PART B. Statistical Methods

1. <u>Universe and Respondent Selection</u>

The potential respondent universe of the NIBRS includes 6,648 LEAs who voluntarily participate in the FBI UCR Program. LEAs consist of local, county, state, tribal and federal agencies that correlate to all population group sizes and have many diverse attributes. These agencies include a mix of population density and degrees of urbanization; various compositions of population particularly youth concentration; population mobility with respect to residents' mobility, commuting patterns, and transient factors; different economic conditions including median income, poverty level, and job availability; areas with different modes of transportation and highway systems; different cultural factors and educational, recreational, and religious characteristics; family conditions with respect to divorce and family cohesiveness; climate; effective strength of law enforcement; policies of other components of the criminal justice system; citizens' attitudes toward crime; and crime reporting practices of the citizenry. The chart below represents the number of NIBRS participating agencies in the FBI UCR Program and the number of NIBRS agencies submitting one or more months of data.

	Population Group	Number of Agencies	Population Covered
Cities	Group I (250,000 inhabitants and more)	18	9,725,819
	Group II (100,000 to 249,999 inhabitants)	68	10,127,829
	Group III (50,000 to 99,999 inhabitants)	154	10,797,093
	Group IV (25,000 to 49,999 inhabitants)	314	10,905,700
	Group V (10,000 to 24,999 inhabitants)	652	10,410,558
	Group VI (Less than 10,000 inhabitants) ^{1,2}	3,332	9,490,919
Counties	Group VIII (Nonmetropolitan County) ²	1,331	12,233,068
	Group IX (Metropolitan County) ²	779	22,396,629
	Total	6,648	96,087,615

¹ Includes universities and colleges to which no population is attributed.

² Includes state police to which no population is attributed.

Number of months submitted	Number of Agencies	
1 month	110	
2 months	24	
3 months	39	
4 months	43	
5 months	29	
6 months	42	
7 months	46	
8 months	79	
9 months	60	
10 months	77	
11 months	177	
12 months	5,922	
Total	6,648	

Out of the 6,648 agencies that voluntarily report NIBRS data to the FBI UCR Program, approximately 5,922 submit twelve months complete data (89.1 percent). Of the remaining agencies, 726 submit between one and eleven months of data.

The FBI UCR Program's NIBRS statistics are published by many scholars. UCR NIBRS data is provided to the ICPSR on an annual basis. Since 1990, sixty-one scholarly citations have been recorded by the ICPSR. Additionally, the FBI UCR Program received 124 requests for NIBRS data throughout 2015. The 2011 NIBRS publication was the first to be released in August of 2013. Subsequent annual publications are released in December of the following years. Beginning in 2014, the UCR Program created a user friendly interactive NIBRS Map for use on the publication webpage. Within the map, statistics are presented for each agency that reported 12 months of data, using filters to view map points by agency type, state, and offense categories. For *Crime in the United States (CIUS)* the FBI converts NIBRS data to the traditional SRS format. Once converted from NIBRS submissions, the SRS data are available as printouts to state and local agencies for review. The SRS printouts contain incident reports that are aggregated by offenses, arrests, property types and values, clearances, and details of homicides.

While NIBRS participants include a mix of population density and jurisdictions with different sociodemographic conditions, the current NIBRS participants are not a representative sample and therefore not used to calculate NIBRS national estimates of broader populations. However, the FBI CJIS Division and the BJS partnered in 2012 to support the NCS-X to increase participation in the NIBRS data collection. The goal of the NCS-X project is to increase the number of participating agencies by at least 400 agencies, to include the 72 largest agencies. The NCS-X is providing assistance to select local, state, and tribal LEAs and to select state UCR programs to enable them to report NIBRS data to the FBI.

In addition to the NCS-X project, the CJIS APB recommended and the FBI Director approved the initiative for the FBI UCR Program to transition to a NIBRS-only data collection by January 1, 2021. Therefore, agencies that were not included in the NCS-X selections are able to transition to the NIBRS because of the APB recommendation.

2. Procedures for Collecting Information

Developed in the late 1980s, the NIBRS was designed as an automated system to modernize the UCR Program. The NIBRS is an incident-based reporting system used by participating LEAs to report 52 specific offenses and relevant details by incident, using up to 59 data elements and collect details about offenses, offenders, victims, property, and arrestees reported to police.

Since data collected by NIBRS are considerably more comprehensive than those of the traditional SRS, agencies wishing to participate should have computerized data systems capable of processing NIBRS information. The NIBRS data are designed to be generated as a byproduct of local, state, and federal automated record systems. Thus, an agency can build its own system to suit its individual needs, including all the information required for administrative and operational purposes. Only the data required by NIBRS are then reported to the national UCR Program.

Full participation in NIBRS necessitates meeting all the reporting guidelines and requirements set forth. Before a local agency begins submitting NIBRS data directly to the FBI, the agency will be asked to demonstrate its ability to meet NIBRS' reporting requirements by submitting test data to the FBI. If a local agency is going to participate indirectly through its state UCR program, it is the state's responsibility to ensure that the local agency is able to fulfill NIBRS' data submission requirements.

NIBRS data are collected and received from state UCR program participants on a monthly basis. The FBI UCR Program has established various time frames and deadlines for acquiring the monthly data. Annual deadlines are also designated in order to collect and assess all submissions prior to publication. There are times when special circumstances may cause an agency to request an extension. The FBI UCR Program has the authority to grant these extensions.

3. Methods to Maximize Response

Response rates are maximized through liaison with state UCR programs. Communications encouraging data submissions occur frequently because of the relationship between the FBI UCR Program staff and LEAs. FBI UCR Program staff have a strong understanding of contextual challenges agencies face in reporting valid and reliable data and regularly work to overcome nonresponse issues when such challenges occur. The mission of the FBI UCR Program is to promote the NIBRS by active liaison with the state UCR programs and the national LEAs to encourage participation. To encourage the submission of data, a listing of missing reports are sent to state UCR programs and individual LEAs twice a year and then follow up contact is also made to those agencies to further encourage the submission of missing data. The FBI UCR Program staff assists agencies in submitting 12 months of complete data through continuous communication.

Currently, 89.1 percent of the NIBRS participating LEAs report 12 months of complete data to the national program. These agencies are nonresponsive due to being understaffed, underfunded, or are implementing a new data record system. Even though these agencies are non-reporters, they are considered participants of the program and will submit data when the problems have been resolved.

Additionally, the FBI and the BJS have partnered through the NCS-X effort to increase participation in the NIBRS data collection by at least 400 agencies to include the 72 largest agencies to ensure data coverage to generate statistically-sound national estimates of crime known to LEAs. The NCS-X is providing assistance to select local, state, and tribal agencies as well as to select state UCR programs to enable them to report NIBRS data to the FBI. Also, the CJIS APB recommended and the FBI Director approved an effort for the FBI UCR Program to transition to a NIBRS-only data collection by January 1, 2021.

Currently, 42 percent of participating agencies report their UCR statistics via the NIBRS. There are 34 states certified to report data via the NIBRS, and 16 of those states include agencies that report all of their crime statistics through the incident-based reports. Eighteen states report both SRS and NIBRS data, and 16 states report only SRS data. Two of the 16 states reporting only SRS data, report directly to the FBI because there is no state UCR program in place. One state, Indiana, is working to establish a NIBRS-only state UCR program, and the Crime Data Modernization Team is working with Mississippi to become a state program and transition to the NIBRS.

The following state programs have provided transition updates: North Carolina has mandated a full state transition by 2018; Texas has mandated a full state transition by September 2019; and Georgia has committed to a full state transition by the end of 2018.

The FBI recognizes the NIBRS transition requires additional support to be successful. One of the critical parts is the ability of the FBI to provide training to agencies before, during, and after implementation. In Fiscal Year (FY) 2017, the FBI is supporting this training need:

The FBI funded the NCS-X Project as well as the states with no and/or limited NIBRS capability at the state level. As a result, the training focus is to provide training via free regional training sessions. This training is three days per session with an emphasis on all topics agencies need in order to transition to the NIBRS. Invitees include two people from each of the 400 NCS-X agencies, and three people from their corresponding state program office, which will help in the transition of the states as a whole.

Also, during FY 2017, the FBI will develop NIBRS computer-based training (CBT) modules. Additionally, as of June 2016, the FBI no longer provides onsite summary training; the focus of the FBI will now be onsite and CBT NIBRS training.

The FBI is establishing a communications strategy for the NIBRS transition to share the benefits and value of incident-based reporting. This effort involves developing unified messages for various audiences and stakeholder groups to allow them to both listen, as well as share, the benefits of the NIBRS to their agencies. In addition, the FBI is identifying venues for engaging stakeholder groups, internal and external audiences, varied communities of interest, and the general public to educate groups on the value of the NIBRS. Part of this communications strategy is the establishment of a NIBRS website that is available to the general public at: https://ucr.fbi.gov/nibrs-overview. In addition to the NIBRS website, the FBI established a mechanism for subject matter support and assistance by email and telephone: <UCR-NIBRS@ic.fbi.gov> or (304) 625-9999 (NIBRS Line).

To supplement the NIBRS marketing strategy, the FBI, in 2016, produced a NIBRS video detailing the reporting system's history, as well as its importance today. The NIBRS video is shared with stakeholders to illustrate the need for this transition. This video is available on the NIBRS website provided above.

The FBI is writing a series of articles on state and local agency transitions to share success stories and lessons learned. An article highlighting the transitions of Georgia and Minnesota has been published in the *CJIS Link*, a newsletter for law enforcement, and the article is also posted on the NIBRS website. Other articles are planned to share NIBRS success stories to include the Texas state UCR program, Grand Ronde Tribal and Salem, Oregon Police Departments.

MODERNIZATION OF CRIME STATISTICS

The first of two reports from the National Academies of Sciences, Engineering, and Medicine, was released on May 16, 2016. The first report, *Modernizing Crime Statistics* -

Defining and Classifying Crime, focuses on the substantive plan and the development of a new classification of crime. The second report will address the methodological and implementation plans.

The first report from the National Academies panel indicates there is a strong demand for comprehensive, reliable, consistent, and timely information about crime by a broad range of users. Following the release of the final report on the methodology and implementation plans for this proposed new crime classification, the FBI will evaluate each of the panel's recommendations to determine whether they align with the current crime data modernization efforts.

Following the launch of the National Academies panel, the FBI, in December 2014, introduced a crime data modernization initiative to improve the UCR Program's crime statistics. This initiative involves transitioning the Program from the SRS to a NIBRS-only data collection and includes federal reporting. This initiative supports the FBI's movement to the NIBRS, but notes that a detailed examination and consideration of the implementation and operation of the UCR Program's data collections, including the NIBRS, awaits the final report of the National Academies panel.

The FBI is also conducting a NIBRS modernization study, in which current business practices and policies employed by local, state, tribal, and federal LEAs are being assessed, as well as how they compare with the requirements to transition these LEAs from the SRS to the NIBRS for purposes of collecting crime statistics. This study began in June 2016 and the final report should be delivered by September 2017. In the study, the NIBRS is being assessed to determine if it meets current policing needs in its present state or requires modernization. Policing policies and strategies have evolved over the last 30 years. While the FBI feels strongly that the NIBRS is the pathway to more accurate crime data; however, we must ensure the policy evolves to guarantee the best data. Depending upon the timing of the release of the final report from the National Academies panel, the modernization study will incorporate the panel's recommendations in the study's evaluation. Regardless of when the final report is released, however, the findings of the modernization study should provide objective criteria by which to evaluate the final recommendations to ensure that they are feasible given current policing practices.

4. <u>Testing of Procedures</u>

Purpose of the Research

At the request of an APB Subcommittee member, the FBI UCR Program was asked to report domestic violence in NIBRS. Consequently, the CJIS APB voted to change the circumstance code for "Lovers' Quarrel" to "Domestic Violence" in the NIBRS Data Element 31 (Aggravated/Homicide Circumstances). In 2013, the FBI UCR Program also presented a proposal for defining Domestic Violence which was approved by the CJIS APB in 2014.

During the same meeting the APB recommended the UCR Program allow the collection of Victim/Offender Relationships for Crimes Against Property, and added the Victim/Offender Relationship codes of "ex-boyfriend" and "ex-girlfriend." During the 2015 meetings, the FBI recommended and the APB approved combining the two relationship codes referenced above to one code (XR=Ex-Relationship) to more closely align the other relationship codes collected in NIBRS, ex., SE=Spouse, GP=Grandparent, SP=Stepparent, etc. These recommendations were approved by the FBI Director on October 6, 2015 and February 9, 2016.

When Cargo Theft became a UCR data collection requirement in 2010, the NIBRS fraud offenses were added as cargo theft related offenses for identifying cargo theft as either "yes" or "no" in Data Element 2A in NIBRS. In 2012, the CJIS APB voted to approve the addition of two new fraud offenses of 26F=Identity Theft and 26G=Hacking/Computer Invasion to NIBRS. These new offenses were not taken into consideration as cargo related offenses at that time. Therefore, the UCR Program Training staff presented a proposal for adding them to the list of cargo related offenses in 2016, which was approved by the APB. As a result, the CJIS APB also voted to add the two fraud offenses identified above to the Cargo Theft collection on October 27, 2016.

In 2014, the ASUCRP, the NSA, the NSA Traffic Safety Committee, and the NSA Crime Victim Services Committee proposed the FBI UCR Program allow reporting of a fatalities resulting from impaired operation of a vehicle as Negligent Manslaughter offenses within NIBRS. Further, the UCR Program requested to expand this collection to include vessels and distracted driving incidents where a cell/smartphone was a factor. In 2016, the APB voted to collect driving under the influence, distracted driving (using a cell/smartphone), and reckless driving traffic fatality incidents under Negligent Manslaughter. In order to collect and distinguish these offenses from other Negligent Manslaughter offenses, the definition was amended and specific data elements were modified.

The goals of the exploratory interviews are to:

- Assess the comprehension of terms and definitions included in the collection, including whether respondents interpret questions consistently; and
- Assess the reliability and validity of the answers supplied from the participants.

Methodology, Participants, Analysis

The FBI UCR Program conducted the exploratory interviews with fifteen RMS managers and LEAs throughout Connecticut to uncover problems of ambiguity or misunderstanding to identify instructional issues respondents had when addressing questions pertaining to the revisions to the NIBRS for collecting Cargo Theft, Domestic Violence, and Negligent Manslaughter. The fifteen participants were comprised of 6 representatives from a small city police department, 3 representatives from a medium city police department, 3 representatives from a large city police department, 2 representatives from a campus police agency, and 1 representative from the state police.

The method for the exploratory interviews involved asking each participant to review the materials received in an e-mail prior to a telephone interview. During the telephone interviews, the FBI interviewers asked specific questions to determine how respondents came up with their answers. The objective was to detect problems of ambiguity or misunderstanding, identify instructional improvements, and to highlight other difficulties respondents had in answering questions. Participants were provided with two examples for identity theft and hacking/computer invasion offenses for Cargo Theft related incidents; three incident examples for domestic violence; and, four examples of negligent manslaughter involving traffic fatalities. These incidents were used to determine if the participants understood the criteria for determining the offenses and to ensure they provided consistent, reliable results for future research and analysis when these components are fully implemented.

The interviews uncovered the following results:

Cargo Theft – Fraud Offenses

• Identity Theft

- **o** The NIBRS User Manual provided sufficient detail for the Cargo Theft and Identity Theft definitions.
- **o** Limited questions arose from the scenarios referencing the 26F = Identity Theft offense which centered on utilizing another fraud offense, impersonation, based on the end user inferring information from the scenario.

Hacking and Computer Invasion

- **o** The NIBRS User Manual provided sufficient detail for the Cargo Theft and Hacking/Computer Invasion definitions.
- Certain scenarios contained ambiguity; while most participants were able to reach the correct conclusion, most recommended the UCR Program add additional details to the scenarios to focus them more towards the specific answer.

Domestic Violence

• The NIBRS User Manual provides sufficient detail for the definition of Domestic and Family Violence, but requires additional detail regarding the "Domestic Violence" data value. A small number of participants were unsure how to use the new data value.

Negligent Manslaughter

• The NIBRS User Manual provides sufficient detail for the definition, but requires additional detail regarding the Offender Suspected of Using and Type Weapon/Force Involved data values. Several participants were unsure of how to use these data values within these incidents.

The appropriate changes uncovered from the exploratory interviews were implemented within the NIBRS User Manual for the Paperwork Reduction Act submission. Details pertaining to the exploratory interviews can be found in the supplementary documents of this Information Collection Review.

5. Contacts for Statistical Aspects and Data Collection

Christopher A. Nicholas LESS Chief <u>christopher.nicholas@ic.fbi.gov</u> (304) 625-3690

Amy C. Blasher CSMU Chief amy.blasher@ic.fbi.gov (304) 625-4840

Cynthia Barnett-Ryan Statistician <u>cynthia.barnett-ryan@ic.fbi.gov</u> (304) 625-3576

Kristi L. Donahue Management/Program Analyst <u>kristi.donahue@ic.fbi.gov</u> (304) 625-2972