

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 18,108 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 15,475 voluntarily report 1-12 months of arson data to the FBI UCR Program. Fifteen 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. 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. 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. This data collection does not include estimates for arson because the FBI UCR Program does not currently have the imputation procedures defined for the crime of arson. Fluctuations in arson reporting are due to the fact many law enforcement agencies do not have investigative or arrest jurisdiction in arson-related matters and therefore do not report the arson offenses. This difficulty is due to the overlapping or concurrent investigative jurisdiction problems encountered in many areas of the country. In these jurisdictions, the state fire marshal's office, the Bureau of Alcohol, Tobacco, Firearms and Explosives, or other fire services are responsible for investigation and reporting of information concerning arson and without appropriate liaisons between law enforcement and fire services the offense of arson does not get reported to the FBI. Because the FBI UCR Program does not have current imputation procedures that accommodate these complexities, the FBI's UCR Program does not apply estimation procedures to arson offenses and excludes the arson offense from *Crime in the United States* Tables 1-7. The FBI UCR Program presents the number of arsons reported by individual law enforcement

agencies in tables 8-11, arson trend data in tables 12-15, arson clearance data in table 25-28, and Arson Table 1 and Arson Table 2 in *Crime in the United States*. The data are published as reported to the FBI. An estimation method is not applied to account for the 15 percent of jurisdictions that did not participate. 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. Approximately 85 percent of the UCR law enforcement agencies submit arson data.

3. Response rates are maximized through liaison with State UCR Programs. Due to the relationship between FBI UCR staff and law enforcement agencies, communications encouraging data submissions and correcting potential anomalies, occur frequently. 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. Although the FBI makes every 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 is working to help law enforcement agencies participate in the arson data collection with the FBI CJIS Division's creation of the UCR Redevelopment Project (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, it is hoped that all data interfaces can be electronically managed. The goal is to have minimal paper burden on the public. The UCRRP has developed four options for paperless submissions, they are: XML, Flat File Formats, Online Data Entry, and an FBI provided Excel Workbook and Tally Book.
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.

SA Michelle S. Klimt
LESS Chief
michelle.klimt@leo.gov
304-625-3690

Amy C. Blasher
CSMU Chief
amy.blasher@leo.gov
304-625-4840

Loretta A. Simmons
Supervisory Technical Information Specialist
loretta.simmons@leo.gov
304-625-3535

Patricia S. Hanning
Technical Information Specialist
patricia.hanning@leo.gov
304-625-2957