PART B. Statistical Methods

1. The potential respondent universe of the form *Monthly Return of Arson Offenses Known to Law Enforcement* (OMB No. 1110-0008) includes all United States (U.S.) LEAs who submit their crime stats via the SRS. In 2015, 11,791 SRS U.S. LEAs voluntarily participated in the FBI's UCR Program. Out of those agencies, approximately 9,623 voluntarily report 1-12 months of arson data to the FBI UCR Program, leaving 4.1 percent that do not report any arson data. 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.

SRS Agencies, 2015				
	Population Group	Number of Agencies	Population Covered	
Cities	Group I (250,000 inhabitants and more)	65	51,448,151	
	Group II (100,000 to 249,999 inhabitants)	150	22,312,003	
	Group III (50,000 to 99,999 inhabitants)	343	23,737,500	
	Group IV (25,000 to 49,999 inhabitants)	586	20,227,802	
	Group V (10,000 to 24,999 inhabitants)	1,272	20,294,222	
	Group VI (Less than 10,000 inhabitants) ^{1,2}	6,359	17,114,079	
Counties	Group VIII (Nonmetropolitan County) ²	1,559	15,419,912	
	Group IX (Metropolitan County) ²	1,457	54,777,536	
	Total	11,791	225,331,205	

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

² Includes state police to which no population is attributed.

SRS Arson Participation, 2015			
Number of Months Submitted	Number of Agencies		
1 month	51		
2 months	57		
3 months	69		
4 months	58		
5 months	52		
6 months	59		
7 months	70		
8 months	71		
9 months	77		
10 months	110		
11 months	235		
12 months	8,714		
# of agencies not reporting arson	483		
# of agencies not participating in any UCR collection	1,685		
Total	11,791		

Out of the 11,791 agencies that voluntarily participate in the FBI UCR Program, via the SRS, approximately 8,714 submit twelve months complete data (73.9 percent). Of the remaining agencies, 909 submit between one and eleven months of data, 1,685 are non-reporters, and 483 don't provide arson data.

2. Arson data are collected/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. Monthly reports/submissions should be received at the FBI by the seventh day after the close of each month. Annual deadlines are also designated in order to collect/assess receipt of monthly submissions. 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. Although the law enforcement community requested crime data be collected on a monthly basis since police records are run on a calendar month, the FBI UCR Program has agencies that submit data quarterly, twice a year, and even once a year. Upon approval, the FBI UCR Program agencies can submit their data at intervals that minimizes the burdens to the agency.

The FBI CJIS Division is projected to deploy the New UCR Project later this year. This project will manage the acquisition, development, and integration of a new and improved data collection system which will affect UCR participating local, state, tribal, and federal LEAs. The goal for the project is to improve the accuracy and timeliness of the crime data collection and delivery process. The New UCR Project will provide enhanced data management tools for greater efficiency in data collection, processing, and maintenance of crime data. The project will provide automated processes, tailored reports on an as-needed basis, and will streamline publication processes that will give users more timely access to the data.

Although the FBI makes an effort through its editing procedures, training practices, and correspondence to ensure the validity of the data it receives, the accuracy of the statistics depends primarily on the adherence of each contributor to the established standards of reporting. The FBI relies on the integrity of data contributors reporting data, however, staff from the CJIS Audit Unit are available, by request, to conduct Quality Assurance Reviews. The results of the audits are not used to adjust crime data, but are used to educate reporting agencies on compliance with national UCR guidelines.

As the ICR arson data collection is intended to collect all arson offenses from law enforcement agencies in the U.S., sampling methodologies are not used. Past arson data collections have not included national or subnational estimates for arson because the FBI UCR Program had not had the imputation procedures defined for the crime of arson.

See Attachment 1. Revising the UCR Part I Offense Count Imputation Methods–Status Report

3. 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 no-response issues when such challenges occur. The mission of the FBI UCR Program is to acquire arson data, establish guidelines for the collection of such data, and publish arson data.

Currently, 73.9 percent of the FBI UCR Program SRS reporting agencies report 12 months of complete arson data to the FBI while 7.7 percent submit between 1-11 months of data. The remaining 18.4 percent do not participate in the arson data collection. These agencies are nonresponsive due to being understaffed, underfunded, or are implementing a new data record system. Additionally, the FBI UCR Program has determined that a number of "other agencies" and "other state agencies" consistently provide missing or incomplete data. Even though these agencies are non-reporters, they are considered participants of the Program and will submit data when the problems have been resolved. Based on historical reporting trends,

similar response rates are expected in future arson collections, however, the FBI UCR Program actively liaisons with national law enforcement agencies to encourage participation in UCR data collections.

The FBI UCR Program assists agencies in submitting 12 months of complete data through active liaisons with the state UCR programs and the individual LEAs. 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.

4. The FBI has conducted the arson information collection since 1979. The response rates for arson have remained relatively consistent from year-to-year. During the implementation of the arson information collection, extensive research regarding the offense of arson was conducted by members of the FBI's UCR Program staff. Liaison with members of law enforcement, fire services, and insurance communities had been effective in the effort to fulfill the congressional mandate to collect arson offense data and to design a collection form which would provide meaningful information to all those concerned. Representatives of the FBI's UCR Program, International Association of Chiefs of Police, National Sheriffs' Association, U.S. Fire Administration, National Fire Protection Association, and a number of other national and international fire service associations met to discuss the design of a viable collection device and other pertinent implementation procedures of fulfilling the legislative mandate to collect arson. Representatives of the various agencies in attendance solicited suggestions and comments on a number of proposals concerning the collection of arson, some of which were implemented into the design of the proposed arson collection form. Numerous other meetings and liaison activities were conducted in order to obtain a base of information concerning the offense of arson. Direct liaison with fire chiefs and arson investigators afforded an opportunity to discuss details of the arson form and persons directly involved in investigation, detection, and reporting of fires, and specifically, arson cases. The information shared throughout these meetings provided the designers of the arson collection form with the pertinent information to incorporate into the new form.

Today, the UCR Program receives guidance for implementing or making changes to a data collection from the CJIS Advisory Policy Board. The FBI CJIS advisory process was developed to obtain the user community's advice and guidance on the development and operation of all the CJIS Division programs. The philosophy underlying the advisory process is one of shared management; that is, the FBI along with local, state, tribal, and federal data providers, and system users share responsibility for the operation and management of all systems administered by the FBI for the benefit of the criminal justice community.

There have not been any changes to the current arson form that would need to be tested. No comments or suggestions of problems with the form have been reported through the CJIS APB Working Groups, UCR Subcommittee, CJIS APB, or the ASUCRP which meet

frequently throughout each year and are dedicated to improving the collection, use, and utility of crime data as reported through the FBI UCR Program and all state and local crime reporting programs. However, as stated in the "Revising the UCR Part I Offense Count Imputation Methods" status report, the FBI UCR Program will be conducting a nonresponse bias study in order to understand the mechanism for an agency's nonresponse.

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

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

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

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