New Directions in National Incident-Based Reporting System (NIBRS)/Incident-Based Research

2022 SEARCH Conference
July 21, 2022

FBI Uniform Crime Reporting (UCR) Program
FBI Programs Research and Standard Unit (PRSU)
Department of Justice Bureau of Justice Statistics (BJS)
Analytical Benefits of NIBRS
Relationship Between Policing and UCR Data

• The data collected in the Summary Reporting System (SRS) reflects policing in the early 20th century
  • Reactive
  • Primarily interested in demand and response
• NIBRS data is better suited to meet the demands of 21st century policing
  • Proactive
  • Data-driven
Reporting Comparison

NIBRS
• Incident report with linked information
• Three crime classification: Persons, Property, Society
• 24 offense categories
• 52 offenses
• 10 arrest-only categories
• No Hierarchy Rule

SRS
• 12 separate reports
• Two crime classifications: Persons, Property
• 10 offenses
• 21 arrest-only categories
• Hierarchy Rule
Reporting Comparison

NIBRS
- Additional details
  - Weapon
  - Date/time
  - Location
  - Relationships
  - Bias motivation
  - Type of criminal activity
  - Gang involvement
  - Offenders suspected of using drugs/alcohol

SRS
- Monetary values of property stolen/recovered
- Supplemental data only collected for homicides:
  - Weapon
  - Relationship Victim to Offender
  - Circumstance
  - Victim/Offender Age, Sex, Race
Relationship between Crime Analysis and Incident-based Systems

Local
- Operational and tactical questions
- Good records management is vital

State
- Mainly operational and strategic questions
- Freedom to design own system to meet own analytical goals

Federal
- Strategic questions (broad view of crime in United States)
- UCR and NIBRS are suited for this level
Utility of NIBRS Data

• Narrow the field of potential leads
• Benchmarking
• Allocate Resources
• Plan for future resource needs
• Enact effective policies
• Educate the public

Source: “Fundamentals of Crime Analysis” in Exploring Crime Analysis, Christopher W. Bruce
Establishing New Methods for Estimating Crime in the U.S.

The Transition to Incident-Based Crime Reporting through NIBRS

July 21, 2022
National Crime Statistics Exchange (NCS-X) and the NIBRS Transition

The National Crime Statistics Exchange (NCS-X) supported the NIBRS transition by:

1. Creating a partnership between BJS and the FBI for funding, technical assistance, training, and other resources

2. Supporting state UCR programs and local law enforcement agencies to transition to NIBRS reporting – invested approximately $120 million in funding since FY2015

3. Developing methodologies and procedures by which national, regional, and state level crime estimates can be produced
   • BJS-funded National NIBRS Estimation Project (NNEP) – established to develop, test, and implement procedures on which national estimates of crime using NIBRS data will be based
   • NNEP is a full partnership with the FBI – we meet approximately 4 times a month, on various aspects of the project, including about communications planning and project documentation
National NIBRS Estimation System Objectives

**Primary Objectives**

- Determine set of key NIBRS indicators for which accurate and reliable estimates can be produced.
- Develop population served estimates which can be split by key demographic characteristics such as age, sex and race.
- Use the NCS-X sample to produce national estimates.

**Secondary Objectives**

- Use NCS-X sample to produce subnational (e.g., state-level) estimates.
- Develop population served estimates for agencies traditionally classified as zero population agencies.
Key Indicators for Estimation

**Key indicator**
Critical measures prioritized for estimation

**Why these key indicators?**
Identified with stakeholder input, including FBI, BJS, law enforcement executives, criminal justice and victim services practitioners, and academics

**Can the indicators change?**
Yes! New indicators can be added, and existing measures can be modified, based on changes in data quality and reporting coverage, among other things.
<table>
<thead>
<tr>
<th>Key Indicators by Offense Type</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Crimes Against Persons</strong></td>
</tr>
<tr>
<td>• Aggravated assault*</td>
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<tr>
<td>• Simple assault</td>
</tr>
<tr>
<td>• Intimidation</td>
</tr>
<tr>
<td>• Murder &amp; Nonnegligent Manslaughter*</td>
</tr>
<tr>
<td>• Negligent Manslaughter</td>
</tr>
<tr>
<td>• Kidnapping and abduction</td>
</tr>
<tr>
<td>• Sex trafficking*</td>
</tr>
<tr>
<td>• Labor trafficking*</td>
</tr>
<tr>
<td>• Rape*</td>
</tr>
<tr>
<td>• Fondling</td>
</tr>
<tr>
<td>• Nonforcible sex offenses</td>
</tr>
<tr>
<td><strong>Crimes Against Property</strong></td>
</tr>
<tr>
<td>• Arson*</td>
</tr>
<tr>
<td>• Bribery</td>
</tr>
<tr>
<td>• Burglary*</td>
</tr>
<tr>
<td>• Counterfeiting/forgery</td>
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<tr>
<td>• Destruction, damage, and vandalism</td>
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<tr>
<td>• Embezzlement</td>
</tr>
<tr>
<td>• Extortion/blackmail</td>
</tr>
<tr>
<td>• Fraud offenses</td>
</tr>
<tr>
<td>• Larceny/theft offenses*</td>
</tr>
<tr>
<td>• Motor vehicle theft*</td>
</tr>
<tr>
<td>• Robbery*</td>
</tr>
<tr>
<td>• Stolen property offenses</td>
</tr>
<tr>
<td><strong>Crimes Against Society</strong></td>
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<tr>
<td>• Animal cruelty</td>
</tr>
<tr>
<td>• Drug/narcotic offenses</td>
</tr>
<tr>
<td>• Gambling offenses</td>
</tr>
<tr>
<td>• Prostitution/obscene material</td>
</tr>
<tr>
<td>• Prostitution offenses</td>
</tr>
<tr>
<td>• Weapon law violations</td>
</tr>
</tbody>
</table>

*Indicates Part 1 offenses reported through summary UCR.
### Additional indicators

#### Characteristics of Individuals
- Victim age, sex, race
- Offender age, sex, race
- Juvenile disposition
- Multiple arrest indicator
- Arrestee armed (yes/no)
- Victim-offender relationship

#### Characteristics of Incidents
- Multiple offenders
- Multiple offense incident
- Population group (cities and counties combined by population size)
- Agency indicator
- Property loss
- Bias motivation type
- Location type
- Time of day
- Weapon involved
- Injury
- Cleared through arrest
- Exceptional clearance
- Gang involvement
- Officer assault type
NIBRS Coverage

Agencies reporting in 2016

2016 NIBRS Agency Coverage

0% 100%

BJS
Bureau of Justice Statistics
NIBRS Coverage

Agencies reporting in 2021
NIBRS Coverage

Population covered in 2016

2016 NIBRS Population Coverage

Population covered in 2016

0% 100%

86% 99%

92% 100%

89% 100%

78% 99%

95% 100%

81% 100%

Bureau of Justice Statistics
NIBRS Coverage

Population covered in 2021
Coverage rate and why it matters

- The lower the coverage rate, the greater the uncertainty in the estimate
- To understand the amount of uncertainty, we are calculating a confidence interval around each estimate
- Summary-based UCR estimates did not require a confidence interval because of the historically high coverage rates (~95%)
Implications for National Estimation

Some geographical areas and agency subgroups still have low coverage ratios.

• A subset of estimates in some subgroups will likely need to be suppressed due to low precision.
• Separate weights will be calculated for regional estimation.
• These coverage rate considerations are expected to improve over the coming years, as NIBRS participation grows.

Data are a non-probability sample; structuring based on specific strata improves the precision of estimates

• Many remaining agencies are expected to complete transition by 2022.
• Large agencies and tribal agencies had the most difficulty meeting the 1/1/21 transition deadline.

Precision-based suppression rules have been developed to determine if an estimate can be released
Implication for State-Level Estimation

NIBRS expansion progress has varied greatly by state and will change dramatically in future years.

- In 2021, 34 states had more than 80% pop coverage; 2 states had less than 15% pop coverage
- California, Florida and New Jersey are expected to have significant expansion in 2022

In general, high coverage rates are needed to publish state-level estimates

- The estimation team is assessing which states had sufficient coverage in 2021 to produce state-level estimates
- The assessment will determine:
  - If state-level estimates can be generated without all the largest agencies reporting
  - If tribal law enforcement agencies are critical to state-level estimates in certain states
<table>
<thead>
<tr>
<th>Pros</th>
<th>Cons</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Counts all offenses in a crime incident</td>
<td>• Reduced number of reporting agencies</td>
</tr>
<tr>
<td>• Provides a more complete picture of reported crime</td>
<td>• Estimates will be expressed with associated confidence intervals</td>
</tr>
<tr>
<td>• Captures details on the characteristics of each crime incidents</td>
<td>• Suppression of some estimates is likely to occur</td>
</tr>
</tbody>
</table>
Next Steps

Technical components

• Full integration into FBI CJIS operating environment
• Enabling long-term trending capabilities, when possible

Communications strategy

• Describing estimation for the lay audience
• Series of technical reports
• Adopting methods to make NIBRS data more accessible to the public
• Drafting NIBRS-based reports

First set of NIBRS-based national estimates for release the last Monday in September
What’s Next for FBI Uniform Crime Reporting?
Future Vision of UCR Data Collection

• Updates and enhancements to the NIBRS data collection
• Development of new law enforcement collections
  • Law Enforcement Suicide Data Collection
  • Law Enforcement-Public Contact
  • Lawful Access
Updates to the NIBRS data collection

Enhanced understanding of firearm-related crime
- Addition of firearm discharge
- Addition of stolen firearm
- Addition of gunshot wound as an injury
- Collection of injuries on homicide victims

Updated information on drug crime
- Updated drug types
- Updated policies for drug measurement conversion
Updates to the NIBRS data collection

Updated code lists

- Victim-to-Offender relationship
- Location type
- Property descriptions
- Type Criminal Activity

Exploration of additional enhancements in UCR collections

- *Unfounded* as an incident status in NIBRS
- Geolocation in NIBRS
- Gender identity
- Definition of sex offenses
- Collection of race and part-time on police employee collection
Along with NIBRS enhancements, the FBI UCR Program has been working on several new initiatives that will enhance and expand the data available from the FBI.

Some of these collection are designed to provide additional context to existing UCR collections, while others are new to the world of UCR statistics.

- Law Enforcement Suicide Data Collection (LESDC)
- Law Enforcement Public Contact (LEPC) Data Collection
- Lawful Access Data Collection (LADC)
LESDC: Understanding Suicide

- On June 16, 2020, Congress passed the Law Enforcement Suicide Data Collection Act.

- This law mandated the UCR Program to establish a new data collection focused on gathering data concerning law enforcement suicide and attempted suicide events.

- The Law Enforcement Suicide Data Collection (LESDC) was officially launched on January 1, 2022.
• The LESDC focuses on an expanded universe of respondents compared to traditional UCR data collections.

• In addition to traditional law enforcement agencies, the LESDC also accepts submissions from:
  • Corrections officers
  • 911 telecommunicators
  • Judges and adjudicators

• These additions will help decision-makers understand the circumstances surrounding suicides and attempted suicides for not only officers, but a much wider portion of the criminal justice community.
The full impact of the LESDC will be known as more data is collected over time.

However, the LESDC marks a major expansion for both the UCR Program and the analysis of law enforcement data.

- Suicide among law enforcement has never been collected by a major federal entity to this degree.

- With the LESDC, the UCR Program expands from its traditional law enforcement agency contributors to include a much larger scope of criminal justice entities.
LEPC: Providing Context to UCR Data

- As the UCR Program expands collection of law enforcement data, it is important that the data being collected can be presented in a way that provides real-world utility and context.

- In the case of collections such as the National Use-of-Force Data Collection and the Law Enforcement Officers Killed and Assaulted (LEOKA) data collection, this means also understanding how often law enforcement officers contact the public in applicable situations.

- The LEPC Data Collection is designed to provide this context by gathering law enforcement officer contacts for participating agencies in a number of categories.
The LEPC Collection focuses on three specific types of public contact:

- Citizen Calls for Service
- Officer/Unit Initiate Contact
- Court Bailiff Activities

Participating agencies will submit annual counts of their contacts for these three categories to the UCR Program.

Aggregated counts for these categories will be used to support an understanding of how often Use-of-Force or LEOKA incidents occur compared to law enforcement encounters with the public.
• The addition of LEPC data from participating agencies will mainly provide real-world context to both Use-of-Force and LEOKA data.

• This context will be instrumental to presenting an accurate, national interpretation of Use-of-Force and LEOKA incidents.

• In the long term, LEPC data may also be adaptable to support understanding of additional UCR collections.

• The LEPC Data Collection is set to launch in 2023.
Lawful Access: How Big is the Problem?

• Law enforcement agencies depend on the collection of evidence to effectively investigate criminal offenses.

• The use of encryption on personal devices and software systems often restrict law enforcement access, even when granted by a lawful subpoena.

• This barrier has a negative impact on investigative cases and the ability of criminal justice agencies to prosecute potential offenders.

• In 2021, the FBI UCR Program began development on a new data collection to gather details on the volume of investigations that are negatively impacted by encrypted devices or software.
Lawful Access: Key Data Elements

• The data collected will include several data elements, including the number of devices collected, the type of encryption encountered, the criminal offense(s) connected to the case, and basic agency information.

• Collection results will be used to examine the severity of the effect encryption is having on criminal investigations and provide decision makers with viable statistics to guide policy changes.

• The Lawful Access Data Collection is set to launch in 2023.