

## SUPPORTING STATEMENT

### A. JUSTIFICATION

#### 1. Necessity of Information Collection

Latent fingerprints used in criminal investigations are often crucial pieces of evidence to link a suspect to a crime. These latent fingerprints are typically collected from a crime scene by specialists trained in forensic science techniques to reveal or extract fingerprints from surfaces and objects using chemical or physical methods. The fingerprint images can then be photographed, marked up for distinguishing features by latent examiners, and used to search an automated fingerprint identification system (AFIS). An AFIS is a computer system that stores fingerprint images in an organized, searchable data structure and are widely utilized by Federal, State, local, and tribal criminal justice agencies to maintain fingerprint databases of individuals who have been arrested or incarcerated. The databases typically contain fingerprints from all ten fingers (“tenprints”) containing fingerprints of each individual finger rolled (“rolls”) and all the fingers extended in parallel (“flats,” “slaps,” or “plain”). The AFIS can later be searched when an individual has a future encounter with the criminal justice system to establish identity and a linkage with a particular criminal record.

If a criminal investigator matches a latent print to a fingerprint in the AFIS, that individual may be linked to the crime under investigation. An AFIS can also house repositories of latent fingerprints that remain unidentified, typically referred to as an “unsolved latent file” (ULF). The ULF can be periodically searched in case a match turns up from new fingerprints added to the AFIS from someone arrested or incarcerated for another crime in the future. Certainly a match like this could happen within one jurisdiction over time, however an unsolved latent fingerprint collected in one jurisdiction may match a tenprint record stored in the AFIS of another jurisdiction. Whether or not the wanting agency in Jurisdiction A can search the database in Jurisdiction B to make the match will depend on the interoperability between the two jurisdictions. Maximizing AFIS interoperability can help maximize the value of latent fingerprint evidence.

Interoperability can be influenced by both technology and policy. Through secure network connections, the AFIS in Jurisdiction A can be networked to the AFIS in Jurisdiction B so that either jurisdiction can search the fingerprints in the other. The two jurisdictions typically must have an AFIS manufactured by the same vendor or have a way for two different systems to communicate. The two agencies typically also must have some official agreement such as a memorandum of understanding (MOU) that defines the terms of the information sharing, otherwise the searching will be done on an ad hoc basis.

The total national infrastructure of AFIS systems maintained by Federal, State, local, and tribal agencies can be thought of as the national criminal justice AFIS enterprise and how the AFIS systems communicate with each other will depend on the network architecture and access controls. Fingerprint searches can be done in either a vertical (e.g., local to State, State to Federal) or horizontal (e.g., local to local, State to State) manner and, as a result, interoperability can be considered at different levels of geographic or jurisdictional

granularity: local, regional intrastate, state, regional interstate, and national. The extent to which an authorized AFIS user such as a criminal investigator can launch a latent fingerprint search at a point of service in the national criminal justice AFIS enterprise and search for a fingerprint match in databases maintained in other jurisdictions can be thought of as the level of interoperability.

The proposed collection, the Latent Fingerprint Interoperability Survey (LFIOS), is the only comprehensive effort that provides an ability to establish the level of interoperability of automated fingerprint identification systems maintained by State and local law enforcement agencies (LEA) regarding the electronic exchange of latent fingerprint data to support criminal investigations. This collection will enable Federal, State, local, and tribal law enforcement and government administrators; legislators; and researchers; to understand the technological and regulatory barriers affecting automated, cross-jurisdictional interoperability. Information collected in the core survey and survey addenda will provide critical data on the types and functionalities of fielded AFIS systems in State and local agencies; the current policy agreements among jurisdictions to permit the sharing, exchange, and searching of latent fingerprints electronically; and the technological and regulatory factors which impact electronic sharing, exchange, and searching of latent fingerprints across various jurisdictions at the National, State and local levels.

In line with a core mission objective to improve the criminal justice system at the State and local levels, the National Institute of Justice (NIJ) proposes this data collection to provide timely information regarding the level of interoperability of automated fingerprint identification systems maintained by State and local law enforcement agencies regarding the electronic exchange of latent fingerprint data to support criminal investigations. The results of the data collection will provide a comprehensive qualitative and quantitative basis to make specific decisions to improve interoperability related to latent fingerprints to maximize the value of this type of forensic evidence in an equitable way based on the available evidence and data. It will also help shape strategic planning at all levels of government to support research, development, testing, and evaluation of tools and technology; training; and other forms of investment for Federal, State, and local law enforcement agencies.

NIJ is authorized to pursue this activity by the Omnibus Crime Control and Safe Street Act of 1968, as amended (42 U.S.C. 3722) (see Attachment 1), which provides for NIJ to improve the functioning of the criminal justice system and to develop new methods for the prevention and reduction of crime and the detection and apprehension of criminals, including the development of programs to facilitate cooperation among the States and units of local government. As a consequence of this proposed data collection, NIJ is authorized to make recommendations for action which can be taken by Federal, State, and local governments and by private persons and organizations to improve and strengthen criminal and civil justice systems and to engage in research and development of tools and technologies relating to prevention, detection, investigation, and prosecution of crime.

The Office of Science and Technology (OST) within NIJ is authorized by the Homeland Security Act of 2002 (6 U.S.C. 162) (see Attachment 2) to work with other entities within the Department of Justice, other Federal agencies, and the executive office of the President to establish a coordinated Federal approach on issues related to law enforcement technology. Furthermore, OST is authorized to carry out research, development, testing, evaluation (RDT&E), and cost-benefit analyses in fields that would improve the safety, effectiveness, and efficiency of law enforcement technologies used by Federal, State, and local law enforcement agencies, including, but not limited to tools and techniques that facilitate investigative and forensic work to help maximize the value of forensic evidence like latent fingerprints.

## 2. Needs and Uses

The proposed data collection is motivated in response to the identified need for improved AFIS interoperability. According to the 2009 National Research Council (NRC) report entitled *Strengthening Forensic Science in the United States: A Path Forward*:

“Great improvement is possible with respect to AFIS interoperability. Many crimes no doubt go unsolved today simply because investigating agencies cannot search across all the individual databases that might hold a suspect’s fingerprints or contain a match for an unidentified latent print from a crime scene. It is possible that some perpetrators have gone free because of the limitations on fingerprint searches.

The committee believes that, in addition to the technical challenges noted above, a number of other critical obstacles to achieving nationwide AFIS interoperability exist involving issues of practical implementation. These include (1) convincing federal and state policymakers to mandate nationwide AFIS interoperability; (2) persuading AFIS equipment vendors to cooperate and collaborate with the law enforcement community and researchers to create and use baseline standards for sharing fingerprint image and minutiae data and interfaces that support all searches; (3) providing law enforcement agencies with the resources necessary to develop interoperable AFIS implementations; and (4) coordinating jurisdictional agreements and public policies that would allow law enforcement agencies to share fingerprint data more broadly.

Given the disparity in resources and information technology expertise available to local, state, and federal law enforcement agencies, the relatively slow pace of interoperability efforts to date, and the potential gains that would accrue from increased AFIS interoperability, the committee believes that a new emphasis on achieving nationwide fingerprint data interoperability is needed.”

The criticism outlined above is vast in scope and requires redress, however achieving nationwide AFIS interoperability will require government action combined with some level of investment to close the technical and regulatory gaps. For governments to make effective use of resources, especially in a fiscal climate of constrained budgets, they must have access to basic quantitative information on a national scale to gain a deeper understanding of the current situation before making tactical decisions regarding where and how to improve interoperability.

The purpose of the Latent Fingerprint Interoperability Survey (LFIOS) is to collect the information to assess the current status of AFIS interoperability by State and local law enforcement agencies as it pertains to latent fingerprints. LFIOS is targeted at State and local law enforcement agencies across the United State that maintain an AFIS to obtain facts related to the workflow focusing on latent fingerprint searching in support of criminal investigations. It is the only comprehensive effort that provides an ability to establish the level of interoperability of AFIS systems maintained by State and local law enforcement agencies regarding the electronic exchange of latent fingerprint data to support criminal investigations.

Respondents will encounter questions that include which vendor manufactures the AFIS systems they house, AFIS usage patterns, and jurisdictions with which they currently share information. LFIOS is not targeted at vendors or researchers, although the data gathered from this survey will be valuable to a wide variety of stakeholders. Some of the outcomes of analysis of the survey data will be to quantify and understand interoperability at different levels of geographic or jurisdictional granularity as well as vertical and horizontal search patterns. This collection will enable Federal, State, local, and tribal law enforcement and government administrators; legislators; and researchers; to understand the technological and regulatory barriers affecting automated, cross-jurisdictional interoperability.

#### Proposed Survey Instrument: Content Development

LFIOS is divided into a core survey (LFIOS-C) and two addenda, one for State respondents (LFIOS-S) and one for local respondents (LFIOS-L). Respondents will be asked to complete the LFIOS-C (see Attachment 3) and either the LFIOS-S Addendum (see Attachment 4) or the LFIOS-L Addendum (see Attachment 5) depending on where the respondent agency is a State-level agency or local-level agency (e.g., town, city, county). Information collected in the core survey and survey addenda will provide critical data on the types and functionalities of fielded AFIS systems in State and local agencies; the current policy agreements among jurisdictions to permit the sharing, exchange, and searching of latent fingerprints electronically; and the technological and regulatory factors which impact electronic sharing, exchange, and searching of latent fingerprints across various jurisdictions at the National, State and local levels.

NIJ has engaged a variety of stakeholders over the past two years from the target respondent community to develop and refine the survey questions and structure. Personnel from the Enterprise Integration Center (e-IC) in the Mission, Cyber, and Technology Solutions Group from ManTech International Corporation who staff the NIJ Sensors, Surveillance, and Biometrics Center of Excellence have assisted in developing the online and print survey questionnaire using input provided iteratively from Federal, State, and local latent examiners, AFIS managers, criminal justice practitioners and administrators, and subject matter experts. In particular, the Latent Fingerprint AFIS Interoperability Task Force discussed below have been instrumental in providing guidance and expertise.

The primary manner to complete LFIOS is online, however print or portable electronic document formats are available to respondents who request them. Due to the complex nature of the subject matter, each respondent agency will likely require more than one person to complete the survey, although one person will be responsible for reporting the data. As a result, the preferred online format has integrated into its functionality to save answers and return later to questions with no response indicated to make it easy for multiple individuals to complete the survey if necessary.

## Original Survey

The three original LFIOS questionnaires are described below. A number of changes to the original survey were made as a result of pretesting suggested by the Office and Management and Budget (OMB) discussed in Section B.4.

## LFIOS-C

The Core survey had 83 questions and some of these questions had supporting sub-questions for a total of 101 questions. Questions were given in a multiple choice format with some fill in the blank responses required. The survey asked respondents for information regarding the following topics:

- **General Information:** Includes name, agency/organization, size of agency/organization, and the type of jurisdiction.
- **AFIS Information:** Includes AFIS vendor, software version, number of records, and use of Federal funds.
- **AFIS Capabilities (Criminal and Civil):** Includes database size, type of fingerprint records utilized, biometric standards, Universal Latent Workstation (ULW) use, and the number of searches conducted over time.
- **Latent Print Examiners:** Includes number of examiners employed, AFIS services available to internal examiners, and AFIS services available to external agencies.
- **AFIS Interoperability:** Includes modes of searching, searching or enrolling in other jurisdictions, being searched by other jurisdictions, use of official agreements such as Memoranda of Understanding, reasons that prohibit searching or exchange of latent prints, effect of dissimilar vendors on searching or exchange, ad hoc searching, percentages of fingerprints that are searchable in the database (i.e., “penetration”), and participation in regional AFIS networks.
- **Interoperability with Federal Government:** Includes Federal databases searched, technology used for search, use of and retention in IAFIS, reasons that prohibit exchange of latent prints with Federal databases, rescanning or re-encoding prints for Federal submission.

## LFIOS-S

The State addendum had 15 questions with some supporting subquestions for a total of 22 questions. It would be taken only by respondents that indicated they represent a State level agency in the core survey. Questions were given in a multiple choice format and

were crafted for the perspective of the State level law enforcement agency. It included questions about the State's interactions with local law enforcement on an intrastate basis, interactions with other States, and interactions with local law enforcement on an interstate basis. LFIOS-S included questions about the technologies used, compatibility with other State and local agencies, and hindrances to and opportunities for interoperability with a specific focus on the interaction at the State-to-State and State-to-local levels.

#### LFIOS-L

The local addendum had 19 questions with some supporting subquestions for a total of 27 questions. It would be taken only by respondents who indicated they represent a local level law enforcement agency and not a State agency. Questions were given in a multiple choice format with some fill in the blank responses required. The local addendum explored the view from the "bottom up" and focused on local-to-local and local-to-State interactions. It included questions about the local agency's interaction with other local agencies on an intrastate basis, interactions with their own State agency, and interactions with other States and local agencies on an interstate basis. Similar to the state survey, LFIOS-L included questions about the technologies used, compatibility with other State and local agencies, and hindrances to and opportunities for interoperability with a specific focus on the interaction at the local-to-local and local-to-State levels.

#### Revised Survey

A number of changes to the original survey were made as a result of pretesting suggested by the Office and Management and Budget (OMB) discussed in Section B.4. The questionnaire was revised to take into account a number of factors that could influence how the questionnaire is understood by the respondents, including:

- Sensitivity to the variety of AFIS resources and configurations across the United States.
- Diversity of ways LEAs may use their AFIS and what records they keep.
- Variability that may arise regarding the number of people who are on staff at each LEA who do substantive AFIS work.
- Differences between the way State LEAs and local LEAs operate.

The questionnaire includes Yes/No, multiple choice, and fill-in-the-blank questions and covers the same topics and concepts discussed above. Some additional concepts were added and existing concepts were worded more clearly, and more concepts were presented as Yes/No questions to decrease ambiguity. Acronym usage was reduced for better readability and a brief glossary was added at the beginning to define any acronyms used.

Overall, the number of questions increased from the original questionnaire, however half of the questions are Yes/No questions designed to be basic "quick recall" queries to minimize any associated increase in burden. About two-thirds of the Yes/No questions

“gate” one or more other questions, so the actual number of questions a respondent answers may be far less than the total inventory. In almost all cases, the fill-in-the-blank questions are seeking numerical information, such as the number of searches conducted in 2011, and all of those types of questions are gated by a Yes/No gate question asking if such records exist. If it is reported that the records do not exist, no numerical data is collected.

The LFIOS Core Questionnaire (LFIOS-C) contains 272 questions broken down as follows:

- 138 Yes/No questions
- 85 Yes/No questions gate other questions
- 44 fill-in-the-blank questions
- 35 fill-in-the-blank questions gated by a Yes/No question
- 90 multiple choice questions
- 77 multiple choice questions gated by a Yes/No question
- Questions presented modularly in 10 Sections divided by topic. Some Sections are further decomposed into subsections to group related questions together for easier comprehension. The Table of Contents is as follows:
  - Section 1: General Information
  - Section 2: AFIS Information
    - AFIS Product Information
    - AFIS Acquisition
    - AFIS Upgrades
    - AFIS Maintenance
    - AFIS Enrollment Capabilities
  - Section 3: Tenprints and Palm Prints
    - Tenprint Repositories
      - Criminal Tenprint Repositories
      - Civil Tenprint Repositories
    - Mobile ID Fingerprint Repositories
    - Palm Print Repositories
      - Criminal Palm Print Repositories
      - Civil Palm Print Repositories
    - Criminal Repositories – Total Individuals
    - Civil Repositories – Total Individuals
  - Section 4: Latent Prints
    - Latent Print Repositories
    - Latent Prints Submitted from Outside LEAs
    - Latent Prints Submitted from Outside LEAs without an AFIS
    - Latent Prints Submitted from Outside LEAs with an AFIS
  - Section 5: Latent Searching on Your AFIS
    - Latent Searching Capacities and Capabilities on Your AFIS
    - Latent Search Launches on Your AFIS
    - Search Requests from LEAs with an AFIS WITHIN YOUR STATE
    - Search Requests from LEAs with an AFIS OUTSIDE YOUR STATE

- Latent Search Candidate Lists
- Section 6: Latent Searching on Another AFIS
  - Latent Prints Submitted to Outside LEAs with an AFIS
  - Latent Search Launches on AFISes of Outside LEAs
  - Search Requests to LEAs with an AFIS WITHIN YOUR STATE
  - Search Requests to LEAs with an AFIS OUTSIDE YOUR STATE
- Section 7: Relaunching Searches
  - Tenprint to Latent Print Searching
  - Unsolved Latent Search Relaunching – Latent Print to Tenprint
  - Palm Print to Latent Print Searching
  - Unsolved Latent Search Relaunching – Latent Print to Palm Print
- Section 8: Official Agreements With Outside LEAs with an AFIS
- Section 9: Supporting Local LEAs that do not have an AFIS
- Section 10: Latent Print Personnel
- Each Section of the questionnaire is followed by an “Additional Comments” area for voluntary free text entry should a respondent desire to provide additional remarks.

The LFIOS State Addendum Questionnaire (LFIOS-S) contains 58 questions broken down as follows:

- 43 Yes/No questions
- 19 Yes/No gate other questions
- 9 fill-in-the-blank questions
- All fill-in-the-blank questions gated by a Yes/No question
- 6 multiple choice questions
- 4 multiple choice questions gated by a Yes/No question
- Questions presented modularly in 6 Sections divided by topic. The Table of Contents is as follows:
  - Local LEAs with an AFIS WITHIN YOUR STATE
  - Search Frequencies
  - Search Frequencies with Local LEAs with an AFIS
  - Search Frequencies with State LEAs with an AFIS
  - Your State Agency Searching the FBI
  - Your State Agency Searching Other Federal Agencies
- The addendum is followed by an “Additional Comments” area for voluntary free text entry should a respondent desire to provide additional remarks.

The LFIOS Local Addendum Questionnaire (LFIOS-L) contains 65 questions broken down as follows:

- 46 Yes/No questions
- 18 Yes/No gate other questions
- 10 fill-in-the-blank questions
- 8 fill-in-the-blank questions gated by a Yes/No question
- 9 multiple choice questions
- 6 multiple choice questions gated by a Yes/No question



- Questions presented modularly in 6 Sections divided by topic. The Table of Contents is as follows:
  - Your Local Agency
  - Search Frequencies
  - Search Frequencies with Local LEAs with an AFIS
  - Search Frequencies with State LEAs with an AFIS
  - Your Local Agency Searching the FBI
  - Your Local Agency Searching Other Federal Agencies
- The addendum is followed by an “Additional Comments” area for voluntary free text entry should a respondent desire to provide additional remarks.

The revised questionnaire collects only ubiquitous and universal agency-level information relevant to AFIS interoperability with respect to latent prints using questions worded in the simplest and plainest way to reduce both burden and confusion.

#### Users of NIJ Latent Print AFIS Interoperability Data

A wide variety of stakeholders in Federal, State, local, and tribal government administration, criminal justice operations, and legislative bodies will be able to use the data collected to understand the technological and regulatory barriers affecting automated, cross-jurisdictional interoperability to help guide decision making going forward. The beneficiaries of this information include NIJ, who is supporting this effort, as well as other Federal Executive Branch agencies, U.S. Congress, the Federal Judiciary, and State, local, and tribal counterparts, especially as it pertains to regulatory issues. Vendors and developers of AFIS and fingerprint analysis technologies developers in industry and academia will also gain a clearer understanding of latent fingerprint interoperability, especially as it pertains to technological issues. Examples of users and uses of these data include the following:

U.S. Congress—Congress provides support to NIJ to perform functions related to criminal justice system research, development, and evaluation. In fact, the FY 2012 Appropriations Bill (H.R. 2112) signed into law directs NIJ to support activities that maximize the value of forensic evidence. Developing a rich and full understanding of nationwide AFIS interoperability to fully leverage all available AFIS resources to match latent prints is directly related to that goal. This survey and analysis of the LFIOS data can be used to inform Congress to provide a better sense of what sort of Federal support might be required to enhance AFIS interoperability to improve criminal justice processes to protect the American public.

National Institute of Justice—NIJ will be a primary consumer of the information provided by the proposed data collection to help identify research priorities in the areas of biometrics, interoperability, and information sharing by criminal justice practitioners as it continually updates priorities for RDT&E and other investments. NIJ maintains a primary emphasis on the needs and requirements of Federal, state, local and tribal criminal justice systems in how it prioritizes a balance between basic and applied research to support improved outcomes for practitioners.

To meet the operational challenges encountered by criminal justice practitioners, NIJ seeks input and information from representative stakeholders across the criminal justice enterprise. This material is used in part to determine technological gaps which can benefit from investment in RDT&E or other activities. NIJ has well-established programs in biometrics, forensics, and information led policing which are the primary program areas that will scrutinize the information provided by the proposed data collection. NIJ regularly releases competitive solicitations that address identified gaps from which Cooperative Agreements are generally awarded after peer review of applications to performers who provide innovative proposals that address the requirements identified in the solicitations.

NSTC Subcommittee on Forensic Science—The Subcommittee on Forensic Science (SoFS) serves as the Federal interagency coordinating body to advise and assist the Committee on Science (COS), the National Science and Technology Council (NSTC), and other coordination bodies of the Executive Office of the President on policies, procedures, and plans related to forensic science in the national security, criminal justice, and medico-legal death investigation systems at the federal, state, and local levels. This Subcommittee was created to assess the practical challenges of implementing recommendations in the 2009 NRC report *Strengthening Forensic Science in the United States: A Path Forward* and to advise the White House on how best to achieve the goals outlined in that report. The SoFS is charged with developing practical and timely approaches to enhancing the validity and reliability of the forensic sciences. This includes assisting regional, state and local entities to recognize and adopt best practices in forensic sciences, and to facilitate a strong coordinated effort across federal agencies to identify and address important federal policy, program, and budget matters.

Latent Print AFIS Interoperability Task Force—In response to the NRC’s recommendation related to AFIS interoperability, SoFS chartered an interagency task force on latent print AFIS interoperability. The overarching goal of the Latent Print AFIS Interoperability Task Force (the “Task Force”) is to coordinate the development and execution of a strategic plan and roadmap that identifies long and short-term goals which enhances latent print AFIS interoperability in the United States. The plan will identify and propose solutions to address critical issues such as technology, training, governance, usage, and standard operating procedures. The Task Force supported an AFIS interoperability policy round-table to identify opportunities to enhance interagency cooperation and cross-jurisdictional information sharing, which will enhance the information provided by the proposed data collection. The Task Force will also coordinate the adoption of standards related to latent print AFIS interoperability.

The Task Force has expressed immediate interest in the information collected to help develop its strategic plan to enhance latent print AFIS interoperability in the United States. The SoFS Standards, Practices and Protocols Interagency Working Group (SPP-IWG) identified subject matter experts from organizations such as the Scientific Working

Group on Friction Ridge Analysis, Study and Technology (SWGFAST), the National Institute of Justice Working Group on AFIS Interoperability, and the NIST Biometrics Technology Information Access Division. Other members will include nominations from the SoFS to appropriately complement expertise and perspective on the Task Force.

The Task Force roster includes the following personnel (current as of November 16, 2011):

Lauren Cooney (Co-Chair)  
U.S. Army Biometrics Identity Management Agency

Melissa Taylor (Co-Chair)  
National Institute of Standards and Technology

Wesley Grose  
Los Angeles County Sheriff's Department

John "Dusty" Clark  
Western Identification Network

Charlie Schaeffer  
Florida Department of Law Enforcement

Terry Green  
FBI Laboratory Division

Mike Lesko  
Texas Department of Public Safety

Randy Hanzlick  
Emory University

Leo Norton  
Los Angeles County Sheriff's Department

Mark Greene  
National Institute of Justice

Mark Zabinski  
Rhode Island State Crime Laboratory

Lisa Vincent  
FBI Criminal Justice Information Services (CJIS) Division

Kenneth Blue  
Tennessee Bureau of Investigation

Anne May  
Department of Homeland Security, US-VISIT

Michael Garris  
National Institute of Standards and Technology

Joe Polski  
International Association for Identificaiton

Kathryn Suchma  
FBI Terrorist Explosive Device Analytical Center (TEDAC)

The Task Force has also consulted additional subject matter experts from NIST:

Mike Indovina  
National Institute of Standards and Technology

Martin Herman  
National Institute of Standards and Technology

The Task Force developed a latent print AFIS interoperability Roadmap document that highlights a number of the issues that hinder interoperability at the State and local levels through interviews and case studies. It provides a framework to understand the challenges, and it is anticipated that the data collection proposed here will complement that effort by providing a comprehensive qualitative and quantitative basis to make specific decisions to improve interoperability in an equitable way based on evidence and data.

State and local law enforcement agencies—Law enforcement and public safety agencies including State Investigation Bureaus and forensics laboratories that maintain an AFIS will not only provide the respondent population but would also benefit from the information provided by the survey. Other State and local law enforcement agencies that may not have AFIS resources in house will also benefit by better understanding the current state of interoperability revealed by the survey data.

Federal Bureau of Investigation—The FBI has invested heavily over the years to develop and deploy AFIS technology and latent collection and examination methods. Components within the FBI that would benefit from the information provided by the survey include the Criminal Justice Information Services (CJIS) Division which is responsible for fingerprint storage and searching. The Integrated Automated Fingerprint Identification System (IAFIS) and Next Generation Identification (NGI), which incorporates IAFIS with improved functionalities, are both CJIS systems. Other components including the field offices would benefit as appropriate.

State legislatures, municipal councils, and city and county managers—Policymakers and budget planners would also benefit from the information provided by the survey. Interoperability can be influenced by both policy and technology, and any improvements suggested by the survey data will require close assessment by State and local government bodies to coordinate efforts to improve AFIS interoperability.

Federal, State, local, and tribal correctional institutions—Corrections administrators would benefit from the information provided by the survey. Correctional institutions often maintain an AFIS to keep track of offenders processed and housed in their facilities. These AFIS systems can also be included in latent fingerprint searches to resolve criminal cases.

Federal, State, local, and tribal medical examiners and coroners—Medical examiners and coroners would benefit from the information provided by the survey as it pertains to connecting deceased individuals to unsolved latent fingerprints.

Federal Judiciary, State and local courts—The various actors within the judicial system such as judges and attorneys who handle criminal cases involving latent fingerprints would benefit from the information provided by the survey for educational purposes. Outside of intelligence or national security operations, latent fingerprint evidence that is part of a criminal investigation will ultimately be adjudicated in a courtroom.

Office of Justice Programs—Components in OJP other than NIJ could benefit from the information provided by the survey. The Bureau of Justice Assistance (BJA) provides support at the State, local, and tribal levels to improve the criminal justice system. BJA provides national leadership in criminal justice policy, training, and technical assistance to further the administration of justice and coordinates and administers all state and local grant programs. The Bureau of Justice Statistics (BJS) can utilize the data in the context of the statistics it collects to better understand the criminal justice system. The results of this survey will provide baseline input for analysis and improvement of state and local AFIS interoperability over time.

Community Oriented Policing Services Office—The COPS Office could benefit from the information provided by the survey. COPS offers grants to help law enforcement agencies to hire more community policing officers, to acquire new technologies and equipment, to hire civilians for administrative tasks, and to promote innovative approaches to solving crime.

U.S. Department of Justice (other)—Other agencies within DOJ with a stake in criminal investigations that might benefit from information provided by the survey include the Criminal Division; the Office of the United States Attorneys; the Drug Enforcement Administration; and the Bureau of Alcohol, Tobacco, Firearms, and Explosives.

U.S. Department of Homeland Security—Different agencies within DHS collect fingerprints from individuals that are housed in databases against which latent fingerprints can be searched from within to meet DHS mission objectives or from without

given appropriate sharing agreements are in place. Some DHS components also employ latent examiners. DHS can make use of the information provided by the survey to gain a better understanding of how their resources could be made more interoperable to support latent fingerprint searches. Some of the agencies within DHS that would benefit from the information provided by the survey include US-VISIT, Immigration and Customs Enforcement, Customs and Border Protection (which includes Border Patrol), the U.S. Coast Guard, and the Science and Technology Directorate.

U.S. Department of Defense—Different agencies within the DoD collect fingerprints from individuals that are housed in databases against which latent fingerprints can be searched from within to meet DoD mission objectives or from without given appropriate sharing agreements are in place. DoD components also employ latent examiners. DoD can make use of the information provided by the survey to gain a better understanding of how their resources could be made more interoperable to support latent fingerprint searches. Some of the agencies within DoD that would benefit from the information provided by the survey include the U.S. Army Biometric Identity Management Agency (BIMA), the U.S. Army Criminal Investigation Laboratory (USACIL), the Naval Criminal Investigative Service (NCIS), the Air Force Office of Special Investigations (OSI), Technical Support Working Group (TSWG) Investigative Support and Forensics, and Defense Biometrics and Forensics.

Intelligence Community—Various agencies within the IC that support intelligence and counter terrorism missions would benefit from the information provided by the survey.

National Institute of Standards and Technology—NIST has long been active in developing fingerprint standards and biometrics research and would benefit from the information provided by the survey.

Various stakeholders in industry and academia—Researchers and vendors in fingerprint and AFIS technology would benefit from the information provided by the survey. The RDT&E and subsequent operational deployment of such AFIS systems has required a sustained effort over the course of decades comprised of a community made up of criminal justice practitioners, forensic scientists, computer scientists, engineers, and technologists with specific training in biometrics, pattern recognition, algorithm design, network architecture, and related fields. The NRC report specifically called out vendors as being an integral part of achieving nationwide AFIS interoperability, which is an important issue since many of the algorithms and systems used to compare fingerprint patterns are proprietary. LFIOS will help illuminate the extent to which technical barriers are hindering interoperability by collecting data regarding actual AFIS usage by forensic practitioners.

### 3. Use of Information Technology

In an effort to reduce respondent burden, the Latent Fingerprint Interoperability Survey uses an online form that is straightforward and easy to comprehend. Both the content and

form of the proposed data collection were developed over several months with the input and feedback of members of the Task Force, many of whom are from the targeted respondent population. Personnel from the Enterprise Integration Center (e-IC) in the Mission, Cyber, and Technology Solutions Group from ManTech International Corporation who staff the NIJ Sensors, Surveillance, and Biometrics Center of Excellence have developed the online and print survey questionnaire. ManTech will host the online survey and house the data during the survey collection period.

NIJ received a great deal of constructive feedback to clarify, reduce, or consolidate the number of questions. NIJ also consulted with the Bureau of Justice Statistics (BJS) on their efforts to collect data from respondent populations within the criminal justice community. NIJ also received feedback regarding the user experience of the web and print forms. The web form allows for respondents to save answers and return to the survey at a later time if all the responses cannot be provided at one time. Every effort was made to make the questions clear, relevant, and concise. Wherever possible, efforts were made to:

- Use consistent response methods were used.
- Questions are sequenced from the general to the specific.
- Where closed questions are used, every effort was made to develop exhaustive and mutually exclusive response alternatives.
- Questions with similar content are placed together in the questionnaire and every effort has been made to decrease the amount of time necessary to take the survey.
- The online survey is consistently formatted and easy to read and utilize.

Since a web survey is being implemented, responses will be obtained through the use of internet-based information technology. Using a web-based survey will:

- Facilitate survey administration by reducing the amount of time and effort to distribute the survey and collect the survey responses.
- Decrease the need for data cleaning since where possible the questions and responses have been crafted such that only valid responses can be entered.
- Responses will be automatically stored in an electronic database which will decrease the amount of effort to record the results and increase the ease of analysis.

#### 4. Efforts to Identify Duplication

NIJ has consulted with other groups working on latent fingerprint interoperability to determine if this proposed data collection has been duplicated by any other program or agency. No other effort was identified that provides the comprehensive data to establish the level of interoperability of automated fingerprint identification systems maintained by State and local law enforcement agencies regarding the electronic exchange of latent fingerprint data to support criminal investigations.

Table 1 below shows the funding NIJ has provided since FY 2005 through FY 2011 for research toward latent fingerprints. Three in the area of interoperability are highlighted

in bold. In the two awards from FY 2010, NIJ is supporting efforts by the Law Enforcement Standards Office (OLES) at NIST through an Interagency Agreement that will complement the LFIOS, however none of these efforts have a survey component that seeks information from practitioners on a nationwide scale.

NIJ through NIST is sponsoring an effort to develop a Latent Interoperability Transmission Specification (LITS). Through this effort, OLES is supporting Noblis for drafting, vetting, and delivering three documents designed to enable vendor-neutral latent AFIS interoperability, all built upon the ANSI/NIST Extended Feature Set (EFS) definitions for fingerprint/palmprint features: Latent Interoperability Transmission Specification (LITS), EFS User Profiles, and EFS User Guidelines. OLES and Noblis are also investigating interoperability with respect to latent fingerprint processing through case studies and interviews with select jurisdictions. The scope of this effort, however, does not include collecting data from every State and local agency that maintains an AFIS regarding AFIS usage with respect to latent fingerprints as LFIOS does.

The award from FY 2006 does not provide any guidance with respect to AFIS interoperability, so there is no duplicative effort there. It reports the findings and recommendations of the International Association for Identification (IAI) Standardization II Committee which focused on matters related to friction ridge analysis. In particular, the group was charged with re-examining the following conclusion of the IAI Standardization Committee from 1970 to 1973 regarding fingerprint matching: "...no valid basis exists at this time for requiring that a pre-determined minimum number of friction ridge characteristics must be present in two impressions in order to establish positive identification." The Committee recommended that the IAI replace the 1973 Position Statement to read: "There currently exists no scientific basis for requiring a minimum amount of corresponding friction ridge detail information between two impressions to arrive at an opinion of single source attribution." The Committee also recommended a variety of proposals to further advance friction ridge science.

Table 1. NIJ Awards for Latent Fingerprints and/or Interoperability for FY 2005 through FY 2011.

Smartphone Technology for Capturing Untreated Latent Fingerprints			EOIR
Technologies, Inc.	2011-DN-BX-K536	\$208,085	
Latent Print AFIS Interoperability Technical Working Group			NIST Office of Law
Enforcement Standards	2010-DN-R-7121	\$280,000	
NIST/NIJ Expert Working Group on Human Factors in Latent Print Analysis			NIST
Office of Law Enforcement Standards	2010-DN-R-7121	\$180,000	
Development of Latent Print AFIS Interoperability Standards			NIST Office of Law
Enforcement Standards	2010-DN-R-7121	\$700,000	
Web-based Testing and Quantification of Cognitive Suitability for Conducting Latent Print Examination			NIST Office of Law Enforcement Standards
	2010-DN-R-7121	\$273,000	



Developing Methods to Improve the Quality and Efficiency of Latent Fingermark Development by Superglue Fuming The University of Tennessee 2010-DN-BX-K202 \$258,816

Acquisition of Fingerprint Topology Using Columnar Thin Films The Pennsylvania State University 2010-DN-BX-K232 \$470,216

Miami-Dade Research Study for the Reliability of the ACE-V Process: Accuracy, Precision, Reproducibility and Repeatability in Latent Fingerprint Examination Miami Dade County 2010-DN-BX-K268 \$139,530

Improving the Understanding and the Reliability of the Concept of "Sufficiency" in Friction Ridge Examination The Pennsylvania State University 2010-DN-BX-K267 \$479,412

Quantified Assessment of Contextual Information in Latent Friction Ridge Impression Analysis Related to Accuracy and Reliability of Subsequent Examiner Suitability Determinations Complete Consultants Worldwide, LLC 2010-DN-BX-K270 \$452,050

Quantitative Measures in Support of Latent Print Comparison The Research Foundation of State University of New York 2009-DN-BX-K208 \$498,784

Quantifying the Effects of Database Size and Sample Quality on Measures of Individualization Validity and Accuracy in Forensics George Mason University 2009-DN-BX-K234 \$974,981

Specific Heat Capacity Thermal Function of Cyanoacrylate Fingerprint Development Process Mountain State University 2009-DN-BX-K196 \$207,731

Application of Spatial Statistics to Latent Print Identifications: Towards Improved Forensic Science Methodologies Western Oregon University 2009-DN-BX-K228 \$685,754

Establishing the Quantitative Basis for Sufficiency: Thresholds and Metrics for Friction Ridge Pattern Detail Quality and the Foundation for a Standard Virginia Polytechnic Institute and State University 2009-DN-BX-K229 \$854,907

Error Rates for Latent Fingerprinting as a Function of Visual Complexity and Cognitive Difficulty University of California at Los Angeles 2009-DN-BX-K225 \$866,674

The Information Content of Friction Ridge Impressions as Revealed by Human Experts Indiana University 2009-DN-BX-K226 \$424,285

Quantified Assessment of AFIS Contextual Information on Accuracy and Reliability of Subsequent Examiner Conclusions Complete Consultants Worldwide, LLC 2009-DN-BX-K224 \$348,770

Latent Print AFIS Interoperability Technical Working Group NIST Office of Law Enforcement Standards 2008-DN-R-121 \$340,000

NIST/NIJ Expert Working Group on Human Factors in Latent Print Analysis NIST Office of Law Enforcement Standards 2008-DN-R-121 \$435,000

IR-Fluorescence Imaging of Latent Fingerprints on Human Skin Oak Ridge National Laboratory 2008-IJ-R-134 \$440,013

Electronic Fingerprint Development Device "Fuma-Room" Mountain State University 2007-DN-BX-K242 \$60,916

Automatic Fingerprint Matching Using Extended Feature Set Michigan State University 2007-DN-BX-0005 \$15,541

Cultivating Methods to Enhance the Quality of Aged Fingerprints Developed by  
 Cyanoacrylate Fuming The University of Tennessee 2006-DN-BX-K031  
 \$126,505

Breakable Cartridge Cyanocrylate Fingerprint Development System/3 Port Sublimation  
 Chamber Mountain State University 2006-DN-BX-K037 \$82,815

Interoperability of AFIS Systems for Latent Print Searches International Association for  
 Identification 2006-DN-BX-K249 \$179,943

Quantitative Assessment of the Individuality of Friction Ridge Patterns Research  
 Foundation of the State University of New York, Amherst 2005-DD-BX-K012  
 \$596,450

Friction Ridge Analysis Research Ultra Scan Corporation 2005-DD-BX-K056  
 \$126,601

Latent-Print Detection by Macro-Raman Imaging Oak Ridge National Laboratory  
 2005-DD-R-094 \$299,000

Improving Methods for Fingerprint Development on Hand-guns U.S. Department of  
 Defense, Technical Support Working Group 2005-IJ-R-051 \$70,000

Adding Human Expertise to the Quantitative Analysis of Fingerprints Indiana  
 University 2005-MU-BX-K076 \$431,234

Analysis of Level III Characteristics at High Resolutions International Biometric  
 Group, LLC 2005-MU-MU-K063 \$461,495

## 5. Efforts to Minimize Burden

The Latent Fingerprint Interoperability Survey collects data that are available from criminal justice agencies that maintain an AFIS. The arrangement of the items on the form reflects a logical flow of information to facilitate comprehension of requested items and to reduce the need for follow-up. NIJ also provides several modes by which respondents may submit data: by web, fax, or mail response.

The design of the proposed data collection form has also been developed in an effort to minimize burden on respondents. The survey is divided into three groups of questions: Core (LFIOS-C), State (LFIOS-S), and local (LFIOS-L). The Core survey questions are similar to all agencies that maintain an AFIS and request basic information about an agency's AFIS usage with respect to latent fingerprints. The State survey requests specific AFIS usage information relevant only to State agencies that maintain an AFIS. The Local survey requests specific AFIS usage information relevant only to Local agencies that maintain an AFIS. State respondents do not need to respond to Local questions and Local respondents do not need to respond to State questions.

The primary manner to complete LFIOS is online, however print or portable electronic document formats are available to respondents who request them. Due to the complex nature of the subject matter, each respondent agency will likely require more than one person to complete the survey. As a result, the preferred online format has integrated into

it functionality to save answers and return later to questions with no response indicated to make it easy for multiple individuals to complete the survey if necessary.

## 6. Consequences of Not Conducting or Less Frequent Collection

The motivation for developing the proposed data collection was primarily due to the absence of comprehensive and quantifiable data regarding State and local AFIS interoperability regarding latent fingerprints. LFIOS will provide timely information on a crucially important topic, and until this data collection effort is complete, a huge data gap regarding interoperability will remain. At present, current information is anecdotal and incomplete and not in a form that can be analyzed in a statistical manner. Although enormously useful, the efforts through OLES outlined in Section 4 will not yield the kind of quantitative data on a nationwide scale that LFIOS will.

Absent the LFIOS, NIJ would only be able to provide the same information LFIOS could regarding State and local AFIS usage after extensive interviews with appropriate agencies if a survey structure was not in place. Based on the estimates of the number of agencies that maintain an AFIS that support latent fingerprint searches, it would likely require an FTE years of full-time work to complete this assignment, after which time the information reported for the first agencies interviewed would be at risk of being out of date.

## 7. Special Circumstances

Data collected in the survey should be considered Law Enforcement Sensitive and will be handled in a responsible and secure manner. Collecting this data is justified and extremely important since the State and local agency AFIS resources and usage details regarding both technology and policies that impact interoperability are sensitive in nature. Without a complete knowledge of all the information, it will be very challenging to develop a proper understanding of AFIS interoperability as it pertains to latent fingerprints on a national scale. While none of the requested data is classified, the raw data will be treated as for official use only and not for public release until a thorough analysis can be conducted. Knowledge products such as analyses produced from the data will be considered for dissemination to the stakeholder community since those materials will represent aggregate data that is not agency-specific.

Collection of sensitive data will be done in a secure manner. Personnel from the Enterprise Integration Center (e-IC) in the Mission, Cyber, and Technology Solutions Group from ManTech International Corporation who staff the NIJ Sensors, Surveillance, and Biometrics Center of Excellence have developed the online and print survey questionnaire. ManTech will host the online survey and house the data during the survey collection period. This organization is an excellent choice to conduct this survey as they are familiar with the requirements of United States Government clients such as those from the DoD who have strict IT security requirements. ManTech has developed and maintained numerous collaboration web portals for various DoD and Federal customers.

In addition to the core capabilities as collaboration portals, these tools often included balloting and polling functionality.

Under ManTech hosting policies, access to the survey will be granted on a need-to-know basis by the project task leader responsible for data collection. The survey will be taken through a password protected website and all communication will use HyperText Transfer Protocol Secure (HTTPS). In order to prevent unauthorized access and restrict usage to authorized users, users will be required to register with the site prior to accessing the survey. Password communication will be secured with Windows Authentication Services. Once a user has registered, the system will give them permission to take the survey and review and/or edit their own response; they may not access the surveys of others. These restrictions are enforced by the survey software (Microsoft SharePoint) and permission settings within the associated directory services. The ManTech server used for this survey has a firewall in place to restrict unsolicited traffic and is only accessible through the https protocol. The server is actively maintained and patched by system administration personnel. As a further precaution, survey data and user accounts are stored on different systems. Basic physical security measures are also in place as the server is in an always locked room in a facility with a security force.

In addition, there is no circumstance in which a respondent would respond more than once and provide more data than on the survey form.

#### 8. Public Comments and Consultations

The research under this clearance is consistent with the guidelines in 5 CFR 1320.6. The 60-day and 30-day notices for public comment have been published in the Federal Register (Volume 76, Number 148, Page 46,328 on August 2, 2011 and Volume 76, Number 201, Page 64,383 on October 18, 2011, respectively). In developing the data collection procedures, NIJ has consulted with Federal, State, and local latent examiners, AFIS managers, criminal justice practitioners and administrators, and subject matter experts to improve the questionnaire and the survey overall. Within the 60-day comment period, draft versions of the data collection instrument were also publicly presented at the International Association for Investigation (IAI) in August 2011 in Milwaukee, WI and the Biometrics Consortium Conference (BCC) in September 2011 in Tampa, FL. These two annual conferences attract a variety of stakeholders who will benefit from the data collection.

As a result of outreach efforts, the following individuals provided feedback regarding the proposed data collection effort. A brief questionnaire was developed to assist respondents with providing feedback in the four principal areas outlined in the Federal Register notices (see Attachment 6).

Vicki Farnham  
New Mexico Department of Public Safety  
Santa Fe, NM

Angela Pratt  
Bureau of Alcohol, Tobacco, Firearms, and Explosives  
San Francisco, CA

James P. Martin  
Rutherford County Sheriff's Office  
Murfreesboro, TN

Katie Suchma  
Federal Bureau of Investigation  
Terrorist Explosive Device Analytical Center  
Quantico, VA

Gary Stone  
IB  
Biometrics Identity Management Agency  
Clarksburg, WV

Robin Jones  
Bureau of Alcohol, Tobacco, Firearms, and Explosives  
Washington, DC

William G. Doyne  
U.S. Army Criminal Investigation Laboratory  
Forest Park, GA

Wade Anderson  
King County Sheriff's Office  
Seattle, WA

Kenneth Woods  
U.S. Immigration and Customs Enforcement  
McLean, VA

Karen Ford  
Orange County Sheriff's Department  
Orange County Crime Laboratory  
Santa Ana, CA

Carol Gillespie  
King County Sheriff's Office  
Seattle, WA

Mary Ann Pelletier  
New York State Division of Criminal Justice Services  
Albany, NY

Deneen Flowers  
King County Regional AFIS  
Seattle, WA

Cindy Fangour  
King County Sheriff's Office  
Seattle, WA

Carl J. Carlson  
Kansas City Police Crime Laboratory  
Kansas City, MO

Roxanne S. Brooks  
Indiana State Police  
Indianapolis, IN

Ed Downing  
Rhode Island State Crime Laboratory  
Kingston, RI

B. Scott Swann  
Office of the Director of National Intelligence  
McLean, VA

Jozi Scholl  
Kern County Sheriff's Office  
Bakersfield, CA

Steven Johnson  
Biometrics Identity Management Agency  
Clarksburg, WV

Laura Tierney  
U.S. Immigration and Customs Enforcement  
McLean, VA

Jeff Smith  
Private Consultant  
Castle Rock, CO

Jamie Robinson  
Mississippi Crime Laboratory  
Batesville, MS

Kenneth Blue  
Tennessee Bureau of Investigation  
Nashville, TN

Mark Zabinski  
Rhode Island State Crime Laboratory  
Kingston, RI

John D. Clark  
Western Identification Network  
Rancho Cordova, CA

Randy Hanzlick  
Fulton County Medical Examiner  
Atlanta, GA

Greg L. Soltis  
Federal Bureau of Investigation  
Laboratory Division  
Quantico, VA

Ed German  
Newington, VA

Lauren Cooney  
Biometrics Identity Management Agency  
Clarksburg, WV

George Kiebuszinski  
Noblis  
Falls Church, VA

Austin Hicklin  
Noblis  
Falls Church, VA

John Mayer-Splain  
Noblis  
Falls Church, VA

David Sobotka  
Lincoln Police Department  
Lincoln, NE

Steve Koch

Kansas Bureau of Investigation  
Topeka, KS

M. Dawn Watkins  
Palm Beach Gardens Police Department  
Palm Beach Gardens, FL

Stan Slonina  
Kentucky State Police AFIS Section  
Frankfort, KY

Charles D. Bramlett, Jr.  
West Columbia Police Department  
West Columbia, SC

In addition to the public comments, various staff at the Bureau of Justice Statistics (BJS) were consulted prior to survey development to find out if the information requested in the proposed data collection was already collected by any of their current collections and to discuss the Paper Reduction Act clearance process. After initial review of the package by OMB, BJS was consulted to discuss different approaches to pretesting. In all cases, interaction with BJS has been extraordinarily positive and helpful and NIJ will continue to consult with its experienced statistical sister agency on issues relevant to this proposed data collection.

9. Provision of Payments or Gifts to Respondents

Participation in the survey is voluntary and no gifts or incentives will be given.

10. Assurance of Confidentiality

The information gathered in this data collection shall be used only for research purposes. The data collected through LFIOS represent institutional characteristics of publicly-administered or funded facilities and are, therefore, in the public domain. However, data collected in the survey should be considered Law Enforcement Sensitive and will be handled in a responsible and secure manner. Collecting this data is justified and extremely important since the State and local agency AFIS resources and usage details regarding both technology and policies that impact interoperability are sensitive in nature. Without a complete knowledge of all the information, it will be very challenging to develop a proper understanding of AFIS interoperability as it pertains to latent fingerprints on a national scale.

While none of the requested data is classified, the raw data will be treated as for official use only and not for public release until a thorough analysis can be conducted. Minimal biographic information will be collected in the survey form: Only information that pertains to a person's role and experience within the law enforcement agency is requested from the primary point of contact (See Section B.1.) in case there are follow-up questions



regarding the responses. Questions regarding the number of years of experience with AFIS and latent prints (LFIOS-C, Section 1) is requested to determine whether any changes to the level of language and any jargon used will be required in future versions and to determine if experience of the POC has any impact on the reported data. Any data or edited data made available for public use will not contain any individually identifiable information. Knowledge products such as analyses produced from the data will be considered for dissemination to the stakeholder community since those materials will represent aggregate data that is not agency-specific.

In addition, the questions on Latent Print Personnel (LFIOS-C, Section 10) are relevant to latent print interoperability and were developed as a result of the pretesting (See Section B.4). The experience, training, and qualifications of staff sending and receiving fingerprint information from outside agencies was perceived to potentially have an impact on how information is shared among jurisdictions, which could have important implications to criminal justice practice and interoperability. The questions asked do not request any personally identifiable information, however, but rather request de-identified aggregate agency-level information.

#### 11. Justification for Sensitive Questions

No sensitive information of a personal nature will be collected.

#### 12. Estimate of Respondent's Burden

The burden estimate is 3 hours per respondent (see Revised Survey below in this section for more information), which comes to a total of 1200 estimated burden hours. An introductory statement with a set of instructions to complete the LFIOS-C survey and either LFIOS-S or LFIOS-L is provided at the start of the questionnaire. This includes the following burden statement:

##### Burden Statement

Under the Paperwork Reduction Act, we cannot ask you to respond to a collection of information unless it displays a currently valid OMB control number. The survey will be sent to law enforcement agencies with an automated fingerprint identification system (AFIS) in 51 state jurisdictions, including the 50 States and the District of Columbia, and local jurisdictions. The average time required for each agency to complete the survey is estimated at 3 hours. Send comments regarding this burden estimate or any aspect of this survey, including suggestions for reducing this burden, to the Director, National Institute of Justice, 810 Seventh Street, NW, Washington DC 20531. Do not send your completed form to this address.

An Invitation Letter from the NIJ Director will be sent by email on his behalf to the Nation's estimated 400 State and local law enforcement agencies that house and maintain an AFIS used for latent fingerprint searching in the course of criminal investigations to participate in the survey (See Section B.1. for more information on the frame). The signed letter included as a part of the PRA submission package (See attached "Invitation

Letter”) will be attached to the email, and the body of the email will copy the text of the letter and include the above Burden Statement along with any assigned OMB control number as well.

### Original Survey

The estimated burden of the original version of the survey was reported for the LFIOS in the 60-Day and 30-Day Notice of Information Collection Under Review. From the feedback provided during the public comment periods, 29 respondents provided time estimates ranging from 45 minutes to 120 minutes to complete the survey. Below are basic statistics to determine the burden estimate:

Number of burden estimates: 29

Mean: 67 minutes

Median: 60 minutes

Mode: 60 minutes

A reasonable estimate is that it will take an agency approximately one hour to complete the survey. If 400 agencies are canvassed, the total burden will amount to about 400 man hours of effort, which agrees with the upper range reported in the Federal Register Notices (Note: the 60-Day and 30-Day FRNs mistakenly reported the burden estimate in minutes, not hours. Instead of 21,000 to 24,000 hours, they should read 350 to 400 hours).

Keeping the respondent burden to a minimum has been an important goal during the development of the survey. Iterative input from practitioners and subject matter experts regarding the survey content, wording, and length so that the questionnaire is best targeted to the individuals in the law enforcement agency best suited to provide the needed information such as AFIS managers and latent print examiners. Due to the complex nature of the subject matter, each respondent agency will likely require more than one person to complete the survey. As a result, the preferred online format has integrated into it functionality to save answers and return later to questions with no response indicated to make it easy for multiple individuals to complete the survey if necessary, which minimizes the burden on any one person.

### Revised Survey

As noted in Section A.2, the number of questions increased in the revised version, however half of the questions are Yes/No questions designed to be basic “quick recall” queries to minimize any associated increase in burden. About two-thirds of the Yes/No questions “gate” one or more other questions, so the actual number of questions a respondent answers may be far less than the total inventory. In almost all cases, the fill-in-the-blank questions are seeking numerical information, such as the number of searches conducted in 2011, and all of those types of questions are gated by a Yes/No gate question asking if such records exist. If it is reported that the records do not exist, no numerical data is collected.

Based on the revisions made to LFIOS as a result of pretesting, it is anticipated that the time to complete has increased from the original version. Both the 2006 and 2008 Survey of State Criminal History Information Systems by the Bureau of Justice Statistics have estimated burdens of 3 hours. While only a State-level survey, it provides a relevant point of comparison since the information requested is about and contained in criminal justice information systems in current use. It is unclear whether the burden of LFIOS has tripled to 3 hours like the Survey of State Criminal History Information Systems, nevertheless placing 3 hours as a conservative estimate is reasonable until demonstrated otherwise.

13. Estimate of Cost Burden

One set of instructions to complete the LFIOS-C survey and either LFIOS-S or LFIOS-L will be sent by email to the Nation’s estimated 400 State and local law enforcement agencies that house and maintain an AFIS used for latent fingerprint searching in the course of criminal investigations. Questionnaires and a self-addressed stamped envelope are mailed to respondents if requested. The information requested is normally maintained electronically as administrative records in the law enforcement agencies and should be available to the appropriate personnel. The only costs respondents will incur are costs associated with their time. Other than these costs, there are no additional costs to the respondent. The estimated cost for all surveys is \$50 per hour. The total respondent cost for the entire LFIOS collection is \$60,000.

14. Cost to Federal Government

This PRA clearance request to OMB encompasses a survey collection (LFIOS-C, LFIOS-S, and LFIOS-L) that accounts for unique costs to the government. Currently, the division of labor for the data collection is as follows: ManTech develops the survey questionnaire, conducts outreach to respondent population, conducts follow-up, collects the data, maintains and updates the website and database, prepares a dataset for NIJ analysis, and performs basic analysis. NIJ staff provide oversight, coordinate with stakeholders especially at the Federal level, develop all materials required for OMB clearance, analyze the data, prepare statistical tables, write reports based on these data, disseminate and report results, and make data available for stakeholder analysis.

Based upon 2012 NIJ salaries and expenses and ManTech expenditures related to this project since FY 2011 Q2, the estimated costs to the government associated with this data collection, subsequent analysis, and dissemination of results is estimated to cost the government \$504,620 over three years from FY11 through FY13. This come out to an annualized estimated cost of \$170,000. The estimated costs are divided between NIJ costs (\$30,800) and ManTech costs (\$473,820), both of which include salary, fringe, and overhead. Table 2 below shows a cost breakout:

Table 2. Estimated costs for the Latent Fingerprint Interoperability Survey

---

NIJ costs	
Staff salaries	
GS-13 Physical Science (1 month FY11)	\$7,600

GS-13 Physical Science (1 month FY12)	\$7,600
GS-13 Physical Science (1 month FY13)	\$7,600
Subtotal salaries	\$22,800
Fringe benefits (35% of salaries)	\$8,000
Subtotal: Salary & fringe	\$30,800
Subtotal: NIJ costs	\$30,800

ManTech costs FY11 – FY13 (NIJ Award # 2010-IJ-CX-K024)

ManTech costs (salaries; fringe benefits; questionnaire development; website development, maintenance, and updating; data collection; travel; email and phone outreach; data analysis; report writing; overhead)	\$473,820
Subtotal: ManTech costs	\$473,820

Total estimated costs FY11 – FY13 \$504,620

15. Reason for Change in Burden

This is a new data collection, so all burden estimates are original.

16. Anticipated Publication Plan and Schedule

Anticipating OMB approval in FY 2012 Q2, respondents will be contacted on or about April 1, 2012 by email with a link to the online LFIOS form, and the print version will be available on request. Since this is a new data collection effort that will be unfamiliar to State and local practitioners, NIJ requests that OMB permit at least one year to complete the data collection as there may be a significant need to reach out repeatedly to nonrespondent agencies. Assuming data collection will go from FY 2012 Q3 through FY 2013 Q2, it is anticipated that analysis can be completed by the end of FY 2013 which will permit time to develop any necessary NIJ solicitation directed toward projects to improve latent fingerprint interoperability in FY 2014. A basic anticipated timeline is outlined below:

Planning, preparation, and survey development	February 2011 – November 2011
Package development and submission	November 2011 – January 2012
DOJ and OMB review	January 2012 – April 2012
Pre-testing, survey revision, and resubmission	April 2012 – August 2012
DOJ and OMB review	September 2012 – October 2012
Data collection	Starting in early FY13
Data processing and analysis	Midway through FY13
Release of results to stakeholders for review	FY14

17. Display of Expiration Date

The expiration date of the OMB approval will be displayed on the web survey and survey forms.

18. Exception to the Certification Statement

There are no exceptions identified in Item 19, "Certification for Paperwork Reduction Act Submissions," of OMB Form 83-I.