- The PM should have the authority to assign tasks and make decisions about features and technical implementation details on behalf of the stakeholders.
- The PM should have a strong relationship with the contracting officer.
- Establish a mechanism by which the project team communicates with users for feedback when necessary.
- The internal team should include a contracting officer and budget officer, when possible.
- The appropriate privacy, civil liberties, and legal advisor for the department or agency should be on the internal team, when possible.
Questions to Consider

- What organizational changes have been made to ensure the PM has sufficient authority over and support for the project?
- What does it take for the PM to add or remove IBR features and capabilities?
- What technical skills are available in house and what skills are missing?
- What are the options for filling gaps in skills on the team (e.g., acquisitions, training)?
Play 08 – Procure Resources

Development of every state-level IBR project will require procurement of resources for long-term success. Experienced budgeting and contracting officers are necessary for contracting out development activities and acquiring resources or technology. When third parties are contracted to build a service or to supplement an in-house team, a well-defined contract can facilitate good development practices. Outsourced services can include conducting research, prototyping, refining product requirements, evaluating open source alternatives, testing, and certifying the system. Strong procurement support allows the flexibility to consider alternative development and implementation solutions.

Checklist

- Ensure that the budget includes research, discovery, and prototyping activities.
- Secure proven solution providers—those with product certifications or compliance certification.
- Structure the contract to include frequent, incremental deliverables, not milestones that are months apart.
- Structure the contract for provider accountability for deliverables.
- Ensure that the contract gives the state IBR implementation team enough flexibility (e.g., to adjust the priority given to specific features of the system, to adjust the delivery schedule as the project evolves).
- Ensure that the contract encourages evaluation of open-source solutions when technology choices are made.
- Ensure that the contract specifies that solutions are standards based and leverage appropriate information technology, security, geospatial, and data content standards.
- Ensure that the contract specifies that data stored in the system are owned by the state and are reusable and releasable to the public as appropriate and in accordance with the law.
- Ensure that the contract specifies a warranty period during which defects uncovered by the public are addressed by the solution provider at no additional cost.
- Ensure that the contract includes testing, or create an independent testing contract for testing by a different, unrelated provider.
- Ensure that the contract includes a transition-of-services period and transition-out plan.
- Ensure that the contract includes training on how to use and maintain the developed tools and services after implementation of new functionality (e.g., enhancements and upgrades).
- Ensure that supporting resources are available in multiple regions within the state.
- Confirm that all applications are hosted on contemporary and commonly available hardware.
Questions to Consider

- Does the contract include a well-defined service-level agreement that clearly describes the levels of service and penalties for not meeting them?
- What hardware is required?
- How much capacity is available in the proposed solution?
- How long does it take to provision a new resource, like an application server?
- How is the system designed for scalability based on demand?
- How will testing best prove the solution’s ability to meet identified requirements?
- What are the performance metrics or service-level agreements defined in the contract (e.g., deliverable-based milestone, delivery-based payment after each module or capability is delivered)?
- What are the requirements to acquire the necessary resources?
- How much training is required to use the provided product?

Resources

- The Pre-RFP Toolkit: [http://www.ijis.org/?page=PreRFP_Toolkit](http://www.ijis.org/?page=PreRFP_Toolkit)
- TechFAR Handbook: [https://playbook.cio.gov/techfar/](https://playbook.cio.gov/techfar/) (highlights the flexibilities in the Federal Acquisition Regulation that can help agencies implement plays from the Digital Services Playbook – [http://playbook.cio.gov/](http://playbook.cio.gov/) – that would be accomplished with acquisition support, with a particular focus on how to use contractors to support an iterative, customer-driven software development process)
Information Sharing Environment (ISE) Information Interoperability Framework (I²F):
http://ise.gov/sites/default/files/FINAL%20-%20ISE_I2F_v0%205.pdf
Play 09 – Manage Implementation

A milestone-based development plan with short-term measurement of progress and periodic revisiting of objectives related to the endgame is essential to eventual success. Today’s advanced development methodologies call for iterative development and continuous user feedback. Close collaboration among the team developing and building the technology solution and between the team and practitioners at the local law enforcement level can bolster project success. The subtasks associated with state IBR system development should be disaggregated in order to monitor each and explain progress to stakeholders. Consider using methodologies to shorten development and implementation time. An incremental, fast-paced style of software development reduces the risk of failure and puts working software into users’ hands as early as possible, giving the design and development team opportunities to make adjustments based on user feedback.

Checklist

- Create a project plan and work breakdown structure with frequent measurable milestones.
- Hold discussion sessions with stakeholders to help them understand how to eliminate barriers to implementation.
- Review project status frequently and adjust planning as necessary.
- Deploy and test prototypes of systems and processes under user control.
- Communicate progress regularly to stakeholders.

Questions to Consider

- Do you have a structured project plan that includes short-term milestones with defined end points?
- Do you have a project budget that identifies budget allocations to different aspects of the NIBRS system implementation and the funding streams that will provide funding?
- How long is each stage of deployment expected to take before a move to production deployment?
- What is the estimated timeline for production?
- How and how often are you going to share the status among the project team and project sponsors?
- How will application and functional user testing be conducted?
- How do you collect user feedback during development? How is that feedback used to improve the service?
Resources

* Manifesto for Agile Software Development: [http://www.agilemanifesto.org](http://www.agilemanifesto.org)
Play 10 – Coordinate State and Local Rollout Plan

After the development and testing are complete, the technical requirements for the system are in place. It is also important to consider, however, the additional practical and logistical requirements instrumental to a successful transition to the state IBR system. Coordinate with stakeholders (identified in previous plays) at the state and local levels to ensure that they have the content and materials required to effectively communicate the status of the effort to elected officials, the media, and the general public. The state UCR program should coordinate with the FBI UCR Program for NIBRS certification before rollout.

Checklist

- Maintain open communications with all stakeholders to update them on progress on the effort to transition to the state IBR system.
- Remember to message key stakeholders in other areas, including state elected officials, peer state organizations that may be affected, and relevant advocacy groups.
- Ensure that local agencies have received appropriate outreach materials to help them communicate the transition effort to their constituencies.

Questions to Consider

- Who may be most affected by the state IBR transition? Are they aware of the current status of the project?
- Are all involved parties aware of the next steps and what is required of each of them?
- Are stakeholders actively supporting the state IBR system transition effort?
- Have elected officials been briefed on the status of this project?
- Have members of the media been briefed on the status of this project?
- Has the general public been sufficiently engaged about this project and what the transition to a state IBR system means for crime reporting in their local jurisdictions?
Play 11 – Roll out the System (Go Live!)

Ensure that all plays have been conducted and successfully addressed. Review and ensure compliance with all legislative, governance, operational, technical, and programmatic requirements.

Checklist

- State rules for certification of submittals have been defined in accordance with FBI requirements as modified by the state.
- Submitting agencies have tested the generation and submission of sample datasets.
- Local agency staff have been trained in IBR program offense scoring and classification and data validation rules.
- The state IBR data validation program has been tested with feedback to local contributors.
- The process for feedback to local agencies has been tested (including rejection and resubmittal processes).
- The state has tested submission of datasets to the FBI as specified in the NIBRS technical specification.
- The state program provides technical assistance to local agencies during the certification process.
- Training requirements have been identified for for different categories of users and a plan has been developed to provide training during the go-live period and in the future (for staff changes, software upgrades).
- The availability of user help resources has been ensured.
- Processes have been developed for the collection, documentation, and dissemination of performance measures.

Questions to Consider

- What data quality requirements have been defined for acceptable error rates?
- Have contributing agencies been trained in data collection and submission requirements?
- Do contributing agencies have local quality control processes in place?
- Who are the different types of IBR users, both internal and external? Is training available to help them use the IBR system to achieve stated goals?
- Does your state IBR system involve data that are open to the public? If so, how will you communicate this availability to the public and educate them on the use of the interface?
- Is help available for data consumers?
- What tools and mechanisms are in place for collecting feedback?
Play 12 – Measure and Report the Impact

Measuring the impact of a state IBR program is difficult, mainly because the fundamental purpose of the IBR program is to collect data that are primarily useful to other agencies in support of operational missions. It falls upon the state IBR program manager to develop program-level measures of effectiveness and performance objectives for the system, such as the percentage of agencies submitting IBR data, the average rate of failure to pass data validation, and the extent to which output reports generated by the program, among other options, can be useful for shaping meaningful metrics. A communications mechanism should be in place to report back to the stakeholders, sponsors, and the public regarding the program’s success in meeting objectives.

Checklist

✓ Conduct customer satisfaction surveys on reports and products.
✓ Monitor data validation error rates.
✓ Track agency participation and report trends.
✓ Survey the satisfaction of agencies and organizations that use the work products.
✓ Publish metrics internally and externally.
✓ Consider using an independent third party, such as an academic institution, to review metrics and results of the IBR implementation to ensure that the evaluation is accurate, unbiased, and neutral.

Questions to Consider

☐ What are the key metrics for the IBR system?
☐ How have these metrics performed over the life of the program?
☐ Which tools are in place to monitor or measure user behavior?
☐ How do you measure customer satisfaction?
☐ How are you reporting performance to the governance body and agency executives?
☐ Do policies and procedures adequately address safeguarding and privacy issues?
Play 13 – Share Your Experiences

Every statewide IBR system implementation can provide lessons learned and best practices to the greater community of interest. Sharing IBR implementation successes and failures is critical to the nationwide initiative to move toward the NIBRS. Contributing your project information will help others build their state IBR capabilities.

Checklist

✓ Document successes and failures, as both are valuable to your future projects and to IBR projects in the greater community of interest.
✓ Share your experiences, best practices, and documentation as allowable with relevant community of interest organizations (e.g., standards development organizations, industry organizations, government repositories).
✓ Contribute specific information about standard use to the organizations with ownership of the standards used in your IBR system.
✓ Consider compliance certification, which will document the success of your IBR system and contribute to the larger body of knowledge in the process.
✓ Contribute Information Exchange Package Documentation (IEPD) to the IEPD Clearinghouse.
✓ When appropriate, publish online any sharable source code for projects or components.
✓ When appropriate, publicly share your development process and progress.
✓ Consider presenting your findings at conferences and educational summits for appropriate communities of interest.

Questions to Consider

☐ Do I have useful information to share with others?
☐ How can the team get involved in organizations in the community of interest?
☐ Where do I go to share my lessons learned and best practices?
☐ How do we share our success stories with our stakeholder and user communities?
☐ What were the failures? How were they addressed to ensure that corrective actions were put in place in the current system and to establish preventive measures against future failures? What was learned from the failures that is valuable to future projects or the greater community of interest?
Resources

- **Standards Coordinating Council:** [http://www.standardscoordination.org](http://www.standardscoordination.org)
- Relevant Standards Development Organizations
  - **Open Geospatial Consortium Standards:** [http://www.opengeospatial.org/standards](http://www.opengeospatial.org/standards)
  - **Organization for the Advancement of Structured Information Standards (OASIS),** a nonprofit consortium that drives the development, convergence, and adoption of open standards for the global information society: [https://www.oasis-open.org/](https://www.oasis-open.org/)
  - **International Organization for Standardization (ISO):** [http://www.iso.org/iso/home/standards.htm](http://www.iso.org/iso/home/standards.htm)
- **IJIS Institute:** [http://www.ijis.org](http://www.ijis.org)
- **National Information Exchange Model (NIEM):** [http://www.niem.gov](http://www.niem.gov)
- **Global Information Sharing Toolkit,** Bureau of Justice Assistance—Justice Information Sharing: [https://it.ojp.gov/about-gist](https://it.ojp.gov/about-gist)
- **Relevant Practitioner Associations**
  - International Association of Chiefs of Police (IACP)
  - Police Executive Research Forum (PERF)
  - Police Foundation
Play 14 – Maximize Responsible Data Transparency

Consider ways the public might be interested in seeing data so that the work of criminal justice, public safety, and homeland security agencies is transparent and widely available. Building technical solutions and publishing open data simplifies the public’s access to government services and information; allows the public to contribute easily; and enables the use of the data by entrepreneurs, nonprofits, other agencies, and the public.

Checklist

- Explore the presentation of raw data (incident reports, for example), crime and other statistics, and spatial representations through bulk downloads, open standards, and common interoperability profiles.
- Consider participation in open data forums and datasets, such as with https://www.data.gov and various state and local versions of open data portals.
- All public presentations of data must preserve privacy and security policies for the protection of individual civil liberties and the control of access to detailed data.
- Ensure that data are explicitly in the public domain, and that rights are waived globally via an international public domain dedication, such as the Creative Commons Zero waiver.
- Catalog data in the agency’s enterprise data inventory and add any public datasets to the agency’s public data listing.
- Ensure that the rights to all data developed by third parties are releasable and reusable at no cost to the public.

Questions to Consider

- What datasets are made available to the public?
- Do privacy protections follow a privacy plan for publishing data?
- Are other organizations and agencies taking advantage of the open data published?
Play 15 – Make It Scalable and Sustainable

Long-term sustainability of the systems to meet mission-critical needs of the agencies is the project goal. The overall project can be broken into logical phases to ensure that funding can be obtained for a longer period of time. Future IBR system development and technology phases should be scalable to accommodate corrective actions, changes in stakeholder needs, and enhancements. A sustainable funding plan, including resources for training, auditing, and ongoing analysis projects, should be in place to ensure that the state IBR system can meet stakeholder needs.

Checklist

✓ Develop a long-term sustainability plan that accounts for programmatic and technology evolution.
✓ Create a maintenance plan and path for expansion responsive to stakeholder needs.
✓ Secure ongoing fiscal support in an established budget process that defines multiyear support.
✓ Engage the community of interest in the product to ensure that a continual increase in usage is achieved.
✓ Maintain a plan for adding new capabilities and services in response to user needs.

Questions to Consider

☐ Does the budget account for staffing and ongoing support services?
☐ Who is responsible for the day-to-day operation of the state IBR system beyond the initial implementation?
☐ Is staff and contractor support available to respond to stakeholder needs?
☐ Are the requirements defined fully to ensure scalability?
☐ Has the contract with the solution provider addressed scalability, new capabilities, and services development for the IBR system?
Appendix A: *Playbook* Frequently Asked Questions

The following are FAQs about the use and content of the *State IBR Playbook*. Have a question? E-mail ncsx@rti.org.

**What types of agencies can use the *State IBR Playbook***?

The *State IBR Playbook* is designed to support the state UCR program. Although some resources apply to a focused subset, the plays themselves have been designed to assist all agencies.

**What types of people can use the *State IBR Playbook***?

Technical practitioners, implementers, midlevel managers, project managers, executives and high-level leadership, representatives from industry, and stakeholders of developed systems can all use the information in this *Playbook*.

**Do the plays in the *State IBR Playbook* have to be used in order?**

The simple answer is no. The first 13 plays do follow the general order of occurrence, but Plays 14 and 15 are pervasive across the entire effort.

The *Playbook* is intended to allow users at any point in a process to pick up the document, identify where they are in the process, and then move forward. Here are two very important things to consider:

1. If you start at a point past Play 01, the plays before the point of entry still have relevance to the development effort. Don’t just skip over prior plays completely. Evaluate and determine whether a play, or some of its elements, can be used to improve the process.
2. The *Playbook* is iterative. A play may need to be revisited after progress is made in the development effort. By having a phased development approach, past plays may be reconsidered as each milestone is met.

**Are all the plays in the *State IBR Playbook* mandatory?**

No, the *Playbook* is meant to be flexible for many types of projects, people, and agencies. There is helpful advice in every play that may be useful to consider, even in skipped plays.

Although the plays are not mandatory, skipping plays is not recommended. The *Playbook* was designed for maximum success, and plays are interconnected in subtle ways. Skipping one might negatively affect another. For example, choosing to skip a play that recommends establishing a governance group for the project could hinder the success of other plays. The *Playbook* was designed with success in mind, and each play moves the project toward success.

**What is the benefit of engaging end users in the development of an IBR system?**

The software and systems development industry, as a whole, has realized the benefits of engaging users and involving them in decision making throughout the development process. This methodology is in contrast to traditional systems development approaches (i.e., waterfall). Engaging stakeholders in the development life cycle can expedite progress and increase the likelihood of success and utility of the final product for the user community. Experience has proven that routine user engagement, provided early and often, can eliminate do-overs, saving both time and money.
We can’t get a key stakeholder to engage with the team. Can we move forward?

Yes. Progress toward creating an IBR system should not be constrained by any single organization or stakeholder group. The system’s design and implementation should benefit all stakeholders. Stakeholders who are reluctant to engage early in the project may be swayed when progress and participation are demonstrated and communicated.

Who should evaluate the results of the IBR program?

It is best to engage an independent research organization, such as an academic institution, to ensure that the results of the IBR system development effort are accurate and unbiased.

Are there ways to overcome the procurement obstacles to implementing an IBR system?

Yes; identifying and evaluating alternative procurement options can improve our ability to implement systems in a timely and cost-efficient way. Play 08 (procurement) has been designed with this in mind and can help with this challenge in the Checklist, Questions to Consider, and Resources sections.

At the federal level, the Office of Management and Budget has attempted to dispel common myths regarding interactions between government and industry in a “myth-busting” memo. Here is the link, as listed in Play 08 (Procurement):


A dire lack of funding threatens our entire project. What can we do?

Competing priorities and tightening budgets are a continual concern for any project. Play 04 (Identify Critical Sponsors and Gain Their Support) provides advice on structuring support for the development of IBR systems. The following strategies may help secure support:

- Build a solid case for moving to an IBR data collection for NIBRS reporting. With IBR data, agencies can track offense trends, which managers can use more effectively in defining crime prevention and response strategies.

- Align your mission to organizational priorities, whether those of the governing body or of other agencies in your state. Show potential supporters that information generated by incident-based crime reporting supports the needs of many constituencies, provides a better understanding of crime and criminal behavior, and empirically supports budget requests that aid in the evaluation of tactical and strategic programs and practices.

- Consider combining grants in various programs to fund system integration.

- Multiagency and regional information sharing or consortiums can solicit funding across resource streams. Broadening the project’s scope and working together can generate more interest and support. Consider aligning your project with those of others to take advantage of increased interest.
- Adopting national standards and considering innovative technology solutions can improve the probability of securing funding and can leverage efficiencies in implementation.

- Choose your team members wisely, ensuring that they have the correct skill set to achieve project success. Identify a champion for the effort who can serve as the project spokesperson. Team members who can advocate for and deliver project results complement any project team.

**How can I suggest changes to the plays based on my experiences?**

Provide feedback regarding the *Playbook*, including suggestions for changes to the content and recommended resources, to ncsx@rti.org.

Feedback on your experiences using the *Playbook* in your projects is also encouraged. Tell your story by sending it to ncsx@rti.org.