

SUPPORTING STATEMENT – Part A

Census of Publicly Funded Forensic Crime Laboratories (CPFFCL)

Overview

The Bureau of Justice Statistics (BJS) seeks clearance to implement the **2020 Census of Publicly Funded Forensic Crime Laboratories (CPFFCL)**. The data collection will build on the previous administrations of the survey (referencing 2002, 2005, 2009, and 2014), a focus group conducted at the 2019 American Society of Crime Laboratory Directors Symposium, and an expert panel convened in August 2019. The instrument was cognitively tested during fall 2020 under BJS’s generic clearance (OMB Control No. 1121-0339). BJS plans to field the 2020 CPFFCL from April through October 2021. Like the 2014 CPFFCL data collection, the 2020 CPFFCL includes all publicly funded laboratories in the United States within the scope of this data collection.

In the United States, public forensic crime laboratories are funded by federal, state, and local governments, which legislate their operational jurisdiction of criminal cases and their legal authority to process, analyze, and render results and interpretations concerning physical and digital evidence to its jurisdictional court systems and sometimes beyond. Publicly funded crime laboratories are part of the criminal justice system, taking roles in law enforcement investigations, court proceedings, corrections, and public safety. Although key to the criminal justice system, they often contend with issues that challenge efficiency, effectiveness, operational excellence, and capacity. More and continued data are needed to understand the need for resources (e.g., adequate staffing and equipment), funding, training and continuing education opportunities, costs, and impact of forensic evidence analysis.

Through surveying the approximately 500 publicly funded forensic crime laboratories operating in the United States in 2020, the 2020 CPFFCL aims to provide a comprehensive understanding of these laboratories’ workloads, operations, policies, and procedures. The 2020 CPFFCL goals include collecting data on the:

- administrative characteristics of crime laboratories (e.g., staffing, training, population served, resources, and caseload);
- policies related to data, records, and evidence retention;
- changes in demands on crime laboratories and other emerging trends in the field.

The 2020 CPFFCL will capture important topics for forensic crime laboratories, including: organizational structure/control, forensic functions, characteristics of the laboratory information management system (LIMS), budget, staffing characteristics (e.g., full-time, part-time, salary by position), case and workload, backlogs, laboratory outsourcing needs and practices, and quality assurance measures in the laboratory.

CPFFCL is part of BJS’s law enforcement statistics program. The Law Enforcement Statistics Unit within BJS emphasizes surveys of organizations for collecting and analyzing statistical information about the operations of the criminal justice system, which reflects and is consistent

with BJS's authorizing statute (see 34 USC § 10132(c)(4); **Attachment 1**). The CPFFCL complements BJS's Census of Medical Examiner and Coroner Offices (OMB Control No. 1121-0296), which gathers information about the organizational structure and operations of coroner and medical offices, staffing, employee training, and certification; resources, including budget, information technology, and examination capabilities; workload; policies and procedures for investigations and disposition of remains; participation in information sharing efforts; accreditation status; autopsy and toxicology outsourcing costs, policies, and practices; and access to databases, trainings, and support services.

BJS has modified the format and design of several items from the 2014 CPFFCL to improve measurement and ease respondent burden. Central questions concerning budget, staffing, and caseload were modified to increase clarity based on expert panel and cognitive interview feedback with an eye toward preserving BJS's ability to compare previous administration results.

The 2020 CPFFCL will maintain a focus on administrative and organizational structure, budget, laboratory function, outsourcing, staffing, and workload found in the 2014 Census. BJS has refined questions and response options to reflect 2020 operations, nomenclature, and relevant topic to the forensic laboratory community. See the discussion of the differences in the instruments in "Section 5. Efforts to Minimize Burden."

The design of the 2020 CPFFCL survey instrument is consistent with best practices of survey design including several design elements intended to increase the ease of reading and understanding the questionnaire.¹ First, related questions are grouped together in topical sections. In addition, the survey instrument begins with the most salient items, as respondents can sometimes lose focus and attention towards the end of a questionnaire. Questions and instructions are presented in a consistent manner on each page to facilitate comprehension. On both web and paper survey administrations, proper alignment and vertical spacing are used to help respondents mentally categorize the information on the page and to aid in a neat, well-organized presentation.

The survey design uses informative section headers to assist respondents in recognizing different sets of questions. Clear instructions regarding skip patterns assist the respondent in navigating the survey. Finally, in choosing a method for asking questions, the use of complex matrices has been minimized. When a matrix-type question cannot be avoided, it is presented simplistically and with straightforward directions to help ensure that respondents understand the question being asked and the available answer choices.

In collecting the 2020 CPFFCL data, BJS will use a multi-mode approach in which respondents are directed to a web-based format as the primary mode of data collection. BJS prefers a web-based collection to increase response rates, expedite the data collection process, simplify data verification, enhance data quality by using validation checks, reduce burden by using automated skip logic, and facilitate report preparation. Due to increased capabilities of the forensic laboratory community and the project team's strong encouragement to respond using the web-

¹ Cobanoglu, C., Warde, B., & Moreo, P.J. (2001). A comparison of mail, fax, and Web-based survey methods. *International Journal of Market Research*, 43(4), 441-452; Dillman, D.A., Smith, J.D., & Christian, L.M. (2014). *Internet, Phone, Mail, and Mixed-Mode Surveys: The Tailored Design Method*, 4th Edition. John Wiley and Sons, Inc. Hoboken, NJ.

based data collection tool, BJS expects that most agencies will use this option for the 2020 CPFCL. However, hard copy questionnaires will be available to agencies as an alternative mode for response.

RTI International, BJS's data collection agent for the 2020 CPFCL, is a well-established federal contractor that has successfully conducted several BJS surveys including the 2018 Census of Medical Examiner and Coroner Offices, 2020 Law Enforcement Management and Administrative Statistics (OMB Control No.1121-0240), 2018 Census of State and Local Law Enforcement Agencies (OMB Control No. 1121-0346), and 2018 Census of Law Enforcement Training Academies (OMB Control No. 1121-0255) surveys.

A. Justification

1. Necessity of Information Collection

Under Title 34, United States Code, Section 10132, the Bureau of Justice Statistics (BJS) is directed to collect and analyze statistical information concerning the operation of the criminal justice system at the federal, state, tribal, and local levels. BJS disseminates high quality information and statistics to inform policy makers, researchers, criminal justice practitioners, and the general public. The CPFCL furthers the Department of Justice's mission by providing insight into the nation's forensic crime laboratory system infrastructure, functions, needs and challenges.

Crime data reported by the FBI indicate that authorities received more than 8 million crime offenses reported nationally in 2019 (1.2 million violent crimes and 6.9 million property crimes).² For decades, forensic laboratories have provided objective and scientific measurements to support or refute the outcomes of criminal cases. Their number only modestly increased between the 2005 and 2014 CPFCL administrations, rising from 389 in 2005 to 409 in 2014, while the number of requests they process grew by 1.1 million during the same time period (from 2.7 million in 2005 to 3.8 million in 2014).³ In recent years, the complexities associated with increased toxicology, digital evidence, and drug chemistry caseloads in particular have greatly contributed to overall backlogs.⁴ Through processing, analyzing and communicating the testing results of forensic evidence to other criminal justice entities, crime laboratories are critical to the overall criminal justice process. Their involvement in the criminal justice system extends from law enforcement (aiding criminal investigations), court proceedings (attorney representation of plaintiff or defendant, judge, and jury), corrections, and public safety. Therefore, it is beneficial for crime laboratories to understand the challenges that may be affecting the number of samples/pieces of evidence pending analysis, case turnaround time, and case resolution.

²United States Department of Justice, Federal Bureau of Investigation. (September 2020). *Crime in the United States, 2019*. Retrieved from <https://ucr.fbi.gov/crime-in-the-u.s/2019/crime-in-the-u.s.-2019>.

³Durose, M.R. (2008). Census of Publicly Funded Forensic Crime Laboratories, 2005. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics. Retrieved from <https://www.bjs.gov/content/pub/pdf/cpffcl05.pdf> and Durose, M.R. & Burch, A.M. (2016). Publicly Funded Forensic Crime Laboratories: Resources and Services, 2014. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics. Retrieved from <https://www.bjs.gov/content/pub/pdf/pffclrs14.pdf>.

⁴ National Institute of Justice. (2019). Comprehensive Needs Assessment of Forensic Laboratories and Medical Examiner/Coroner Offices Points to Solutions for a System Under Stress. Department of Justice, Office of Justice Programs, National Institute of Justice. Retrieved from <https://www.ncjrs.gov/pdffiles1/nij/253626.pdf>

There are approximately 500 publicly funded crime laboratories that are charged with processing, analyzing, and providing results and interpretations of forensic physical evidence to criminal justice institutions within their jurisdiction. BJS is the only federal agency to collect administrative, budgetary, and staffing and related information from crime laboratories, which other government agencies, such as the National Institute of Justice, use for context to inform criminal justice statistics, grants, and research. Thus, the 2020 CPFFCL will provide the only systematic basis to provide national estimates of personnel, resources, polices, and practices of forensic laboratories.

Key findings from the 2014 CPFFCL revealed 3.8 million forensic evidence processing requests in 2014, with 3.6 million requests completed and a backlog of 570,100 backlogged requests.⁵ DNA samples from convicted offenders and arrestees processed by these laboratories accounted for 39% of requests for analysis to federal laboratories, 46% of requests to state laboratories and less than 5% of requests to county and municipal laboratories.³ Publicly funded crime laboratories had a combined operating budget of \$1.7 billion and employed 14,300 full-time staff in 2014.³ Data from the 2020 CPFFCL data will allow for needed comparisons with the 2014 CPFFCL.

Design of the 2020 CPFFCL Survey

The proposed 2020 CPFFCL instrument (**Attachment 2**) has been revised to include modifications and new items stemming from an expert panel and methodological review and cognitive testing of the survey instructions, question wording, and hard copy format. Based on the previous administrations of the survey, feedback from a focus group convened in 2019 at the American Society of Crime Laboratory Directors, and an expert panel convened in August 2019, the topics for the 2020 CPFFCL include the types of forensic functions performed; annual operating budget; total number of employees, including the use of consultants and interns; number of forensic requests received and completed during the year; types of proficiency tests performed; and types of professional accreditations and staff certifications.

The 2020 CPFFCL data will allow for needed comparisons with prior CPFFCL data collections. BJS will evaluate all comments and suggestions for improvement provided by respondents to the 2020 CPFFCL for possible incorporation into the next CPFFCL survey.

The instrument has 49 items that fall into seven categories:

1. Section A - Organization (A1-A24)

This section collects information on the level of government under which the laboratory operates (i.e., city/borough/town/village, county or parish, state, Federal); the type of agency or government body with laboratory oversight (i.e., law enforcement, department or division of forensic science, government attorney's office, public health agency, other-

⁵Durose, M.R. & Burch, A.M. (2016). Publicly Funded Forensic Crime Laboratories: Resources and Services, 2014. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics. Retrieved from <https://www.bjs.gov/content/pub/pdf/pffclrs14.pdf>.

specify); whether the laboratory was part of a laboratory system; the types of agencies from which they received forensic requests (i.e., i.e., city/borough/town/village, county or parish, state, Federal, Tribal lands); and the types of forensic functions performed during 2020. This information will be used for future frame development and allows BJS to make comparisons between types of laboratories and to link the population of jurisdictions back to the laboratory that serves them.

2. Section B - Budget (B1-B2)

This section collects information on overall budgets available to the laboratories; sources of funding (i.e., asset forfeitures, donations, fees, grants, partnerships, private foundations, and task force funding); and fiscal year information for context.

3. Section C - Staffing (C1-C5)

Section C collects information on the number of full-time, part-time, and vacant positions held in 2020; personnel with the status of contractors/consultants and interns; the number of hires and separations in 2020; and the number of full-time analysis/examiners with particular types of certifications. The data collected from this section will provide BJS with the ability to describe any staffing shortages and provide a national picture of how many analysts hold certifications, which are critical to maintain integrity of forensic science work within the criminal legal system.

4. Section D - Workload (D1-D18)

This section collects information about the individual laboratory's workload across cases, requests, items, and backlogged items by forensic discipline. Two items in this section will provide important information about the digital evidence, including length of evidence retention and the storage capacity for laboratories to store this type of evidence. Information from this section will allow BJS to describe the amount of work laboratories undertook in 2020 and provide information about digital evidence on a national scale that has not yet been collected.

5. Outsourcing (E1-E5)

Section E will collect information about whether the laboratory outsourced any type of forensic evidence in 2020 and if so, a skip pattern will ask which types of reference laboratories were used (i.e., commercial or private laboratory, publicly funded laboratory, and university laboratory), which forensic disciplines required outsourcing, and the outsourcing total cost in 2020. The section concludes with a question about the use of consultants or contractors to complete forensic analyses. Given the prevalence of outsourcing in laboratories, this section will provide an important window into the additional expenses and work forensic laboratories incurred in 2020.

6. Quality Assurance (F1-F12)

Section F collects information about whether laboratories were required to be accredited and which forensic disciplines within the laboratory were accredited and by which accreditation bodies. The section also includes questions about having resources dedicated to research activities, proficiency testing, competency testing, whether the laboratory has a written code of ethics, whether the laboratory performs technical reviews, and whether the laboratories have or use a small set of processes or resources (e.g., written standard operating procedures; performance verification checks, structured training programs; mental health debriefs).

7. Feedback and Submission (G1)

Section G provides a place for respondents to share any comments to BJS regarding the survey or any other applicable information.

BJS plans to conduct a census rather than a sample survey for the 2020 CPFFCL. The universe of forensic laboratories is small (about 500) relative to the size needed for a representative sample with stratification dimensions needed to address variations by agency type, size, and jurisdictional characteristics. Interest among other federal, state, and local agencies in data collected through CPFFCL relies on the study to ascertain the basic needs of forensic laboratories nationwide since these data have not been collected since reference year 2014. Since the last CPFFCL, there is a known shortage of staff in forensic crime laboratories nationwide⁶ and the financial and staffing burden caused by the ongoing opioid epidemic.⁷ A primary goal of the 2020 Census is to identify the national caseload of forensic requests and the staffing in place to address this caseload. With a census design, these data will comprehensively inform national, state, and local policy-making, grants, and budget planning.

The 2020 CPFFCL will update and document any changes in laboratories that have occurred since the 2014 CPFFCL. Information generated by the 2020 CPFFCL will help to improve our national understanding of laboratories and their operations. The information will be useful for federal, state and local governments to assess the areas in which additional resources for development, improvement, or expansion of criminal justice investigation capabilities may be necessary.

⁶ National Institute of Justice (NIJ) (2019). Report to Congress: Needs Assessment of Forensic Laboratories and Medical Examiner/Coroner Offices. National Institute of Justice, Washington, D.C. Accessed December 1, 2020: <https://www.justice.gov/olp/page/file/1228306/download>

⁷ Roper-Miller, J.D., & Speaker, P.J. (2019). The hidden costs of the opioid crisis and the implications for financial management in the public sector. *Forensic Science International: Synergy*, 1, 227-238.

2. Needs and Uses

BJS/OJP/DOJ Needs and Uses

The CPFFCL complements BJS' other forensic collection—the Census of Medical Examiners and Coroners Offices—as both medical examiner offices and forensic laboratories serve as primary supportive agencies to law enforcement agencies and their operations. BJS will use CPFFCL data to gain a basic understanding of the forensic functions within publicly funded crime laboratories, staffing, infrastructure, resources, and technology available to process, analyze and interpret forensic evidence.

The National Institute of Justice (NIJ)'s 2019 report to Congress, [*Needs Assessment of Forensic Laboratories and Medical Examiner/Coroner Offices*](#), outlined several needs in forensic science, including:

- Sufficient and consistent funding and strategic planning to process increasing amounts of forensic evidence and to address fluctuations in evidence submissions driven by the supply of and demand for forensic services;
- Sufficient and consistent funding and strategic planning to address the impact of the opioid crisis on forensic laboratories;
- Sufficient and consistent funding and strategic planning to address workforce and workload challenges;
- Sufficient and consistent funding for forensic practitioner training;
- Improvement in the personnel pipeline from education through hiring and training, particularly in disciplines that are facing critical personnel shortages;
- Sufficient supply of graduates from academic programs who are prepared to seek and obtain employment in forensic science fields upon program completion;
- Continued efforts to strengthen quality assurance measures, limit preventable nonconformities, and maintain a healthy workforce in the forensic sciences;
- Efforts to maintain a resilient forensic workforce; and
- Overcoming infrastructure challenging, including outdated technology and physical capacity constraints.

The 2020 CPFFCL supports this effort by providing data that will speak to many of these areas (the comprehensive list of topics that will be covered in the 2020 CPFFCL are presented in the *Overview* section) and provide relevant data to inform policy discussions at the local, state, and federal levels about appropriate next steps in terms of budgets, planning, needs, and areas for program growth and outreach. The key types of information that the CPFFCL will make available include—

- Number of full-time and part-time personnel and vacancies
- Average total operating budgets
- Workload metrics, including caseload, outsourcing, and backlogs
- Certifications, accreditation, and quality assurance metrics

BJs will use the data gathered by the 2020 CPFFCL to disseminate information about the forensic laboratories to the public. Previous BJS reports using CPFFCL data include [Publicly Funded Forensic Crime Laboratories: Resources And Services, 2014](#) and [Publicly Funded Forensic Crime Laboratories: Quality Assurance Practices, 2014](#).

Uses of the CPFFCL by others

Data generated from CPFFCL surveys is relevant to the work of law enforcement and other criminal justice practitioners, the research community, Department of Justice officials, and public safety agencies as the collection provides authoritative statistics on the staffing, budget, resources, infrastructure, and technology used to process and analyze forensic evidence.

Officials from federal, state, and local agencies have used the 2014 CPFFCL data for comparative statistical purposes and to leverage for more funding or resources. Although the 2014 CPFFCL data are six years old, the impact on the field endures: the collection remains highly cited and is frequently used among the government, research, public health, and forensic communities because it remains the definitive source regarding the state of the U.S. crime laboratories. For example:

- Former American Society of Crime Laboratory Directors Matthew Gamette, speaking on behalf of the American Academy of Forensic Science, spoke before the U.S. House Committee on Science, Space, and Technology and referenced the accreditation statistics from the 2009 and 2014 CPFFCL reports.⁸
- In NIJ's 2019 *Needs Assessment of Forensic Laboratories and Medical Examiner/Coroner Offices* report to Congress, the authors referenced the 2005, 2009, and 2014 CPFFCL findings.⁹
- In 2017, NIJ published a report on FY2016 funding for DNA analysis, capacity enhancement, and other forensic activities.¹⁰ The report referenced the 2014 CPFFCL's finding that requests for DNA testing increased 28 percent while the tests completed increased 24 percent.
- Drawing in part from the 2014 CPFFCL findings, the NIJ produced a 2017 report that examined sexual assault cases.¹¹

⁸ Gamette, M. (September 10, 2019). *Raising the Bar: Progress and Future Needs in Forensic Science*. Testimony Before the House Committee on Science, Space, and Technology September 10, 2019. Accessed December 1, 2020: <https://republicans-science.house.gov/sites/republicans.science.house.gov/files/2019-09-10%20Testimony%20Gamette.pdf>.

⁹ National Institute of Justice (NIJ) (2019). Report to Congress: Needs Assessment of Forensic Laboratories and Medical Examiner/Coroner Offices. National Institute of Justice, Washington, D.C. Accessed December 1, 2020: <https://www.justice.gov/olp/page/file/1228306/download>

¹⁰ LaPorte, G., Waltke, H., Heurich, C., & Chase, R.J. (May 2017). Fiscal Year 2016 Funding for DNA Analysis, Capacity Enhancement, and Other Forensic Activities. National Institute of Justice, Washington, DC. Accessed December 1, 2020: <https://www.ncjrs.gov/pdffiles1/nij/250552.pdf>

¹¹ Waltke, H., LaPorte, G., Weiss, D., Schwarting, Nguyen, D.M., & Scott, F. (2017). Sexual Assault Cases: Exploring the Importance of Non-DNA Forensic Evidence. National Institute of Justice, Washington, DC. <https://nij.ojp.gov/topics/articles/sexual-assault-cases-exploring-importance-non-dna-forensic-evidence>

- The NIJ Forensic Technology Center of Excellence has produced several reports that have referenced the 2014 CPFFCL, including the State Forensic Science Commissions report.¹²
- Dr. Victor Weedn referenced the 2014 CPFFCL in his testimony to Congress regarding the state of forensics in the U.S. on March 28, 2017.¹³
- The 2014 CPFFCL final report and the public dataset, published in 2016, are referenced or used across a host of journal articles in the recent scientific literature, for example:
 - Whitford, A.B., Yates, J., Burchfield, A., Anastasopoulos, L.J., Anderson, D.M. (2020). The Adoption of Robotics by Government Agencies: Evidence from Crime Labs. *Public Administration Review*.
 - Ropero-Miller, J.D., & Speaker, P.J. (2019). The hidden costs of the opioid crisis and the implications for financial management in the public sector. *Forensic Science International: Synergy*, 1, 227-238.
 - Gardner, B.O., Kelley, S., Murrie, D.C., & Dror, I.E. (2019). What do forensic analysts consider relevant to their decision making? *Science & Justice*, 59, 5, 516-523.
 - Anderson, J.M., Matthies, C., Greathouse, S., & Chari, A.V. (2018). The unrealized promise of forensic science – An empirical study of its production and use. SSRN. Available as a download at: www.ssrn.com
 - King, W.R., Matusiak, M.C., & Campbell, B.A. (2017). Organizational and environmental determinants of ballistics imaging productivity in United States crime laboratories. *Journal of Crime and Justice*, 41 (4), 450-462.
 - Matthew C. Matusiak, William R. King & Bradley A. Campbell (2020) The multi-dimensional environment of publicly funded U.S. crime laboratories and its impact on lab priorities, *Journal of Crime and Justice*, 43:3, 362-376, DOI: 10.1080/0735648X.2019.1673792
 - Campbell R. Fehler-Cabral G. (2020) “Just Bring Us the Real Ones”: The Role of Forensic Crime Laboratories in Guarding the Gateway to Justice for Sexual Assault Victims, *Journal of Interpersonal Violence*, DOI: [10.1177/0886260520951303](https://doi.org/10.1177/0886260520951303)

Finally, 3-year usage data of the public use file archived at the National Archive of Criminal Justice Data (NACJD) show that the CPFFCL public use file is frequently downloaded. From December 2017 to December 2020, NACJD usage data show that the 2014 CPFFCL data were downloaded 322 times across 157 unique users (including university faculty and staff across 10

¹² Ropero-Miller, J.D. & LaPorte, G. (2019). State Forensic Science Commissions Final Report. Forensic Technology Center of Excellence. Accessed December 1, 2020: <https://www.txcourts.gov/media/1440436/forensic-technology-center-of-excellence-report-on-state-forensic-science-commissions.pdf>

¹³ Committee on the Judiciary (2017). *Hearing to Examine the State of Forensic Science in the United States*. House of Representatives, Subcommittee on Crime, Terrorism, Homeland Security, and Investigations, Committee on the Judiciary, Washington, DC. Accessed December 1, 2020: <https://www.govinfo.gov/content/pkg/CHRG-115hhrg26993/html/CHRG-115hhrg26993.htm>

institutions).¹⁴ Researchers have used the 2014 public dataset for sampling purposes to drive studies regarding forensic familial DNA¹⁵ and digital evidence.¹⁶

3. Use of Information Technology

The 2020 CPFFCL uses a multi-mode design in which respondents are directed to a web survey through mailed and emailed instructions. The web survey is hosted by BJS' data collection agent RTI International (RTI).

The CPFFCL instrument has been designed for online data collection that will export survey data and paradata in various data formats specified by BJS. This software will allow RTI to send an email to respondents explaining the CPFFCL respondents and containing a hyperlink to the questionnaire. Respondents will have a unique Personal Identification Number (PIN) and password provided by RTI to access the website to complete the census form. Additionally, the software allows for real-time online tracking of respondents thereby allowing BJS to track the completion of each laboratory's responses.

Agencies may have several reasons why they do not respond via the internet; for example, some might find it difficult to complete online because of the complexity of the requested data or the need to involve multiple people in preparing the response. Agencies that require printed versions of the census form will have multiple methods of receiving paper versions of the instrument. A paper copy of the questionnaire will be mailed in a reminder mailing to non-respondents. In addition, agencies will be able to download a PDF version of the survey from the survey website that can be printed or e-mailed to CPFFCL staff. Respondents can then complete the survey by hand and transcribe it to the online survey instrument, scan and return the completed form via email, or return the completed form via mail. Completed hardcopy questionnaires will be data entered by RTI staff.

The dataset and supporting documentation will be made available without charge at the National Archive of Criminal Justice Data at the Inter-University Consortium for Political and Social Research (ICPSR). The BJS-produced findings from the 2020 CPFFCL will be provided to the public in electronic format (e.g., Microsoft Excel or comma delimited files). The survey reports will be available on the BJS website as PDF files.

4. Efforts to Identify Duplication

BJS has determined that, by in large, the 2020 CPFFCL does not include measures found in surveys conducted by any other Federal agencies.

The only federal surveys that target the crime laboratory community are the Drug Enforcement Administration's two National Forensic Laboratory Information System (NFLIS) surveys (OMB

¹⁴ See the NACJD CPFFCL usage report: <https://pcms.icpsr.umich.edu/pcms/reports/studies/36759/utilization>

¹⁵ RAND Corporation. (2019). *Forensic Familial and Moderate Stringency DNA Searches: Policies and Practices in the United States, England, and Wales*. Santa Monica, CA. https://www.rand.org/pubs/research_reports/RR3209.html.

¹⁶ RTI International was recently awarded a 2020 NIJ grant that uses the 2014 CPFFCL to identify digital laboratories for an examination of case processing efficiencies. <https://nij.ojp.gov/funding/awards/2020-dq-bx-0016>

Control No. 1117-0034), which are primarily focused on obtaining testing policies and requesting practices from public laboratories with drug chemistry sections (NFLIS-Drug) and public and private toxicology laboratories (NFLIS-Tox) nationwide.

DEA last administered the NFLIS-Drug Survey of Crime Laboratory Drug Chemistry Sections in 2019 and yielded a response rate of 94% (see [report here](#)). The only topics covered in the 2019 NFLIS-Drug data collection effort that overlap with the 2020 CPFFCL are:

- basic administrative information (e.g., name of laboratory, level of government under which the laboratory operates);
- the caseload and the number of items for the drug chemistry section;
- the number of backlogged drug chemistry cases;
- outsourcing needs for the drug chemistry caseload; and
- whether the laboratory had an information management system.

The rest of the 2019 NFLIS-Drug survey included questions about laboratory drug chemistry polices and technical procedures, how laboratories are identifying new and emerging drugs, and opinions regarding NFLIS activities. Notably, the NFLIS-Drug survey included the 2019 reference year, while the CPFFCL will use the 2020 reference year.

Moreover, the frame for the 2020 CPFFCL includes all 500 publicly funded crime laboratories while the 2019 NFLIS-Drug survey included the 301 publicly funded crime laboratories and laboratory systems with drug chemistry sections. For state and local laboratory systems, NFLIS-Drug surveys were administered only to the headquarters laboratory, which filled out the survey for all the laboratories in its system. Thus, there were 173 laboratories and laboratory systems that were identified for the NFLIS-Drug Survey. In contrast, the 2020 CPFFCL will be sent to all individual laboratories.

The forthcoming 2020 NFLIS-Tox survey also differs in terms of content and universe from the 2020 CPFFCL. The NFLIS-Tox 2020 survey includes measures that capture organizational characteristics (e.g., laboratory ownership type, laboratory system versus standalone laboratory), toxicology caseload, toxicology testing practices, capability of the information management system to capture and report toxicology data, and resources needed for NFLIS participation. Thus, the overlap between the 2020 CPFFCL and the 2020 NFLIS-Tox survey is akin to the overlap described above for the 2019 NFLIS-Drug survey, including:

- basic administrative information (e.g., name of laboratory, level of government under which the laboratory operates, but the NFLIS-Tox laboratory will also include private designations for laboratories);
- the caseload and the number of items for the toxicology section;
- the number of backlogged toxicology cases;
- outsourcing needs for the toxicology caseload; and
- whether the laboratory has an information management system.

The 2020 NFLIS-Tox Survey includes private laboratories (which includes 149 private laboratories or laboratory systems) as well as publicly funded laboratories with toxicology

sections of which there are 176 laboratories or laboratory systems). Like the 2019 NFLIS-Drug, NFLIS-Tox will only survey the headquarter laboratory where there are laboratory systems.

Thus, the three surveys—i.e., 2020 CPFFCL, 2019 NFLIS-Drug, and 2020 NFLIS-Tox—are not congruent in terms of their universe coverage or in terms of their topical areas.

5. Efforts to Minimize Burden

The proposed 2020 CPFFCL instrument was designed to minimize response burden in several ways. First, based on feedback received from the agencies through and expert panel and cognitive interviews, the new instrument features questions that have been refined to increase clarity and improve response options where needed. Second, the 2020 CPFFCL was modified with web-based data collection in mind and includes built-in skip patterns, data checks, and was designed with best-practice web layouts including matrices where appropriate.

The 2020 CPFFCL expert panel that was composed of practitioners from laboratories of different regions and sizes. BJS incorporated feedback from this panel and cognitively tested a revised version of the instrument with 23 laboratory respondents that represented a diversity of supervising governments, laboratory size determined by number of laboratory staff, and whether or not the laboratory had a digital evidence section. The cognitive testing was conducted under BJS's generic clearance (OMB Control No. 1121-0339). See **Attachment 24** for the complete cognitive testing report, including the protocol for testing the instrument. The changes are summarized below—

Section A. Cognitive testing resulted in changes to four questions and the complete removal of one question. The definition of one question, Item A3, received clarification with additional wording for what constitutes a “multi-laboratory system”. Item A5 received an additional response, “Tribal Lands.” Item A22 received two additional responses: probabilistic genotyping and direct to DNA approach. Two questions regarding various Laboratory Information Management Systems were moved to the Workload Section, Section D, for further clarity around evidence tracking and laboratory capabilities, with no further changes in wording. However, ten participants voiced concern over a question that asked about tracking “items” with LIMS, due to potential issues around the definition of “item” and how to best track its numbers. This question was completely removed to reduce confusion around the term “item,” and to reduce the overall burden.

Section B. Participants said that this section was generally not difficult to answer. Cognitive testing resulted in the reformatting of one question by the removal of previously titled sub-question B1b “Are you reporting your budget data for your fiscal year or calendar year?” and rewording the previously titled sub-question B1c (now B2b) to “What are the start and end dates of your fiscal year that included December 31, 2020?” Moreover, language was added to the definition of budget reporting, which resulted in the operating budget set to include personnel budget, but not include building construction or major equipment purchases. Item B2 was moved to the top of Section B, becoming Item B1, and received a parenthetical definition for Option C “Fees” for added clarity.

Section C. Cognitive testing resulted in the slight restructuring of one question, the addition of one question, and the removal of one question. For Item C2, nine participants noted they would have difficulty in determining where to place the numbers for certain positions. Thus, Item C2, Option F “Technical Support” received a parenthetical definition “e.g., lab technicians” for added clarity, as well as changing Option C1d “Intermediate/Senior” to “Full-Performance” and removal of “Entry-Level” from the question. Item C5 regarding annual salaries was removed to reduce burden, which made room for the addition of C2, requesting information regarding the number of part-time and full-time staff during 2019 specifically.

Section D. This entire section was reviewed during cognitive testing. As previously mentioned, the term “item” and questions surrounding this term were removed from the 2020 CPFFCL, thus necessitating changes to the questions asked in this section. Fourteen participants noted they would have issues providing, or be completely unable to provide, an accurate number of item counts as the survey was originally worded. The term “item” was dropped from questions originally titled D1-D17 (now D6a-D6k) to reduce confusion and burden. Additionally, definitions for this section were redesigned and added to include “case” and “LIMS”. Changes to the grid for original Items D3-D12 included adding an estimate box to each item on the survey and separating out the “Forensic Biology” section into the following sub-categories: Sexual Assault Casework, DNA Databasing, Arrestee Samples, and Convicted Offender Samples. To keep consistency with previous iterations of the census, the nested questions across original Items D13-D17 were included in the response grid (now items D6j and D6k).

Finally, during testing, eleven participants had trouble defining the term “digital data”; thus, the term was revised to “digital evidence” in Items D7 and D8 instead. Additionally, a definition for digital evidence was provided in the revised instrument for further clarification.

Section E. Overall, respondents expressed that this section was easy to answer. Cognitive testing resulted in one question receiving clarification regarding a definition, and another question receiving additional/refined response rows. Although most respondents did not have any trouble answering Item E1, two participants reported it would be nice to have a more comprehensive definition of outsourcing. Thus, the term “analytical” was included to describe “contracting or procuring ‘analytical’ services...”. In Item E2, Option E2a was refined to include “Commercial or privately funded laboratory”, and Option E2c “University laboratory (public or private)” was added as an answer choice.

Section F. Cognitive testing resulted in changes to four questions and the removal of one. F1 language was revised to include the term “any” for “did ‘any’ of the jurisdictions you served require accreditation?” to account for laboratories who must testify in different jurisdictions. F2 revised language from “was your laboratory accredited?” to “were any disciplines in your laboratory accredited?” as a way to circumvent asking participants for specific discipline accreditation breakdowns. Option C “CALEA” was removed from Item F3, because it is a standard most commonly used for law enforcement evidence rooms, as noted by one cognitive interview participant. Moreover, Option D “CALEA” was removed from Item F4 and replaced with “ANSI National Accreditation Board (ANAB)” by the suggestion of fifteen participants noting the importance of including ANSI and at least one participant suggesting the removal of “CALEA.” To further improve clarity, accrediting bodies were spelled out in the revised version

of the 2020 CPFFCL. In addition, F9 was removed due to redundancy and conflicting definitions with the question regarding proficiency above it.

BJS expects that many respondents will complete the survey online. Web-based system functions will be in place to ease the burden of survey completion. RTI uses an intelligent log-in program for data collection, which will store laboratory information and responses, allowing for multi-session completion of the survey instrument. Since many laboratories, particularly larger ones, will need to seek multiple information sources within their organizations to answer different sections, this will reduce burden by facilitating data entry from different sources. It will also reduce burden by allowing respondents to stop response entry pending confirmation of information from others in the laboratory.

RTI will also provide assistance by phone and email. A toll-free help line will be established, and staff will be available during regular business hours. When staff are not available, calls will be routed to voicemail. Messages will be responded to within 48 hours. A dedicated CPFFCL help email address will be provided with all written materials and emails. Phone numbers and email addresses will be provided to respondents to ensure timely communications.

6. Consequences of Less Frequent Collection

Based in part on recommendations from the National Research Council (Groves and Cork, 2011), BJS has determined that it is necessary to improve the timeliness of the publications flowing from its law enforcement data collections. For CPFFCL, the periodicity of the collection is about every 5 years for this cycle and should result in a publication released in 2022.

More frequent data collection efforts allow BJS and Federal, state, and regional governments to examine more timely data and changes in trends. Should the 2020 CPFFCL not be fielded, the 2014 data will remain—at least in the short term—as the most comprehensive information about the forensic laboratory system in the United States. These data are outdated and provide limited insight into the access and use of new forensic technologies that have been developed and evolved since the 2014 CPFFCL. Moreover, Federal programs aimed to support the forensic laboratory system through grant funding—e.g., the Bureau of Justice Assistance’s Coverdell grants—will continue to base some of the funding and programmatic needs on these old, outdated data.

7. Special Circumstances

No special circumstances have been identified for this project.

8. Federal Register Publication and Outside Consultation

An expert panel of practitioners was gathered to assess the instrument used for the 2020 CPFFCL. These panelists included practitioners from a diverse set of crime laboratories and laboratory system. Panelists were provided with the survey instrument and materials from BJS and RTI introducing the project and BJS’s goals in conducting the census. Panelists were asked to assess the survey form for clarity of the questions, relevance of the questions to the field, and

to provide the project team with updates from the field that ought to be included in the form. BJS, RTI, and the expert panelists gathered for a two-day meeting to discuss the form item-by-item. A special emphasis was placed on digital evidence since this is a burgeoning field, but research has not kept pace with it. Feedback from this expert panel was used to inform instrument design for cognitive testing discussed above. Expert panelists are included in **Table 1**.

Table 1. 2020 CPFCL Expert Panel Members

Panelist	Affiliation
Matthew Gamette	Idaho State Police, Forensic Services Laboratory System
Sean Goodison	Police Executive Research Forum
Troy Lawrence	Fort Worth Police Department, Digital Forensic Laboratory
Sean Lips	Milwaukee Police Department, Computer Crimes Unit
Bonnie Mountain	Denver Police Department, Crime Laboratory
Paul Speaker	West Virginia University
Chris Stark	Raleigh/Wake City-County Bureau of Identification
Tracy Walraven	District of Columbia, Department of Forensic Sciences
Ray Wickenheiser	New York State Police, Crime Laboratory System
Jody Wolf	Phoenix Police Department, Crime Laboratory
Michael Yu	Montgomery County Police Department, Electronic Computer Crime Unit

The research under this clearance is consistent with the guidelines in 5 CFR 1320.6. The 60-day notice for public commentary was published in the Federal Register, Volume 86, Number 9, pages 3198-3199 on January 14, 2021 (**Attachment 4**). The 30-day notice for public commentary was published in the Federal Register, Volume 86, Number 54, pages 15,500-15,501, on March 23, 2018 (**Attachment 5**). In response to the 60-day notice, BJS received four emails from Dr. Bradley Campbell, of the University of Louisville; Dr. William King, of Boise State University; Dr. Edward Maguire, of Arizona State University; Dr. Matthew Matusiak, of the University of Central Florida; and Dr. Joshua Shadwick, of Southeast Missouri State University, stating support for the reinstatement of the CPFCL and emphasizing the utility of the data to the field.

9. Paying Respondents

Neither BJS nor RTI will provide any payment or gift of any type to respondents. Respondents will participate on a voluntary basis.

10. Assurance of Confidentiality

According to 34 U.S.C. 10134, the information gathered in this data collection shall be used only for statistical or research purposes and shall be gathered in a manner that precludes their use for any purpose relating to an individual other than statistical or research purposes. The data collected through the 2020 CPFCL represent institutional characteristics of forensic laboratories. The fact that participation in this survey is voluntary will be included on the first page of the survey instrument. Respondents will also be informed in written communications sent to them that the information provided about their agency will be in the public domain.

However, it will also be made clear to them that BJS and RTI will not release the names, phone numbers, or email addresses of the actual persons responsible for completing the 2020 CPFFCL instruments. Respondents will be told that the survey responses will only be published in aggregate and that none of their responses will be attributed to them or to their laboratory. The public data set will not include identifiable information about specific respondents.

11. Justification for Sensitive Questions

There are no questions of a sensitive nature in the proposed 2020 CPFFCL.

12. Estimate of Hour Burden

BJS has estimated the respondent burden for the proposed 2020 CPFFCL Survey at 1,312.5 hours (**Table 2**). The 2020 CPFFCL burden estimate was calculated using an estimate of 2.5 hours per respondent for the completion of the 14-page, 49-question questionnaire being completed by 500 crime laboratories. In addition, we plan to conduct data quality follow-up for approximately 250 laboratories at 15 minutes per call, totaling 62.5 hours.

The 90-minute estimate is based on feedback received during the administration of the 2020 CPFFCL instrument, the input of the expert panel, and estimates provided during cognitive testing for the 2020 CPFFCL.

Table 2. Estimated Burden Hours for the 2020 CPFFCL

Collection	Sample size	Average time to complete form	Average time pre- and post-survey	Total average time	Reporting hours
2020 CPFFCL, All Agencies	500	1.75	0.75	2.5	1,250
Data Quality Follow-Up	250	0.25	n/a	0.25	62.5
Total					1312.5

13. Estimate of Respondent’s Cost Burden

Approximately 500 laboratories will be asked to participate in the 2020 CPFFCL. Assuming a pay rate approximately equivalent to the GS-12 / 01 level (\$77,488), the estimated agency cost of employee time would be approximately \$37.25 per hour. Based on the estimated time burden per response and employee pay rate, the total respondent employee time cost burden to complete the census form is estimated at \$46,567. Additionally, BJS estimates that in about half of the cases, we will conduct data quality follow up, taking approximately 15 minutes to complete. The additional estimated respondent employee cost burden for the 269 data quality follow-up hours is \$2,328

There are no anticipated costs to respondents beyond the employee time expended during completion of the survey instrument, data quality follow-up, and addressed in above. Therefore, the total cost burden to respondents associated with this clearance request is \$48,896. This estimated respondent cost is shown in **Table 3**.

Table 3. Estimated Costs for Respondents

Mean Hourly Wage	\$37.25
Main data collection	
Number of respondents - main data collection	500
Estimated burden per form	2.5
Estimated cost burden per form	\$93.13
<i>Subtotal: main data collection</i>	<i>\$46,567.31</i>
Data quality follow up	
Number of respondents	250
Estimated burden	0.25
Estimated cost per respondent	\$9.31
<i>Subtotal: data quality follow-up</i>	<i>\$2,328.37</i>
TOTAL COSTS	\$48,895.67

14. Costs to Federal Government

The total expected cost to the Federal Government for this data collection is \$548,926, to be borne entirely by the BJS. This work consists of planning, developing the questionnaire, preparation of materials, collecting the data, evaluating the results, and generating the data reports. A BJS GS-Level 12 statistician will be responsible for overseeing the RTI's work on this project. The budget for this project is shown in **Table 4**.

Table 4. Estimated costs for the 2020 CPFCL

Category	Cost
BJS costs	
Staff salaries	
GS-12 Statistician (25%)	\$17,821
GS-15 Supervisory Statistician (3%)	\$4,324
GS-13 Editor (5%)	\$5,185
Other Editorial Staff	\$3,000
Front-Office Staff (GS-15 & Directors)	\$3,000
<i>Subtotal salaries</i>	<i>\$33,330</i>
Fringe benefits (28% of salaries)	\$9,332
<i>Subtotal: Salary & fringe</i>	<i>\$42,662</i>
Other administrative costs of salary & fringe (15%)	\$6,399
Subtotal: BJS costs	\$49,061
Data Collection Agent (RTI)	
Personnel (including fringe)	\$170,286
	\$66,41
Travel	3
Supplies	\$3,756
Consultants/Contracts	\$36,376
Other	\$22,483
Total indirect	\$200,551
Subtotal: Data Collection Agent Costs	\$499,865
TOTAL COSTS	\$548,926

15. Reason for Change in Burden

A slight change in burden is expected for the 2020 CPFCL relative to that of the 2014 CPFCL. The burden estimate for the 2014 CPFCL was 2.9 hours. We estimate the 2020 CPFCL burden to be 2.5 hours (150 minutes) based on items that were eliminated and streamlined.

16. Project Schedule and Publication/Analysis Plans

Pending OMB approval, the 2020 CPFCL data collection is scheduled to begin in May 2020 (see **Table 5** for the schedule, **Attachment 2** for the paper instrument and **Attachment 3** for example screen shots of the web version of the survey instrument). The data collection period is scheduled to end in October 2020.

The dataset, and supporting documentation, will be made available for download without charge at the National Archive of Criminal Justice Data at the Inter-University Consortium for Political and Social Research (ICPSR). It is expected the data will be available to the public for download

in mid-2022. Access to these data permits analysts to identify the specific responses of individual MECs and to conduct statistical analyses.

Table 5. Project Schedule

Stage	Type of contact	Timing	Attachment number(s)
Survey Pre-notification Letter	All	Week 0	6
Survey invitation letter (with URL and login instructions), endorsement letters	All	Week 2	7, 22
Email invitation (with URL and login instructions), endorsements letters as attachments	All	Week 3	8, 22
First reminder email/postcard	Non-respondents	Week 6	9, 10
Telephone contacting for data quality follow up	Partial respondents and respondents with missing/unclear data	Week 6	16
Second reminder letter/email with questionnaire and BRE	Non-respondents	Week 8	11, 2
Telephone non-response and incomplete response follow up	Non-respondents and incomplete respondents	Week 11	17, 18
Third reminder email/reminder letter	Non-respondents	Week 11	12, 13
Fourth reminder letter	Non-respondents	Week 14	14
Fifth reminder email with postcard	Non-respondents	Week 17	15
End-of-study email/letter reminder	Non-respondents	Week 22	19,20
Close data collection	Non-respondents	Week 24	
Completion thank-you	All	Variable	21
Analysis	N/A	Months 8-15	
Reports	N/A	Months 12-15	

17. Display of Expiration Date

The expiration date will be shown on the survey form, both in web and paper format.

18. Exception to the Certificate Statement

BJS is not requesting an exception to the certification of this information collection.