BETTER DATA FOR EVOLVING CRIME TRENDS

2012–2022 NIBRS Transition

BY

Andrea Gardner, NCS-X Program Manager, Bureau of Justice Statistics; Mark Pope, Director, Policing Research Program, RTI International; and Erica L. Smith, Unit Chief, Bureau of Justice Statistics FOR 90 YEARS, THE PRIMARY SOURCE OF INFORMATION ON CRIMES RECORDED BY U.S. LAW ENFORCEMENT WAS THE SUMMARY REPORTING SYSTEM (SRS) OF THE FBI'S UNIFORM CRIME REPORTING (UCR) PROGRAM. A central strength of the SRS was its participation rate: nearly all law enforcement agencies in the United States submitted data annually. However, the SRS did not collect basic information on the circumstances surrounding crime incidents, such as details on victims, offenders, and other incident characteristics. Recognizing the need for detailed data to address the changing complexities of crime over time, the Bureau of Justice Statistics (BJS), the principal statistical agency in the U.S. Department of Justice, collaborated with

the FBI on the *Blueprint for the Future of* the Uniform Crime Reporting Program. This was the springboard from which the FBI's National Incident-Based Reporting System (NIBRS) launched in the late 1980s.

Like the SRS, NIBRS enables crime data to be standardized and compared across agencies and states. Unlike the SRS, NIBRS captures detailed information on each crime incident—and each offense that occurred during the incident—that law enforcement reports to the FBI. That includes a broader set of offenses that more accurately reflect the nature of crime in communities, including victim demographics, known offender demographics, relationships between victims and offenders, arrestee information,



and property or drugs seized during an incident. NIBRS also has added data quality and consistency checks to improve the data being collected. NIBRS makes it possible for U.S. crime statistics to move beyond the SRS's basic offense counts, as well as enabling agencies to develop strategic and pragmatic evidence-based crime interventions.

Despite its benefits, law enforcement's adoption of NIBRS was historically slow and uneven across the United States, particularly among large police agencies. The most common reason for this has been a lack of funding or staff to update the agency's records

management system (RMS) to be NIBRS compliant. In 2012, about 25 years after its launch, a total of 32 state UCR Programs were certified to collect and report NIBRS data from their local law enforcement agencies. Of these, 15 states gathered NIBRS-compliant data from all their agencies, and 17 gathered a mix of NIBRS data and SRS data. As a result, about a third (6,100) of the roughly 18,000 UCR-eligible police agencies were reporting crime data to the system in 2012, which covered about 30 percent of the U.S. population. The distribution of NIBRS reporters, combined with low coverage rates, precluded NIBRS from serving as the U.S. national standard for measuring crime.

NEW APPROACHES, NEW COLLABORATIONS

BJS funded the National Crime Statistics Exchange (NCS-X) Initiative in late 2012 to study whether it was feasible to produce U.S.-wide estimates of reported crime that included offense details and characteristics. NIBRS captured the crime elements needed to make those estimates; however, the challenge was in getting NIBRS data to be national in scope. Initial efforts showed that NIBRS data could be used to generate national estimates of reported crime using a sample-based strategy for expanding the number of reporting agencies. BJS identified a scientifically selected set of 400 additional law enforcement agencies (NCS-X agencies) to recruit for the NIBRS transition.

In 2013, BJS and the FBI partnered to implement NCS-X, which had two main goals: (1) expanding NIBRS coverage to include the 400 NCS-X agencies and (2) developing the statistical methodology to describe the details and context of crime across the United States. This partnership leveraged the FBI's existing NIBRS program infrastructure, allowing BJS and the FBI to promote NIBRS data collection among state UCR Programs and recruit the sample of 400 NCS-X agencies needed to generate national estimates of crime, including all the United States' largest jurisdictions not yet reporting to NIBRS.

BJS and the FBI created a steering committee to guide the NCS-X recruitment and estimation efforts. The agencies also provided financial support to state and local agencies to ensure they had the resources needed to transition to NIBRS-compliant, incident-based reporting. NCS-X funds are governed through a memorandum of agreement



between BJS and the FBI, with BJS overseeing the funds' distribution and providing the technical assistance required to transition to NIBRS.

Importantly, the NIBRS transition earned support from the law enforcement community, including the International Association of Chiefs of Police (IACP), the Major Cities Chiefs Association, the National Sheriffs' Association, and the Major County Sheriffs' Association. With the NCS-X Initiative underway, the FBI announced in 2015 that NIBRS would replace the SRS as the U.S. national standard for data on reported crime starting January 1, 2021. This meant the FBI would no longer accept SRS data and propelled the transition to NIBRS, which dramatically increased state and local agencies' need for NCS-X funds and technical assistance.

To aid the transition, BJS established the NCS-X Implementation Team (NCS-X Team). The NCS-X Team consisted of BJS and the FBI, as well as a team of contractors with expertise in law enforcement administration and operations, implementation of technical solutions for public safety organizations, and data management and analysis. The contract team was led by RTI International and included the Integrated Justice Information

Systems Institute, SEARCH – the National Consortium for Justice Information and Statistics, the IACP, the Police Executive Research Forum, and the Association of State Uniform Crime Reporting Programs. The NCS-X Team worked directly with state UCR Program managers to expand state-level capacity to accept and transmit NIBRS data and to ensure local agencies' submissions complied with state specifications.

The NCS-X Team assisted NCS-X agencies by assessing their NIBRS readiness, examining agency barriers to the transition, and developing agency-specific plans for transitioning to NIBRS. The team also facilitated ongoing dialogue between law enforcement agencies, state UCR Programs, the law enforcement technology industry, and other key stakeholders to ensure that all voices were heard and a consistent message about the transition was communicated. The NCS-X Team produced resources and other materials for state UCR Programs and for state and local law enforcement agencies to support expanded NIBRS reporting and analysis.

EXPANDING NIBRS

The transition to NIBRS required substantial changes in organizational cultures, business processes, and technical capabilities within law enforcement agencies. Although many of them were already collecting incident-level details for tactical and operational purposes—including victim and offender demographics and relationships, the location of the incident, weapon use, and more—these data were not standardized across agencies or shared for statistical purposes.

The NCS-X Team began reaching out to agencies in late 2013 to familiarize them with the initiative and learn about their operations and incident-based reporting capabilities. The team was tasked with identifying low-cost, efficient, and minimally burdensome ways for state and local agencies to adapt their data repositories and RMS to comply with state and federal incident-based reporting standards. BJS and the FBI prioritized engagement with the law enforcement community, professional organizations, and RMS service providers during the NCS-X Initiative to gather the support needed for its success. Outreach focused on recruiting state and local agencies for the NIBRS transition, identifying transition barriers, developing incentives and resources to encourage agency participation, and generating cost and feasibility guidelines for transitioning.

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To promote NIBRS among the largest U.S. law enforcement agencies, the NCS-X Team completed on-site readiness assessments and did pilot studies with the Chicago, Illinois; Dallas, Texas; and Montgomery County, Maryland, police departments. The team closely examined each agency's ability to collect NIBRS-compliant data and identified their anticipated transition costs. Readiness assessments also examined agency technical capabilities by reviewing RMS data elements, system architecture edit checks, and data extraction, as well as business processes and workflows. Findings were summarized in a report to each agency. While on-site, the NCS-X Team briefed the agency's leadership about the assessment and the proposed transition plans. Ultimately, more than 70 in-person assessments were conducted for agencies through the NCS-X Initiative. In addition, the NCS-X Team conducted virtual assessments for agencies applying for NIBRS transition funds that were unable to schedule in-person sessions.

In 2017, the transition to NIBRS was promoted through a series of FBIhosted three-day regional trainings. These trainings, titled NIBRS A to Z, were held in five regions across the United States, with hundreds of law enforcement officials attending each training. The sessions covered a wide range of NIBRS-related topics, including NIBRS data coding for officers and records management staff, a step-bystep guide for estimating the costs of transitioning, tips for developing training plans, compliance with CJIS security policy, and UCR quality assurance and audit procedures.

FUNDING & TECHNICAL ASSISTANCE

With the FBI's support, BJS made grants to 126 state UCR Programs and local law enforcement agencies to help pay for costs associated with reporting NIBRS-compliant crime data. Eligible uses of funds included upgrading software, hardware, and equipment to directly support or enhance an agency's technical capacity for collecting and processing data and submitting those data to the state UCR Program or to the FBI. Agencies were also able

to use funds for contract support to get technical assistance for critical agency personnel on how to collect, input, and process incident-based data. Applications for funding were peerreviewed by BJS and the FBI. Awards were administered by BJS through cooperative agreements that allowed the NCS-X Team to work closely with and guide award recipients. From fiscal year (FY) 2015 to FY 2021, more than \$120 million was awarded to help states and local agencies with their NIBRS transitions.

Support for State Programs

In total, 33 state UCR Programs received NCS-X funds to help with the states' NIBRS transition efforts. Many states had to first develop the incident-based reporting standards that would govern local agency data submissions, then incorporate those standards into a NIBRS-compliant data repository. They also needed to ensure that the transition of local agency data complied with state crime data standards. To that end, the NCS-X Team helped states develop transition communications plans that clearly specified the state data requirements and processes for submitting data to the state crime data repository.

The NCS-X Team also collaborated with State Administering Agencies, which are agencies responsible for distributing funds from Department of Justice grants in their state. These agencies applied for NCS-X funds on behalf of eligible law enforcement agencies and "passed" funds through to them via subawards. This type of award process streamlined oversight of transitions across agencies with the same RMS vendor, resulting in reduced technical costs and time saved for participating agencies. BJS was able to make a small number of awards this way, which helped more than 100 NCS-X agencies transition to NIBRS.

Further, the NCS-X Team promoted and funded several rapid deployment strategies to facilitate statewide transitions to NIBRS. This entailed states and RMS service providers working together to make RMS software compliant with the state-specific incident-based reporting standards, with the agreement

that the RMS service providers would then deliver the software to their law enforcement agency clients throughout the state.

Support for Local Law Enforcement Agencies

NCS-X made 96 direct awards to local law enforcement agencies from FY 2016 to FY 2019. With expertise in law enforcement operations, technology implementation, data-sharing standards, and data analytics, the NCS-X Team also helped local agencies plan their transitions and coordinate with RMS providers and state UCR Programs to ensure state and federal incident-based reporting standards were met. Additionally, the team shared successful practices for training people on incident-based reporting and deploying new RMS software, which proved critical for the many local agencies that needed such assistance during the COVID-19 pandemic.

This collaborative work led to a strong network in which knowledge and advice were shared among the NCS-X Team, agencies that had already transitioned to NIBRS, and agencies in the process of transitioning. BJS and the FBI also regularly sought input from state and local agencies to understand emerging needs and community concerns. This included BJS's 2019 workshop The Nation's Move to NIBRS: Formulating the Future of Crime Data in Policing, which included police practitioners, researchers, and crime and data analysts among its participants. They discussed ways to leverage NIBRS data to improve policing, community trust, and more.

The NCS-X Team also produced technical resources for agencies to use, including outreach materials to build support for their NIBRS transitions, technical documents on how to transition to NIBRS and use NIBRS data, and data and technology tools for agencies and RMS service providers. Examples of online resources include "Talking About NIBRS: Messaging About Crime Data to Stakeholders," "Using NIBRS to Reduce Crime," and "Will NIBRS Reporting Increase Crime Statistics?" In addition, the NCS-X Team produced a series of videos about the benefits

of NIBRS, including "Enabling Operational Advantages," "Informing Tactical Responses," and "Managing Change."

NCS-X Team member SEARCH also created a set of online tools to help state UCR Programs, agencies, and RMS providers test data while transitioning to NIBRS. These tools allow states and agencies to test NIBRS records for submission or validation errors, so their data meet NIBRS certification requirements. The tools can also convert NIBRS data to SRS data, allowing agencies and states to compare their NIBRS data to their own agencies' historical SRS-based crime counts. Moving forward, the FBI has also indicated it will support agencies and states in their efforts to convert NIBRS to SRS data, to allow the continued trending of the SRS crime counts over time.

NIBRS SUCCESSES

In recent years, there have been substantial gains in NIBRS coverage, both in the number of local agencies (e.g., police departments, sheriffs' offices, tribal law enforcement, and special jurisdiction agencies) that contribute data and in the share of U.S. residents they serve. Leadership at the state level has been critical to the NIBRS transition. As of June 2022, all 50 state UCR Programs were certified by the FBI to report NIBRS data (see Table 1).

The expanded capacity of states to accept and transmit NIBRS data has paved the way for local agencies to adopt incident-based reporting practices. The number of law enforcement agencies reporting NIBRS data doubled between 2012 and 2022, from about 6,100 to 12,500 agencies (see Table 2). As a result, two-thirds (66 percent) of U.S. residents reside in jurisdictions served by NIBRS participants, up from about 30 percent in 2012.

Agency Coverage

More than half (28) of state UCR Programs accepted NIBRS-compliant data from at least 90 percent of their local agencies by the end of 2021, with 15 of those programs achieving 100 percent reporting (see Map 1). Agencies of all types and sizes have transitioned to NIBRS in recent years, with notable gains seen across large law enforcement agencies (those employing 750 or more full-time sworn officers) and tribal agencies. Among the United States' 115 large law enforcement agencies, NIBRS reporting increased from 27 agencies in 2017 to 62 agencies in 2021. Using the FBI's web-based NIBRS Collection Application, transitions to incident-based reporting also increased significantly in tribal jurisdictions, where 87 percent of the 207 tribal agencies reported NIBRS data in 2021 compared to 10 percent in 2017.

Population Coverage

Nearly half of states (24) had 100 percent of their residents covered by NIBRS participating agencies by the end of 2021 (see Map 2). The majority of states (37) had NIBRS-compliant crime data for 75 percent or more of their residents. The largest gaps in population coverage are found in the two states that

TABLE 1. STATE UCR PROGRAMS BY YEAR OF NIBRS CERTIFICATION

NIBRS Certification Year	State UCR Program
2022	California, Florida
2021	Alaska, Illinois, Maryland, New Jersey, New Mexico
2020	Alabama, Mississippi, Nevada, New York
2019	Hawaii, North Carolina
2018	Georgia, Wyoming
Prior to 2018	Arizona, Arkansas, Colorado, Connecticut, Delaware, Idaho, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Massachusetts, Michigan, Minnesota, Missouri, Montana, Nebraska, New Hampshire, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin

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were certified to report NIBRS data in early 2022—California and Florida. Additionally, population coverage is less than 20 percent in New York (19 percent) and Pennsylvania (17 percent).

The substantial increase in NIBRS population coverage was driven by the number of large jurisdictions that transitioned. In June 2022, 62 cities with a population of 250,000 or more residents were served by a NIBRS-certified agency, covering about 37.4 million people in total (see Map 3). In comparison, 18 cities with 250,000 or more residents were served by a NIBRS-certified agency in 2012, which covered about 9.4 million people.

Nine of the largest law enforcement jurisdictions in the United States, serving more than 19.7 million residents, have yet to transition to NIBRS. Those nine jurisdictions are Los Angeles, Los Angeles County, and San Jose in California; Miami-Dade County, Hillsborough County, and Orange County in Florida; and New York City, Nassau County, and Suffolk County in New York. The NCS-X Team continues to work with these and other law enforcement agencies to improve NIBRS coverage.

MORE DETAILED CRIME ESTIMATES

Generating U.S.-wide estimates of crime based on NIBRS data was bolstered by the large number of successful transitions across the states and among local agencies. With the influx of new reporting agencies, crime

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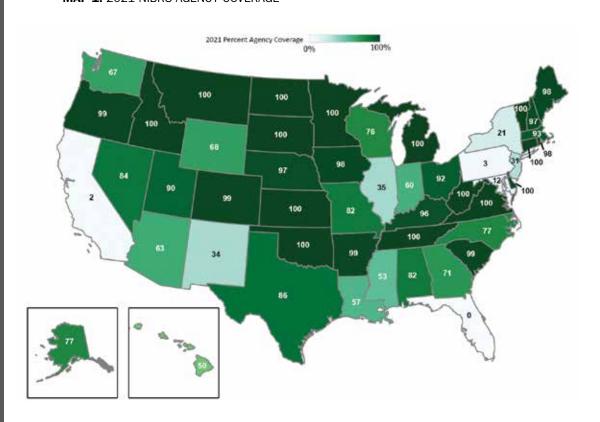
estimates can be based on data provided from all NIBRS reporting agencies, rather than relying primarily on the more limited subset of 400 NCS-X agencies. The statistical methodology developed by BJS and the FBI is designed to

- Estimate for non-reporting agencies agencies that did not report to NIBRS at all and agencies that reported some data but not for the entire year
- Account for missing or unknown information within a reported incident (where appropriate)—incident information that was not reported or that was categorized as "unknown"
- Express statistical measures of confidence in each estimate—a measure of how well the estimated value of an indicator represents the population value
- Assess the reliability of estimates—when uncertainty in an estimate is deemed too high, the estimate may be withheld from publication

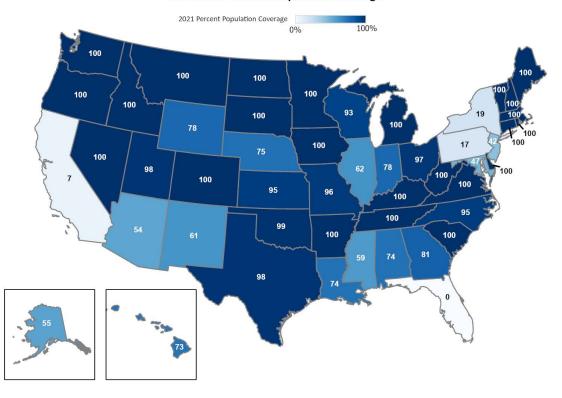
TABLE 2. NIBRS IMPLEMENTATION IN 2012 AND AS OF JUNE 2022

In 2012	As of June 2022
6,115 agencies certified for NIBRS	Approximately 12,500 agencies certified for NIBRS
32 states certified for NIBRS	50 states certified for NIBRS
30% of the U.S. population covered by NIBRS	66% of the U.S. population covered by NIBRS
18 NIBRS-certified agencies serving cities with a population of 250,000 or more, covering a total population of 9,407,350	62 NIBRS-certified agencies serving cities with a population of 250,000 or more, covering a total population of 37,351,619

MAP 1: 2021 NIBRS AGENCY COVERAGE



MAP 2: 2021 NIBRS POPULATION COVERAGE
2021 NIBRS Percent Population Coverage



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MAP 3. NIBRS STATUS OF U.S. CITIES WITH A POPULATION OF 250,000 OR MORE PERSONS



When the FBI publishes crime statistics for 2021, those statistics will be based solely on data submitted by state and local law enforcement agencies to NIBRS. Regardless of changes to the statistical methodology or the underlying data source, the 2021 crime estimates will continue to serve as a reliable and accurate source of information about crime known to U.S. law enforcement.

THE ROAD AHEAD

Going forward, the NCS-X Team will prioritize efforts to transition large agencies and agencies in states with low rates of NIBRS population coverage. Additionally, BJS and the FBI plan to publish more details on transitioning to NIBRS, the key crime indicators being measured, and the methodology for making U.S.-wide crime estimates.

The FBI will also issue the first release of NIBRS-based findings on crime. The first release will cover 2021 and include details on victim characteristics and injuries; victim-offender relationships; weapon use during crimes; crime location and time of day; and incidents involving multiple offenses, victims, or offenders. More tips and tools to support persons, agencies, and organizations interested in using NIBRS data are in the pipeline, too.

There has been solid progress on getting NIBRS to where it will provide nuanced, nationally representative U.S. crime statistics. BJS and the FBI will continue efforts to improve and enhance NIBRS to provide law enforcement, policy makers, and the public with the information necessary to support crime reduction and public safety initiatives and interventions. O

IACP RESOURCES

- National Crime Statistics Exchange (NCS-X)
- Using NIBRS Data to Reduce Crime theIACP.org
- "Leveraging NIBRS to Better Understand Sexual Violence"
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