

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.) law enforcement agencies. Out of all U.S. law enforcement agencies, approximately 18,233 U.S. law enforcement agencies voluntarily participate in the FBI's Uniform Crime Reporting (UCR) Program. Out of those agencies that voluntarily participate in the FBI UCR Program, approximately 16,439 voluntarily report 1-12 months of arson data to the FBI UCR Program. Ten percent of agencies do not report any arson data. Law enforcement agencies 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.

	Population Group	Number of Agencies	Population Covered
Cities	Group I (250,000 inhabitants and more)	75	56,398,148
	Group II (100,000 to 249,999 inhabitants)	209	31,323,512
	Group III (50,000 to 99,999 inhabitants)	473	32,816,692
	Group IV (25,000 to 49,999 inhabitants)	888	30,762,527
	Group V (10,000 to 24,999 inhabitants)	1,929	30,586,844
	Group VI (Less than 10,000 inhabitants) ^{1,2}	9,499	26,669,678
Counties	Group VIII (Nonmetropolitan County) ²	3,049	30,821,138
	Group IX (Metropolitan County) ²	2,111	72,213,378
	Total	18,233	311,591,917

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

² Includes state police to which no population is attributed.

Out of the 18,233 agencies that voluntarily report data to the FBI UCR Program approximately 15,205 submit twelve month complete total, 1,234 submit between one and eleven months of data, and 1,794 agencies do not submit reports to the FBI UCR Program. See chart below.

Number of months submitted	Number of Agencies
1 month	132
2 months	74
3 months	71
4 months	53
5 months	68
6 months	65
7 months	74
8 months	77
9 months	102
10 months	184
11 months	334
12 months	15,205
Non reporting agencies	1,794
Total	18,233

Of the 18,233 participating agencies, 83 percent respond with twelve months of complete data and 1,794 are nonreporters. These agencies are nonresponsive due to being understaffed, underfunded, or are implementing a new data record system. Even though these agencies are nonreporters 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.

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 that the form 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.

Law enforcement agencies submit Arson data to the FBI UCR Program through either the Summary Reporting System (SRS) or the National Incident-Based Reporting System (NIBRS). The SRS is referred to as the “traditional” FBI UCR Program because it began in 1930, and has had few modifications through the years. The NIBRS is used by participating law enforcement agencies to report offenses and relevant details by incident, using up to 58 data elements to collect details about offenses, offenders, victims, property, and arrestees reported to police. Developed in the late 1980s, the NIBRS was designed as an automated system to modernize UCR, and includes automated checks to ensure data quality.

As the UCR 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 estimates for arson because the FBI UCR Program had not had the imputation procedures defined for the crime of arson. The UCR Redevelopment Project (UCRRP), the Bureau of Justice Statistics, and the FBI UCR Program are working in corroboration with OMB to develop an estimation model that will be used with all of UCR data collections.

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 law enforcement agencies. FBI UCR 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 acquire arson data, establish guidelines for the collection of such data, and publish arson data.

The FBI UCR Program actively liaisons with the state UCR Programs and the national law enforcement agencies to encourage participation in the Arson data collection. To encourage the submission of data, a listing of missing reports are sent to state UCR Programs and individual law enforcement agencies twice a year and then follow up contact is also made to those agencies to further encourage the submission of missing data. FBI UCR Program assist agencies in submitting 12 months of complete data through continuous communication.

Currently, 90 percent of the FBI UCR Program agencies report 12 months of complete Arson data to the FBI. The FBI is working to help the absent 10 percent of law enforcement agencies participate in the arson data collection with the FBI CJIS Division’s UCRRP. The UCRRP will manage the acquisition, development, and integration of a new information systems solution which affects UCR participating local, state, tribal and federal law enforcement agencies. The UCRRP’s goal is to improve UCR efficiency, usability, and maintainability while increasing the

value to users of UCR products. The UCRRP will reduce, to the point of elimination, the exchange of printed materials between submitting agencies and the FBI and replace those with electronic submissions. The FBI UCR Program has begun the process of eliminating the exchange of paper for crime reporting purposes. Beginning July 2013, the FBI UCR Program will begin moving submitting agencies away from paper submissions. After a period of transition, the expectation is to have all data interfaces electronically managed, with minimal paper burden on the public. The UCRRP has developed five options for paperless submissions, they are: Extensible Markup Language, Flat File Formats, Online Data Entry, a data extraction from the Law Enforcement National Data Exchange Program, and an FBI provided Excel Workbook and Tally Book.

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, Quality Assurance Reviews are conducted by the Criminal Justice Information Services (CJIS) Audit Unit on a triennial basis. 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.

4. The FBI has conducted the arson information collection since 1979 with high rates of response and has specific plans to further improve participation; proposed initiatives are described in Part B #3. During 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 services 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. 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 with persons directly involved in investigation, detection, and reporting of fires, and specifically, arson cases. 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 Advisory Policy Board (APB) Working Groups, UCR Subcommittee, CJIS APB, or the Association of State Uniform Crime Reporting Programs 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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