## SUPPORTING STATEMENT

## A. Justification

#### 1. Necessity of Information Collection

Public crime laboratories are an essential component of the criminal justice system. Under Title 42 U.S.C. Section 3732, the Bureau of Justice Statistics (BJS) is directed to collect and analyze statistical information regarding the operation of the criminal justice system at the federal, state, and local levels. The Census of Publicly Funded Forensic Crime Laboratories (CPFFCL) is a recurring BJS census that provides a comprehensive, national picture of crime laboratory personnel, budgets, and other administrative information, including backlogs in requests for forensic services.

BJS conducted its first national survey of crime labs in 1998, focusing solely on agencies that performed testing of deoxyribonucleic acid (DNA). As part of its DNA Laboratory Improvement Program, the National Institute of Justice (NIJ) funded the 1998 survey to identify workload and technology issues. The National Study of DNA Laboratories was conducted again in 2001, obtaining data from 110 out of the 120 known DNA crime labs.

As the need for statistics on other forensic disciplines grew, BJS expanded the data collection to include all publicly operated crime labs. The 2002 CPFFCL captured critical baseline data on the nation's forensic services and the resources needed to complete work. Among other things, this study found that the backlog in requests for forensic services was not limited to DNA analysis. A follow-up census was conducted in 2005 to obtain updated information about the operations and workload of public crime labs nationwide and to examine changes since 2002.

Administration of the new CPPFCL is anticipated to begin in mid-2010 to the 405 publicly funded forensic crime labs operating in the United States. It will collect data on the level of work performed in 2009 and assess the areas in which additional resources are necessary. This important collection effort will update five-year-old data and introduce new inquiries designed to describe the current issues in forensic science. In addition, the 2009 CPFFCL adds flexibility to the overall instrument to better fit the heterogeneous community of publicly funded forensic labs.

As a census, this data collection effort will paint an accurate and complete picture of the state of publicly funded forensic operations in this country. There is an ever-increasing reliance on forensic evidence, as well as increasing concern over the role of the nation's forensic crime laboratories in processing the evidence and its subsequent use in legal proceedings. This reliance has sustained a need for accurate and reliable statistics on the operations of forensic crime laboratories.

The 2002 and 2005 censuses documented backlogs in requests for a wide range of forensic services, including controlled substance identification, firearms/toolmark analysis, and latent fingerprint examination. Previously, public attention had been focused almost exclusively on DNA backlogs. Complete findings are documented in the BJS reports, "Census of Publicly

Funded Forensic Crime Laboratories, 2002" and "Census of Publicly Funded Forensic Crime Laboratories, 2005" both attached to this document. (2,3)

Findings from the 2002 and 2005 censuses have been cited in many reports not the least of which is the 2009 National Research Council of the National Academy of Sciences (NRC) report, "Strengthening Forensic Science in the United States: A Path Forward." This report, which cited the 2005 CPFFCL five times, has been of paramount importance to the forensic science community, catalyzing discussion of long-present issues related to the scientific foundation of forensic analyses and the administration of forensic laboratories. (1) This NRC report led to the initiation of a White House Subcommittee on Forensic Science of the National Science and Technology Council's Committee on Science (NSTC) which was established in August, 2009 to promote the implementation of the NRC report recommendations.

At their invitation, BJS met with each of the Interagency Working Groups within the White House Subcommittee on Forensic Science between January and March 2010 to discuss the proposed data collection, the Subcommittee's data needs, and how the 2009 CPFFCL data can be used to inform the Subcommittee as it establishes recommendations to address the NRC report.

The 2009 CPFFCL will continue to address significant issues facing forensic crime laboratories by refining data elements from the 2005 collection to increase precision and reduce respondent burden. This study will examine changes in the backlogs for forensic requests during 2009 and the capacity of labs to process all requests within a 30-day period. As suggested by an expert panel, the 2009 collection will expand forensic functions to include specific trace evidence examinations such as explosives, paint and unknown chemical analysis, crime scene reconstruction as well as evidence collection for more efficient enumeration of forensic functions performed in modern laboratories. The survey will also provide much-needed national statistics on quality assurances in forensic crime laboratories, including lab accreditation, proficiency testing, examiner certification, employee training, and the resources devoted to research. The study will also examine advanced technologies used in the laboratory and uses of laboratory information management systems. It will also collect detailed information on pending requests and backlogs for sexual assault kits, convicted offender samples and arrestee samples that will help inform and support current programs funded by the National Institute of Justice. To continue the growth of this longitudinal data set to report on trends in workload, staffing, backlog and other administrative functions, and continue to provide the only systematic, national statistics on crime laboratory operations, it is necessary to conduct a third iteration of the census.

# 2. Uses of Information

The data collected in this program will provide government officials, forensic crime laboratory administrators, researchers and planners with national statistics relating to forensic laboratory personnel, budgets, workload, staffing and other administrative information such as outsourcing. Notable uses of the data collection series include the ongoing President's DNA Initiative, the 2009 National Research Council of the National Academies Report on forensic science and the Congressional Research Service Report for Congress Order Code RL32247 "DNA Testing for Law Enforcement: Legislative Issues for Congress". (4,5)

Information from the first two census efforts has been instrumental in support of federal and state legislation. The findings reported in "Census of Publicly Funded Forensic Crime Laboratories, 2002" were discussed in the FY '06 Commerce, Justice, Science Senate Appropriations Committee Report (see Report 109-88, 6/23/05, pp. 45-46) as evidence to justify shifting of Federal dollars for reducing forensic backlog from exclusively DNA to all areas of forensic analysis. A copy of this Committee Report can be found on the Library of Congress website at < thomas.loc.gov >. (6)

The 2009 NRC report on forensic science made a wide variety of specific recommendations to strengthen the field. This has created an environment where legislators are increasing resources for the forensic science community. It is anticipated that the 2009 CPFFCL will continue to inform policy making, planning, and appropriations at all levels of government.

This data collection series has identified the workload burden on the nation's forensic labs as well as the nature of the forensic backlog facing these labs. Another important contribution of this census is the collection of the data needed to estimate the cost of alleviating the workload and backlog burden on publicly funded crime labs. The 2009 CPFFCL will collect comprehensive data on the backlogs in multiple forensic disciplines; budget and salary data will help estimate costs of additional staffing needed to reduce any observed backlog.

## 3. Efforts to Minimize Burden

The Urban Institute (UI) is acting as the data collection agent on behalf of BJS. Respondents will be able to complete the data collection through an online interface or hard copy. UI staff will establish a help desk to assist all respondents by phone or email. Respondents that choose to use the online interface can have their answers reviewed by help desk staff in real time thereby providing timely and accurate assistance. UI and BJS staff worked to minimize the complexity of questions from previous instruments and have included an extensive help text and glossary of definitions that conform to current standard practices in crime laboratories.

It is expected that most respondents will access the data collection instrument through a webbased interface. This system will automatically save respondent's entries and will trigger skip patterns based on responses. This feature streamlines the data collection instrument. This streamlining will ensure that the questions presented are relevant to the tasks completed at each individual laboratory. The web-based system may include pre-populated fields (organization information, jurisdiction, year established, etc) for those respondents that participated in earlier collection efforts. Those that do not use the online data collection interface will be supplied with a hard copy of the census instrument. The pencil and paper version of the instrument was piloted among 9 agencies, including state, local and federal labs. The average time burden reported by the census pilot sites is 4.1 hours.<sup>1</sup> This is a change in burden from the 2005 CPFFCL; however it is a direct estimate of the time necessary to complete this data collection. For more information on the estimate of respondent burden, please see section A.12. Feedback from the pilot sites will be incorporated into the final version of the census instrument. All accepted changes are expected to lower the time burden to the respondents. Expected changes include but are not limited to: elimination of building and improvement questions, reduction of the salary categories requested, focusing solely on requests for forensic services, as opposed to measuring both cases and requests, thereby simplifying the workload section and elimination of questions on the average turnaround time for requests.

In the 2005 CPFFCL, data on workloads and backlogs was collected two different ways – (1) in terms of the number of criminal cases and (2) by the number of requests for forensic services generated by those cases. BJS conferred with lab directors and other subject matter experts to ensure1 the definitions and rules for counting cases and requests conformed to forensic laboratory standards. A case was defined as a single criminal incident or event that resulted in a request for analysis being made to a crime laboratory. Respondents were asked to provide the number of cases received during 2005 (Q14) and the number of cases backlogged at yearend (Q15).

A request was defined as each submission of evidence to a single disciplinary area within a lab. A case can involve multiple pieces of evidence and biological samples that require separate requests for forensic services. For instance, a lab could receive a request to analyze DNA samples and another request to examine drug-related evidence from the same criminal investigation. A subsequent submission of new drug-related evidence from the same crime would be counted as a third request. A request was considered backlogged if it was not completed within 30 days. To examine the capacity of labs to process all requests within a 30-day period and compare backlog levels across the different forensic disciplines, respondents were asked to provide the number of requests received, completed, and backlogged for each area of forensic analyses performed during 2005.

Both the case-level and request-level data showed that the volume of evidence received by labs exceeded the number of forensic analyses completed during 2005. Overall, requests for controlled substance identification, fingerprint examination, and DNA analysis comprised about three-quarters of the forensic backlog nationwide.

In an effort to minimize burden to respondents, the 2009 CPFFCL will only include workload questions on forensic requests. Labs will not be asked to provide the number of cases received and backlogged in addition to workload information on forensic requests. Discipline-specific request data provide a more dynamic measure that allows one to identify the evidence areas that account for the largest portion of the overall backlog and where additional resources are needed

<sup>1</sup> This number does not include the data from the FBI Laboratory. This lab is a singular entity in that it serves the entire nation and has the largest number of forensic disciplines and sub-disciplines. Their experience is unique and not appropriate to use to estimate nation-wide burden. This number does include the time burden of the ATF lab in Beltsville, MD. This laboratory is more representative, in size and services offered, of other federal labs expected to participate in this census.)

to increase the capacity to handle a growing volume of forensic requests. Counting workload in terms of requests also provides a more accurate reflection of the time and resources required to process evidence from criminal investigations that involve a variety of complex forensic procedures.

The 2009 collection instrument will ask for the overall number of requests received and backlogged at yearend for all forensic services in 2009. By changing these two data elements from case totals (items 14-15 in 2005 survey) to request totals (items D6-D7 in 2009 survey) , we will better ensure that labs provide a complete account of all requests within the discipline-specific questions (items D8-D17) and improve the reliability of the data used to compute national-level workload and backlog statistics. The 2009 census form will include detailed definitions and counting rules for forensic requests. A side-by-side comparison and narrative description of differences between the 2005 and 2009 CPFFCL questionnaires is included in his package as a separate supporting document. This document includes the changes made to the 2009 collection instrument following the pretest.

These last two edits to the instrument, the reduction of the salary categories and simplification of the workload section, are expected to be the most effective at minimizing the burden as the workload section has the largest single time burden average (2.1 hrs). It is expected that these changes will reduce the burden to responding labs by approximately 25 minutes, resulting in a total burden of about 3.75 hours.

# 4. Efforts to Identify Duplication

A review of the relevant literature and communications with directors of publicly funded crime laboratories, forensic science professional organizations and forensics consultants has confirmed that there will be no duplication of effort based on the nature and scope of this census. There is also no identified duplication with any other Office of Justice Programs data collections. This collection has the support of the National Institute of Justice, as evidenced by the attached letter of support from Michael Sheppo, Director of Office of Investigative and Forensic Services at NIJ. The information sought is not attainable from any other data source.

# 5. Minimizing Burden on Small Businesses

No information will be gathered from small businesses.

# 6. Consequences of Not Conducting Collection

This data collection is currently the only systematic, national data collection on crime laboratory administrative information. There are presently no other sources for these data. Data from the last collection effort is now five years old. Since the 2005 CPFFCL there have been resources allocated to decrease the growing evidence backlog, increase laboratory efficiency, support the hiring of staff and the construction of new laboratories. Data from this collection effort are vital to capturing the national impact of these redirected resources and to defining the needs that still exist. These data have also been used to inform policy and appropriation decisions on the local,

state and federal level. Failure to update the 2005 data will result in uninformed decisions. This information is significant to all levels of government, particularly in the face of financial constraints and the growing need for analysis of physical evidence to disrupt criminal activity and convict criminal offenders.

The 2002 and 2005 data collection efforts have helped define important scholarly research questions in both the physical and social sciences. Physical scientists have used these data to identify forensic analyses that would benefit most from new technologies designed to optimize or replace current business-as-usual techniques. Social scientists have used these data to identify forensic science disciplines with maximum impact on the criminal justice system and designed research to measure this impact. Failure to update the 2005 CPFFCL will result in an uninformed academic community and research less relevant to the current state of forensic science.

## 7. Special circumstances that would increase respondent burden

There are no special circumstances that would require a respondent to report more than once, report in less than 30 days, retain records over three years, or in any other foreseeable way increase the respondents' burden to provide the requested information.

#### 8. Federal Register Publication and Outside Consultation

BJS and UI staff has consulted the National Institute of Justice (NIJ), the American Society of Crime Lab Directors (ASCLD) and various members of the criminal justice and forensic science community regarding the 2009 Census of Publicly Funded Forensic Crime Laboratories. In December 2009, BJS hosted a workgroup meeting for the upcoming Census of Publicly Funded Forensic Crime Laboratories. Participants included representatives from professional forensic science organizations and managers from federal, state, and local crime labs. Representatives from NIJ and the FBI were also in attendance. Participants discussed a variety of topics, including survey content, data availability, clarity of instructions, methods to maximize response and ways to minimize respondent burden.

Attendees of the CPFFCL working group meeting included:

Susan Narveson Forensic Consultant

Susan Johns Forensic Consultant

Thomas Brettell Asst. Professor Cedar Crest College

Kevin Lothridge

CEO National Forensic Science Technology Center (NFSTC)

Mike Sheppo Director Office of Investigative and Forensic Services National Institute of Justice

Mark Nelson Senior Program Manager Office of Investigative and Forensic Services National Institute of Justice

Melissa Smrz Deputy Director FBI Laboratory

Beth Greene Chief of Forensic Services Florida Department of Law Enforcement President ASCLD

Greg Matheson Director Los Angeles Police Department Forensic Laboratory President elect ASCLD

Nancy LaVigne Director Justice Policy Center Urban Institute

Julie Samuels Senior Research Associate Justice Policy Center Urban Institute

Pete Marone Director Virginia Department of Forensic Services In January 2010, BJS met with DEA staff members who oversee the National Forensic Laboratory Information System (NFLIS) to discuss the key features and objectives of both data collections. The NFLIS program staff also explained their uses of BJS data and how the CPFFCL provides helpful statistical information on the operations of labs that conduct controlled substance analysis. The meeting also provided BJS with a better understanding of how the CPFFCL can help to inform drug enforcement policies and initiatives.

Between February and March 2010, the data collection instrument was pretested on a small sample of state, local, and federal crime labs. (A summary of the pretest results is included in this package as a separate document.)

Pilot test respondents included:

Robert Huston Director Allegheny County Medical Examiner's Office

Greg Czarnopys Deputy Director ATF National Laboratory Center

Melissa Smrz Deputy Director FBI Laboratory

Mike Grubb Manager San Diego Police Department Criminalistics Laboratory

Jean Stover Director Illinois – Morton Forensic Laboratory

Stephen Avedisian Director Illinois-Metro-East Forensic Laboratory

Tom Barnes Director OSP Portland Metro Laboratory

Jeff Ban Manager Virginia Department of Forensic Sciences Nancy Crump Director Phoenix Police Department Forensic Laboratory

In addition to the expert roundtable and the pilot test sites, UI and BJS staff addressed the following interagency working groups from the White House Subcommittee on Forensic Science of the National Science and Technology Council's Committee on Science:

Standards, Practices and Protocols Education and Ethics Certification, Accreditation and Licensing Research, Development, Test and Evaluation

## 9. Provision of Payments or Gifts to Respondents

BJS and UI will not provide any payment or gift of any type to respondents. Respondents participate in the survey on a voluntary basis.

## 10. Assurance of Confidentiality

The 2009 CPFFCL will offer no assurances of confidentiality to respondents. Labs will be advised that the CPPFCL data are being collected for statistical purposes under Title 42 USC 3735 and 3789g. The study is being conducted to produce national-level information on the operations of the more than 400 federal, state, and local forensic crime labs during 2009. Although no comparisons of individual labs will be made in the BJS statistical reports, all census data (including agency names) will be made available for public use. 1No information on individual criminal cases will be collected through the 2009 census.

An introductory letter from BJS will be sent to the Director of each laboratory to inform respondents that the data are being collected for statistical purposes and that participation in the Census is voluntary. We are requesting contact information (person's name, job title, email address, etc) for the individual who completes the questionnaire in case follow up or clarification is needed regarding his or her responses. This personal contact information will not appear in any BJS reports or public use data files.

#### 11. Justification for Sensitive Questions

There are no questions of a sensitive nature included in the data collection.

# 12. Estimate of Respondent Burden

The CPFFCL form will be sent to approximately 405 publicly funded forensic crime laboratories in the United States. The average time required for each agency is 4.1 hours, the total respondent burden is estimated at 1,660.5 hours. Respondents will be asked to respond once. The estimated burden was calculated from responses of eight laboratories that pretested a pilot version of the 2009 census. These eight laboratories varied in level (municipal, state, federal) and jurisdiction

type (urban, suburban, rural).

The survey form, in most cases, will be filled out by a crime laboratory manager (e.g., lab director or supervisor), equivalent to the GS-13 / 01 base level (\$71,674 per year). The cost to the respondent laboratory would be about \$141.28 per survey form. For all respondents combined, the approximate cost would be \$57,218.59. However this estimate is an upper limit as this time estimate was based on the pilot version of the data collection instrument which is being shortened based on suggestions from respondents and consultants. Refer to Section A. 3 for more details on efforts to minimize time burden.

# 13. Estimate of Respondents' Cost Burden

There is no additional cost to respondents other than the time of completing the instrument. The information requested is currently captured either electronically or on hard copy at each site. Respondents are not expected to incur any capital, equipment or system maintenance costs in order to respond. This expectation was reinforced by the reported experience of the pilot test respondents. None of the pilot sites reported any additional costs (staff or other resources) other than the personnel time needed to complete the survey. This information collection will require only information that is already generated and maintained by the respondents.

# 14. Estimated Cost to Federal Government

The total cost to the Federal government for this survey is estimated at \$560,653, all to be borne by the Bureau of Justice Statistics.

# BJS Cost Estimate Summary

These costs include \$160,707 for data collection of publicly funded forensic crime labs, overall program management, data analysis, publication review and dissemination by BJS:

Table 1: Estimated costs for the 2009 Census of Publicly Funded Forensic CrimeLaboratories.		
Staff Salaries	5	
	GS-15 Supervisory Statistician (3%)	3,713
	GS-13 Statistician (50%)	45,516
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	GS-13 Technical Editor (3%)	2,671
	GS-12 Production Editor (2%)	1,497
	GS-13 Digital Information Specialist (2%)	1,781
Benefits	Salary Subtotal	100,694
Bellefits	Fringe Benefits (33% of salaries) Administrative Costs	33,229
	(20% of salaries and fringe)	26,784
		10

# **Total Estimated Costs**

## Data Collection Agent Cost Summary

Urban Institute will act as the new data collection agent this collection of the 2009 CPFFCL. Their total costs for data collection instrument development, creation, testing, data collection, technical assistance and data processing are \$399,946.

#### 15. Reason for Change in Burden

The total estimated respondent burden has increased by 1.1 hours over 2005, as indicated by the respondent pretest. This change in burden is the result of an increase in the total number of questions on the survey, as well as a direct calculation of the burden hours as opposed to the non-pretested burden estimate provided in 2005. The increase in the total respondent burden, currently estimated at 1660.5 hours, has also increased from the 2005 collection, and is in part due to an increase in the total number of labs in the census rising from 375 in 2005 to 405 in 2009. Communications with the pretest respondents have resulted in several changes to the data collection instrument. These changes will reduce respondent time burden. Therefore the 4.1 hour figure overestimates the actual burden associated with responding to the final data collection instrument. Please see section A. 3 for a detailed description of the changes.

#### 16. Plans for Publication

Information collected from forensic crime laboratories will be reported in multiple Bureau of Justice Statistics publications. These reports may include but are not limited to a summary report on the findings from the nation's fifty largest crime labs and a comprehensive report at the conclusion of the data collection effort. The information collected through the 2009 CPFFCL will be used only in aggregate form. No comparisons of individual labs will be made in any BJS reports. All census data will then be made available to the public through the National Archive of Criminal Justice Data (NACJD) and through Data.gov.

#### 17. Display of Expiration Date

The OMB Control Number and the expiration date will be shown on all forms given to respondents.

#### 18. Exceptions to the Certification Statement

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