## 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 LEAs who submit their crime statistics via the SRS. In 2019, 9,454 SRS LEAs voluntarily participated in the FBI UCR Program. Out of those agencies that voluntarily participated in the FBI UCR Program, approximately 8,054 reported 1-12 months of arrest data to the FBI UCR Program, leaving 14.8 percent of SRS LEAs not reporting any arson data. LEAs consist of federal, state, county, city, and tribal 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 Agei	ncies, 2019		
	Population Group	Number of	Population
		Agencies	Covered
Cities	Group I (250,000 inhabitants and more)	47	39,362,500
	Group II (100,000 to 249,999 inhabitants)	128	19,137,352
	Group III (50,000 to 99,999 inhabitants)	284	19,795,908
	Group IV (25,000 to 49,999 inhabitants)	491	16,902,932
	Group V (10,000 to 24,999 inhabitants)	995	15,821,459
	Group VI (Less than 10,000 inhabitants) <sup>1,2</sup>	5,166	13,671,387
Counties	Group VIII (Nonmetropolitan County) <sup>2</sup>	1,141	10,968,657
	Group IX (Metropolitan County) <sup>2</sup>	1,202	43,926,736
	Total	9,454	179,586,931

<sup>1</sup> Includes universities and colleges to which no population is attributed.

<sup>2</sup> Includes state police to which no population is attributed.

Number of Months Submitted	Number of Agencies	
1 month	62	
2 months	45	
3 months	46	
4 months	67	
5 months	81	
6 months	121	
7 months	112	
8 months	148	
9 months	164	
10 months	265	
11 months	888	
12 months	5,448	
# of agencies not reporting arson	607	
# of agencies not participating in any UCR collection	1400	
Total	9,454	

Out of the 9,454 agencies that voluntarily participate in the FBI UCR Program, via the SRS, approximately 5,448 submit 12 months complete data (57.6 percent). Of the remaining agencies, 1,999 submit between 1 and 11 months of data, 1,400 are nonreporters, and 607 do not 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 minimize the burdens to the agency.

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 FBI UCR Program guidelines.

As the UCR arson data collection is intended to collect all arson offenses from law enforcement agencies in the United States, 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 defined the imputation procedures for the crime of arson.

With the impending retirement of the SRS on January 1, 2021, the FBI UCR Program has partnered with the BJS in the development of a methodology for producing valid national and subnational estimates for the NIBRS data with the NIBRS National Crime Statistics Exchange (NCS-X) Estimation Project (NNEP). The NNEP was created as a joint effort between the FBI and BJS to devise a statistically robust method to calculate national estimates for NIBRS data based upon the sample derived for the NCS-X initiative. The overall goal was to ensure the methodology met the needs for both agencies in order to have a single "voice" for NIBRS data from the DOJ. The project goals will be to produce a method for national-level estimates of offense counts and rates similar to the first five tables of *CIUS*. In addition to offense counts and rates, the methodology will produce estimates of other key indicators available in NIBRS (for example, victim and offender characteristics, weapon involvement, and location type). In addition to the development of a methodology for national estimates, the project will assess the feasibility of calculating valid estimates for states given the status of transition to NIBRS in 2021. The NNEP will also provide projections for appropriate coverage rates that should be achieved in order to calculate valid state estimates.

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. The 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, 67.6 percent of the FBI UCR Program SRS reporting agencies report 12 months of complete arson data to the FBI while 24.8 percent submit between 1-11 months of data. The remaining 7.5 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. In addition, 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 nonreporters, they are considered participants of the FBI UCR 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 all 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 engagement is 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 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 UCR Program, International Association of Chiefs of Police, National Sheriffs' Association, USFA, National Fire Protection Association, and 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. 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 FBI UCR Program receives guidance for implementing or making changes to a data collection from the CJIS Advisory Policy Board (APB). 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 federal, state, county, city, and tribal 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.

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