Audit of the Office of Justice Programs
National Institute of Justice
DNA Backlog Reduction Program
Cooperative Agreements Awarded to
the City of Philadelphia, Pennsylvania

Audit Division GR-70-15-003
December 2014
EXECUTIVE SUMMARY

The Department of Justice Office of the Inspector General, Audit Division, has completed an audit of the Office of Justice Programs (OJP) and National Institute of Justice (NIJ) cooperative agreement numbers 2009-DN-BX-K142, 2010-DN-BX-K114, and 2011-DN-BX-K425, awarded to the City of Philadelphia, Pennsylvania (Philadelphia). Collectively, the agreements totaled $3,108,905. Funding was awarded as part of the DNA Backlog Reduction Program to reduce DNA backlogs in state and local government crime laboratories by enhancing the laboratories’ capability to analyze DNA samples.1

The objective of our audit was to determine whether reimbursements claimed for costs under the cooperative agreements were allowable, supported, and in accordance with applicable laws, regulations, guidelines, and the terms and conditions of the awards. We also assessed Philadelphia’s program performance in meeting award-funded objectives and overall accomplishments.

We reviewed Philadelphia’s compliance with key award conditions and found Philadelphia generally met the terms and conditions of the awards. We found the Philadelphia Laboratory met the performance measurement standards established for the awards because the laboratory demonstrated improvements in most of the performance measurements we tested. However, we found performance measurement results were sometimes difficult to interpret and could lead to unanticipated outcomes. We also found one instance, related to the management of accountable property, where Philadelphia did not meet the standards established by the OJP Financial Guide. Our audit concentrated on, but was not limited to the initial award in October 2009, through the end of our fieldwork in April 2014.

These items are discussed in detail in the findings and recommendation section of the report. Our audit objectives, scope, and methodology appear in Appendix 1.

We discussed the results of our audit with Philadelphia officials and have included their comments in the report, as applicable. Additionally, we requested a response to our draft report from Philadelphia and OJP, and their responses are appended to this report as Appendix 2 and 3, respectively. Our analysis of both

1 DNA refers to deoxyribonucleic acid – the unique genetic material found in each individual. The introduction to the report includes a brief discussion concerning the impact of DNA technology on the criminal justice system.
responses, as well as a summary of actions necessary to close the recommendation can be found in Appendix 4 of this report.
AUDIT OF THE OFFICE OF JUSTICE PROGRAMS
NATIONAL INSTITUTE OF JUSTICE
DNA BACKLOG REDUCTION PROGRAM
COOPERATIVE AGREEMENTS AWARDED TO
THE CITY OF PHILADELPHIA, PENNSYLVANIA

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INTRODUCTION

The Department of Justice (DOJ) Office of the Inspector General, Audit Division, has completed an audit of three cooperative agreements awarded by the Office of Justice Programs (OJP), National Institute of Justice (NIJ) to the City of Philadelphia’s Police Department Forensic Science Bureau Criminalistics Unit (Philadelphia). Funding was awarded as part of the DNA Backlog Reduction Program to reduce DNA backlogs in state and local government crime laboratories by enhancing the laboratories’ capability to analyze DNA samples.\(^2\) The crime laboratory improvements were considered to be essential to prevent future DNA backlogs and to helping the criminal justice system utilize the full potential of DNA technology.

As shown in the following table, OJP awarded Philadelphia $3,108,905 for three cooperative agreements (awards).\(^3\)

<table>
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<th>Award Number</th>
<th>Award Start Date</th>
<th>Award End Date</th>
<th>Amount</th>
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<td>03/31/2011</td>
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<td>2010-DN-BX-K114</td>
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<tr>
<td>Total</td>
<td></td>
<td></td>
<td>$ 3,108,905</td>
</tr>
</tbody>
</table>

Source: Office of Justice Programs

The objective of this audit was to determine whether reimbursements claimed for costs under the cooperative agreements were allowable, reasonable, and in accordance with applicable laws, regulations, guidelines, and the terms and conditions of the awards. We also assessed the Philadelphia Laboratory’s program performance in meeting the awards objectives and overall accomplishments.

\(^2\) DNA will be considered to be biology screening (the location, screening, identification, and characterization of blood and other biological stains and substances) and/or DNA analysis (the identification and comparison of DNA in biological samples).

\(^3\) Cooperative agreements are awarded to states, units of local government, or private organizations at the discretion of the awarding agency. Cooperative agreements are utilized when substantial involvement is anticipated between the awarding agency and the recipient during performance of the contemplated activity.
Office of Justice Programs

The mission of the Office of Justice Programs (OJP) is to increase public safety and improve the fair administration of justice across America through innovative leadership and programs. OJP works in partnership with the justice community to identify the most pressing crime-related challenges confronting the justice system and to provide information, training, coordination, and innovative strategies and approaches for addressing these challenges.

National Institute of Justice

The mission of the National Institute of Justice (NIJ), a component of OJP, centers on research, development, and evaluation of crime control and justice issues. NIJ provides objective, independent, evidence-based knowledge and tools to meet the challenge of criminal justice, particularly at local and state levels, by funding research, development, and technology assistance programs.

DNA Backlog Reduction Program

DNA Analysis Backlog Elimination Act of 2000

The DNA Analysis Backlog Elimination Act of 2000 (Act) authorized the Attorney General to make grants to: (1) carry out, for inclusion in the Combined DNA Index System (CODIS) of the Federal Bureau of Investigation (FBI), deoxyribonucleic acid (DNA) analyses of samples taken from individuals convicted of a qualifying offenses and from crime scenes; and (2) increase the capacity of laboratories owned by states or by units of local government to carry out DNA analyses of samples from crime scenes.

The Act established eligibility criteria for funding, including assurances of State implementation of a comprehensive plan for the expeditious DNA analysis of samples and a certification that each DNA analysis carried out under the plan meets established privacy requirements. In addition, the Act directed each laboratory conducting the DNA analysis satisfy quality assurance standards and be operated by a state or a unit of local government within a state, or by a private entity contracted by a state or local governmental unit. The Act also required the Director of the FBI to maintain and make available a description of quality assurance protocols and practices to assure the quality of a forensic laboratory.

DNA Technology

DNA is sometimes referred to as a “genetic blueprint” because it contains instructions that govern the development of an individual organism. Forensic scientists have established patterns within the DNA called short-tandem repeats (STRs) that can be measured to define the unique DNA profile of an individual. Most cells contain DNA and when cells are left behind at a crime scene, they can be analyzed to establish the profile of a perpetrator. DNA evidence is especially
valuable for investigating violent crimes such as homicides or sexual assaults because blood, semen, or saliva may be left behind by the perpetrator.

If a case has no suspects to compare DNA evidence to, the profile of DNA collected at a crime scene may be eligible for entry into CODIS. CODIS is the acronym for the “Combined DNA Index System” and is the generic term used to describe the FBI’s program of support for criminal justice DNA databases as well as the software used to run the databases. The National DNA Index System, or NDIS, is considered one part of CODIS, the national level, containing the DNA profiles contributed by federal, state, and local participating forensic laboratories.

Within CODIS, eligible forensic unknown profiles recovered from crime scenes and attributed to suspected perpetrators are searched against known offender profiles in the Convicted Offender and Arrestee indices, and against other unknown crime scene profiles in the Forensic Index. If an eligible offender or forensic candidate match is identified and confirmed by the laboratory, it will work with law enforcement to verify the identity of the perpetrator or link the profile to other crimes.

**City of Philadelphia, Pennsylvania**

The City of Philadelphia, Pennsylvania was founded in 1682 and merged with the County of Philadelphia in 1854. Today, the City of Philadelphia occupies an area of 135 square miles along the Delaware River and serves a population in excess of 1.5 million, including the southeastern Pennsylvania region encompassing Bucks, Chester, Delaware and Montgomery counties.

The Philadelphia Police Department Forensic Science Bureau Criminalistics Unit (Philadelphia) is the agency that is responsible for analyzing evidential material associated with criminal investigations for the City of Philadelphia. The Criminalistics Unit is comprised of the "DNA Laboratory" which only conducts DNA typing and the "Trace Laboratory" which screens evidence for biological material suitable for DNA analysis. The Trace Laboratory has other functions such as Arson and Gunshot Residue analysis, however these duties are separate from the DNA biological screening duties and are not the subject or recipients of any funds requested under the program we audited.

**Our Audit Approach**

We tested compliance with what we considered to be the most important conditions of the cooperative agreement. Unless otherwise stated in our report, we applied the Office of Justice Programs (OJP) Financial Guide as our primary criteria during our audit. The OJP Financial Guide serves as a reference manual assisting award recipients in their fiduciary responsibility to safeguard award funds and ensure that funds are used appropriately and within the terms and conditions of the award. Additionally, the OJP Financial Guide cites applicable Office of Management and Budget (OMB) and Code of Federal Regulations (CFR) criteria that we also considered in performing our audit. We tested Philadelphia’s:
• **Internal control environment** to determine whether the financial accounting system and related internal controls were adequate to safeguard award funds and ensure compliance with the terms and conditions of the awards.

• **Program performance and accomplishments** to determine whether Philadelphia achieved award objectives and to assess performance and award accomplishments.

• **Personnel and fringe benefit expenditures** to determine whether the personnel and associated fringe benefits charged to the awards were allowable, supported, accurate, and whether positions were within the approved budget.

• **Other direct cost expenditures, including accountable property** to determine whether costs charged were allowable and adequately supported.

• **Budget management and control** to determine whether Philadelphia adhered to the OJP-approved budgets for the expenditure of award funds.

• **Reporting** to determine if the required periodic Federal Financial Reports and Progress Reports were submitted on time and accurately reflected award activity.

• **Drawdowns** (requests for award funding) to determine whether requests for reimbursements were adequately supported and if Philadelphia managed award receipts in accordance with federal requirements.

• **Monitoring Contractors and Consultants** to determine whether Philadelphia took appropriate steps to ensure that contractors met the fiscal and programmatic requirements of the awards.

• **Compliance with other award conditions** to determine whether Philadelphia complied with select terms and conditions of the awards.

Where applicable, we also test for compliance in the areas of matching funds, indirect costs, and program income. For these awards, matching funds were not required and there were no indirect costs or program income.
FINDINGS AND RECOMMENDATION

COMPLIANCE WITH ESSENTIAL AWARD REQUIREMENTS

We reviewed Philadelphia’s compliance with key award conditions and found Philadelphia generally met the terms and conditions of the awards. We found Philadelphia met the performance measurement standards established for the awards because there were demonstrated improvements in most of the performance measurements we tested. However, we found performance measurement results were sometimes difficult to interpret and led to unanticipated outcomes. We also found one instance, related to the management of accountable property, where Philadelphia did not meet the standards established by the OJP Financial Guide because Philadelphia was unaware of the standards. When property records are not adequately maintained, there is a potential for loss, damage, or theft of the property. These conditions and their underlying causes are discussed in the body of the report.

Internal Control Environment

Our audit included a review of Philadelphia’s accounting and financial management system and Single Audit Reports to assess the risk of non-compliance with laws, regulations, guidelines, and the terms and conditions of the awards. We also interviewed management staff, reviewed financial and performance reporting activities to further assess the risk, and performed personnel, fringe benefit, and other expenditure transaction testing.

According to the OJP Financial Guide, award recipients are responsible for establishing and maintaining an adequate system of accounting and internal controls. An acceptable accounting system provides cost and property controls to ensure optimal use of funds. Award recipients must adequately safeguard funds and assure they are used solely for authorized purposes.

The Grant Manager told us he believed an adequate system of internal controls was in place. In conducting this audit, we evaluated Philadelphia’s internal controls that we considered significant within the context of our audit objectives.

Financial Management System

The OJP Financial Guide, incorporating the Code of Federal Regulations (CFR) requires recipients to maintain records to adequately identify the source and application of award funds provided for financially supported activities. These records must contain information pertaining to awards and authorizations, obligations, unobligated balances, assets, liabilities, outlays or expenditures, and income.
We found that Philadelphia maintained these records in separate grant specific accounts assigned separate cost center coding by award. We determined that these accounts tracked obligations, outlays or expenditures allocated to each award. We determined that the accounting system in use by Philadelphia was adequate to record the receipt and expenditure of the federal funds we reviewed and tested for compliance.

**Single Audits**

We reviewed the City of Philadelphia’s Single Audit Reports prepared by the Philadelphia Controller’s Office (an independent auditor) for its Fiscal Years (FY) 2010, 2011, and 2012. For the Single Audit Report for FY 2011, we found two audit findings that could have impacted the DNA Backlog awards. Specifically, the audit identified deficiencies in the City of Philadelphia’s payroll process because some city departments did not properly review and approve time worked by assigned employees, and one grant recipient did not accurately report all financial transactions in the city’s accounting system. Additionally, we found that the City of Philadelphia’s 2012 Single Audit was overdue at the time of our audit.

According to OMB A-133 Section 320, audit reports are due 9 months after the end of a fiscal year. The City of Philadelphia’s fiscal year is from July 1 to June 30, meaning the deadline would be 9 months after June 30. The City of Philadelphia’s 2012 Single Audit was due at the end of March 2013, but was not completed until January 10, 2014. We spoke with an official at the Controller’s Office and he acknowledged the 2012 Single Audit was late because several city agencies were contesting audit findings and, as a result, the report had not been completed. If a Single Audit is not completed, it cannot provide reasonable assurance as to the effectiveness of the City’s financial management and reporting, and compliance with laws and regulations.

During our testing of the salaries paid to award-funded staff we determined Philadelphia established a time and attendance system that verified time worked by the individuals and, included some evidence of supervisory review and approval. During our transaction testing, we found no evidence of improperly recorded financial transactions.

**Program Performance and Accomplishments**

As stated previously, the three cooperative agreements were awarded under the DNA Backlog Reduction Program with the objectives of: (1) improving DNA analysis capacity for Philadelphia and (2) reducing Philadelphia’s backlogged DNA casework. The goals of the DNA Backlog Reduction Program are to reduce the average number of days associated with forensic DNA sample turnaround time,

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4 Beginning in fiscal year 2011, NIJ combined the DNA Backlog Reduction Program and the Convicted Offender and/or Arrestee DNA Backlog Reduction Program into a single program. We were told that Philadelphia does not process convicted offender results. Therefore our audit did not assess that part of the program.
increase the throughput of public DNA laboratories, and reduce DNA forensic casework backlogs. Turnaround time can be defined as the average number of days between the submission of a request for forensic DNA analysis to a laboratory and the delivery of test results. Throughput can be defined as the average number of forensic DNA samples analyzed per analyst during a given time period. NIJ defined a backlogged case as one that has not been completed within 30 days of receipt in the laboratory. To measure a laboratory’s progress towards reducing its DNA backlog, grantees are required to submit semiannual progress reports including performance measurement data. The reports should contain data related to performance metrics to establish: (1) the turnaround time, (2) throughput, (3) improvements in the laboratory’s backlog of cases based on award funding, and (4) the number of profiles entered into CODIS as well as the number of CODIS hits or matches attributable to award funding.

We found Philadelphia met the performance measurement standards established for the awards because Philadelphia demonstrated improvements in most of the performance measurements we tested. However, we found that performance measurement results were sometimes difficult to interpret and could lead to unanticipated outcomes. Our analysis of performance measurements for each of the awards follows.

2009 Forensic DNA Backlog Reduction Award

The Philadelphia laboratory 2009 award was completed (award period ended) at the time of our audit fieldwork, and we compared Philadelphia’s initial progress report data results to the data reported on the final progress report. The progress reports showed Philadelphia: (1) reduced the turnaround time from 45 days to 36 days - a 20 percent reduction, (2) increased the throughput from 20 DNA samples analyzed per analyst to 45 - an increase of 125 percent, and (3) reduced the number of backlogged cases from 523 to 369 – a 29 percent reduction. During the entire 2009 award period, Philadelphia reported 595 profiles entered into CODIS and 122 CODIS hits attributable to award funding.

2010 DNA Backlog Reduction Award

The 2010 award was also complete at the time of our fieldwork and we again compared the laboratory’s initial progress report data results to the data reported on its final progress report. The progress reports demonstrated: (1) turnaround time increased from 144 days at the start of the reporting period to 251 days at the end of award – a 74 percent increase, (2) throughput decreased from 31 DNA samples analyzed per analyst to 22 - a reduction of 29 percent, and (3) backlogged cases were reduced from 3,122 to 2,183 – a reduction of 30 percent. During the 2010 award period, the laboratory reported 103 profiles entered into CODIS and 31 CODIS hits attributable to award funding.

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5 Prior to 2011 there was no standard definition of a backlogged case and laboratories defined the term in various ways. To clarify the meaning and introduce a uniform definition, NIJ now requires laboratories that receive federal funding to define a backlogged case as one that has not been closed within 30 days after receipt of the evidence in the laboratory.
A change in the laboratory’s 2010 award reporting methodology significantly impacted both the initial and final numbers reported for turnaround time. The impact of this change in methodology and other factors will be discussed later in this report.

2011 DNA Backlog Reduction Award

The 2011 award was ongoing at the time of our fieldwork. Therefore, we compared the cumulative or averages of performance measures for the 5 progress reports submitted between at the start of the award-reporting period in October 2011 to the most recent progress report submitted in December 2013. The progress reports demonstrated: (1) turnaround time increased from 172 days at the start of the reporting period to 182 days calculated as an average of the 5 reports submitted – a 6 percent increase, (2) throughput decreased from 32 forensic DNA samples analyzed per analyst to 30 calculated as an average of the 5 reports submitted – a 6 percent decrease, and (3) the number backlogged cases decreased from 2,404 to 2,180 – a reduction of 9 percent. During the ongoing 2011 award period coinciding with the start of our audit, the laboratory reported 527 profiles entered into CODIS and 119 CODIS hits attributable to award funding.

In addition to analyzing the three principle award performance metrics during each overall award period, we examined the impact of each metric over time to determine other factors that could influence performance. We found that a number of factors influence performance measurements and the statistics that describe those factors do not always provide an accurate picture of a laboratory’s performance.

The factors we identified include: (1) Philadelphia’s treatment of evidence received from law enforcement, (2) changes to NIJ’s methodology for calculating performance results, principally the inclusion of a standardized definition for a backlogged case, (3) new employee training, and (4) validation of new award-funded DNA equipment. In the following paragraphs, we discuss the impact of the four factors on turnaround, throughput, and backlog reduction.

Turnaround

The figure below demonstrates that during the 2009 award period, Philadelphia reduced the average number of days between the submission of a request for forensic DNA analysis to a laboratory and the delivery of test results from 45-36 days. However, during the 2010 award period, average turnaround time increased significantly beginning at 144 days and ending even higher at 251 days, and in 2011 average turnaround times remained high beginning at 172 days and increasing to an average of 182 days by the end of the most recent period coinciding with our audit fieldwork.
A DNA case remains open from the time Philadelphia receives the evidence until the DNA analysis is completed and a report is forwarded to law enforcement. The Philadelphia Laboratory Manager told us that, frequently, a case will be open but inactive for a significant period of time pending additional DNA evidence. Moreover, that same case can become active again when the law enforcement agency requests analysis of additional DNA evidence. As a result, when the last DNA sample from the inactive case is finally analyzed and Philadelphia provides its completed report to law enforcement, the case is reported as backlogged for an extended period when in reality the case may never have been backlogged, only inactive for an extended period while waiting for additional DNA evidence.

During the 2009 award period, there was no standard definition from NIJ of a backlogged case and laboratories defined the term in different ways. After 2011, NIJ published a standard definition of a backlogged case to include cases that had not been closed by a final report issued to law enforcement users within 30 days after receipt of the evidence in the laboratory.

During the 2009 award period, and absent specific guidance from NIJ, the Philadelphia Laboratory Manager told us Philadelphia reported all DNA evidence received as backlogged. During Philadelphia’s 2010 award, after NIJ provided additional guidance to define the definition of a backlogged case, Philadelphia’s turnaround time increased significantly – from a low of 36 days at end of the 2009 award period to a high of 251 days by the end of the 2010 award period.

We asked the Philadelphia Laboratory Manager to comment on the significant increase in turnaround time between 2009 and 2010. He told us that in 2009,
before NIJ provided guidance to define a backlogged case, Philadelphia reported all cases as backlogged because cases could not be completed immediately. Therefore, calculations for turnaround time included many cases with short turnaround times that resulted in a low average turnaround time.

NIJ’s revision of the turnaround standards during the 2010 award impacted the turnaround averages in two ways. First, Philadelphia could no longer include cases that were completed in a short period of time. Second, Philadelphia began making significant progress towards reducing the number of backlogged cases. Because the majority of backlogged cases completed included older inactive cases that Philadelphia retained for an extended period of time, completing those cases significantly increased the laboratory’s average turnaround time. The Philadelphia Laboratory Manager provided us with an analysis of completed cases that demonstrated average turnaround time was weighted more towards the older backlogged cases.

Despite the initial increase in 2010 in turnaround time, we concluded that the decrease in the number of backlogged cases represented a positive outcome resulting from Philadelphia’s receipt of award funding. Initially, we expected the average turnaround time to decrease as a result of award funding; however, we found that as Philadelphia began to reduce its backlog of older cases, the inverse occurred and turnaround time increased. Turnaround time reached a high of 251 days at the end of the 2010 award to an average of 182 days at the end of the 2011 periods we reviewed. As older backlogged cases are completed and removed from the database, we would expect the downward trend of average turnaround time to continue. In our view, the increase in average turnaround time provides an example of how the factors influencing backlog reduction statistics can lead to unanticipated outcomes.

Throughput

The figure below demonstrates that during the 2009 award period, the laboratory increased the throughput from 20 to 45 forensic DNA samples analyzed per analyst. However, during the 2010 award period, throughput decreased significantly beginning at 31 samples analyzed per analyst and ending at 22 samples per analyst. In the 2011 award period, throughput stabilized somewhat beginning at 32 samples analyzed per analyst and ending at an average of 30 samples analyzed per analyst.
We asked the Philadelphia Laboratory Manager about the decrease in throughput between the 2009 and 2010 award periods and were told several factors influenced the throughput calculations including: (1) analyst training and turnover, (2) validation of award-funded equipment, and (3) the organizational structure of the laboratory. Collectively, these factors had a negative effect on throughput.

According to the Philadelphia Laboratory Manager, Philadelphia’s training workload is influenced by employee turnover, which creates a requirement to train new analysts, and the addition of new award-funded equipment, which creates a training requirement for already qualified analysts. The Philadelphia Laboratory Manager estimated that a new analyst requires over 1 year of training to become proficient in analyzing DNA evidence. During a new analyst’s training period, a qualified analyst is assigned to mentor the new analyst. This reduces the number of cases the qualified analyst can complete during the mentoring period. Moreover, the acquisition of new award-funded equipment creates a training requirement for qualified analysts to be trained specifically to use the new equipment.

In addition to a training requirement, the Philadelphia Laboratory Manager said new equipment also creates a validation requirement. The FBI’s Quality Assurance Standards (QAS) for Forensic DNA Testing Laboratories require the laboratory to calibrate or verify the accuracy of all new equipment. Equipment validation may also include the completion of new or revised written standard

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Figure 2
DNA Samples Analyzed Per Analyst

![Throughput for Awards Tested](chart)

Source: Office of the Inspector General

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6 The QAS for Forensic DNA Testing Laboratories describe the quality assurance requirements that laboratories performing forensic DNA testing or utilizing CODIS should follow to ensure the quality and integrity of the data generated by the laboratory.
procedures. The validation of the equipment must be completed prior to adding the results of the DNA analysis to the FBI’s NDIS database. During the validation period, qualified analysts are required to test and validate the equipment and the validation and testing reduces the time available for those analysts to analyze samples.

The Philadelphia Laboratory Manager also said Philadelphia’s organizational structure can impact the average cases closed per analyst because a Technical Leader, who reviews the work of analysts, may or may not act as an analyst. The Laboratory Manager stated that Technical Leaders at the laboratory did not perform analyst work and were not included in his calculations.

Current NIJ guidelines in the solicitation and award documentation do not require laboratories to report statistics related to the impact of training, and validation on a laboratory’s reporting requirements that could potentially have a negative effect on throughput, so we could not verify the Philadelphia Laboratory Manager’s claims. We verified a sample of the Laboratory’s throughput statistics back to supporting documentation and did not identify significant discrepancies.

**Backlog Reduction**

The figure below shows that during the 2009 award period Philadelphia reduced the number of backlogged cases from 523 to 369. However, during the 2010 award period, the number of backlogged cases increased significantly at the outset of the award to 3,122 cases and then declined to 2,183 cases by the end of the award period. For the 2011 award period, the number of backlogged cases started at 2,404 and declined to 2,180 during the period reviewed during fieldwork.

**Figure 3**

**Backlogged Cases**
As discussed, earlier in this report and shown in the figure above, backlogged cases fluctuated over the period of the grants we audited. In discussing the fluctuations in backlogged cases, the Laboratory Manager told us the factors influencing backlog reduction included: (1) the Laboratory’s treatment of evidence received from law enforcement; (2) changes to NIJ’s methodology for calculating performance results, principally the inclusion of a standardized definition for a backlogged case; and (3) implementation of the award-funded Laboratory Information Management System (LIMS).

As we noted earlier in the report, Philadelphia retains all DNA related evidence received for cases and the DNA case remains open from the time the laboratory receives all the evidence from law enforcement until the DNA analysis is complete and a report is provided to the requesting agency. Philadelphia’s management of evidence combined with NIJ’s revised definition of a backlogged case – a case that did not close within 30 days – significantly increased the reported number of backlogged cases between the 2009 and 2010 award periods.

The Philadelphia Laboratory Manager said that the implementation of the laboratory’s LIMS software during the 2010 award period resulted in a significant decrease in the number backlogged cases. He explained that prior to the introduction of LIMS, Philadelphia’s retention of evidence policy resulted in a backlog of dormant (or inactive) cases that would never be closed. The new LIMS allowed officials to improve their management of the backlog database by identifying dormant cases and working with the law enforcement agencies that submitted the evidence to remove those dormant cases from inclusion in the backlog database.

Since Philadelphia removed the dormant cases from the database without a report to complete the case, the cases did not meet the criteria for a completed case. The cases were essentially closed administratively and removed from the backlog database. Philadelphia reported the cases as a reduction in the backlog but, because no report was issued, did not include the cases in throughput or turnaround calculations. Thus, the backlog decreased during a period when average turnaround time increased and the average number of cases closed per analyst decreased.

We verified Philadelphia’s calculations and, because of the limited guidance available, we considered the backlog calculations to be reasonable and determined they were adequately supported.

Overall, from our review we determined that NIJ provides laboratories with newsletters, individual assistance, and guidelines for calculating performance metrics but we found from our discussions with Philadelphia officials that the calculation of backlogged case metrics and the factors that impact those metrics can be a complex process requiring considerable guidance and definition of terms.
Personnel and Fringe Benefit Expenditures

We tested a judgmental sample of Philadelphia’s personnel expenditures for all awards to determine if they were correctly computed, properly authorized, accurately recorded, and properly allocated in Philadelphia’s accounting system. In addition, we compared total fringe benefit expenditures approved in the award budget to actual fringe benefits charged for only the 2009 award to ensure costs were properly charged and in accordance with the grant. Fringe benefits were not an approved budget item for the 2010 and 2011 awards.

Philadelphia officials provided us with a separate list of personnel expenditures for each of the awards and a separate listing of fringe benefits for only the 2009 award. From these lists, we tested a judgmental sample of personnel expenditures during two consecutive pay periods for the 2009 award and 4 non-consecutive pay periods for the 2010 and 2011 awards. We also tested a sample of fringe benefits for the 2009 award.

Philadelphia uses a combination of paper-based timesheets, manual requests for overtime, and electronic documents to record employees’ hours worked. From our testing we determined the timesheets, requests for overtime, and electronic documents accurately identified the time an award-funded employee worked on DNA cases related to the award program and evidenced supervisory approval. We reviewed the timesheets and award budgets to ensure that the amounts charged to the awards were allowable. We found that the personnel charges to the three awards were correctly computed, properly authorized, accurately recorded, properly allocated, supported, and allowable.

Philadelphia received approval for the 2009 award to charge fringe benefits that included: (1) Social Security/Medicare tax, (2) pension contribution (3) life insurance (4) health insurance, (5) Workman’s Compensation, and (6) Group Legal. OJP issued a Financial Clearance Memorandum that approved funding for these benefits at a fixed rate totaling 48.6 percent of personnel expenditures. For those award-funded employees we determined that fringe benefits charged were allowable, supportable and accurate.

Based on our review of payroll records for award-funded employees, and our verification of Philadelphia’s accounting methodology, we concluded that Philadelphia officials met the terms and conditions of the award for managing personnel and fringe benefit expenditures.

Other Direct Cost Expenditures

We selected a judgmental sample of non-personnel expenditures for testing from all three awards. To determine if expenditures were properly authorized, we reviewed approval signatures on the purchase documents and accompanying invoices. To determine if expenditures were properly recorded, we verified amounts from the invoices/receipts were accurately recorded in the accounting system under approved and separate cost centers for each award. To determine if
expenditures were allowable, we compared the expenditures to the award budget, permissible uses of funds outlined in the OJP Financial Guide, and the terms and conditions of the awards. To determine if expenditures were supported, we reviewed purchase documents, invoices, and accompanying accounting system data. Based on our testing we found that the non-personnel expenditures we reviewed were properly authorized, recorded, supported, and allowable.

**Accountable Property**

The OJP Financial Guide requires grantees to be prudent in the acquisition and management of property acquired with federal funds. The guide also says that grantees must establish an effective system for property management.

We reviewed a sample of grant-funded equipment meeting the OJP accountable property guidelines for each of the awards to ensure the equipment was properly marked as purchased with federal funds, used as shown in the award, physically present and verifiable, and included on a Laboratory inventory list.

Additionally, we also tested the Laboratory’s equipment inventory list for compliance with the OJP Financial Guide Post Award Requirements for Property and Equipment. From our testing we determined that Philadelphia did not comply with several OJP imposed Financial Guide requirements. Specifically, it did not comply with property and equipment requirements that included: (1) identifying the source of the equipment, including the award number under which it was acquired; (2) determining whether title to the equipment settles with the recipient or the Federal Government; (3) citing the percentage (at the end of the budget year) of Federal participation in the cost of the project or program for which the equipment was acquired (not applicable to equipment furnished by the Federal Government); (4) providing the unit acquisition cost; and (5) detailing ultimate disposition data, including date of disposal and sales price or the method used to determine current fair market value where an award recipient compensates the Federal awarding agency for its share.

Philadelphia Laboratory officials told us equipment inventory listings will be modified to include this missing information. This information was not included because some of the information is kept elsewhere (electronic folders and paper binders) or the Philadelphia Laboratory was unaware of the requirements. When property records are not adequately maintained, there is a potential for loss, damage, or theft of the property. The Philadelphia Laboratory is aware of the issue and is taking action to correct the master inventory list in order to be in compliance with property and equipment management requirements.

**Budget Management and Control**

The OJP Financial Guide and criteria established in 28 C.F.R §66.30 addresses budget controls surrounding awardee financial management systems. According to the requirements, award recipients are permitted to make changes to their approved budgets to meet unanticipated program requirements. However, the
movement of funds between approved budget categories in excess of 10 percent of the total award must be approved in advance by the awarding agency. In addition, the criteria requires that all awardees establish and maintain program accounts which will enable separate identification and accounting for funds applied to each budget category included in the approved award.

We compared the total expenditures by budget category from Philadelphia’s accounting system to the budget categories established by OJP’s final budget revision for each of the three awards. We found that the Philadelphia’s expenditures were within the allowable 10 percent deviation allowance for Award 2009-DN-BX-K142 and 2010-DN-BX-K114. Award 2011-DN-BX-K425 was still in progress during our fieldwork, but at that time Philadelphia expenditures were within the allowable 10 percent requirement. Additionally, for each award we also found evidence of an ongoing budget versus actual expenditure comparison to help ensure compliance with the 10 percent requirement.

**Reporting**

*Federal Financial Reports*

The financial aspects of the awards are monitored through Federal Financial Reports (FFRs). FFRs are designed to report on the status of award expenditures and remaining funds and must be submitted within 30 days of the end of the most recent quarterly reporting period. According to the OJP Financial Guide, if FFR’s are delinquent, an automatic hold on further drawdowns will be placed on the remaining funds associated with an award.

For the three awards, a Philadelphia official told us they completed the FFRs using their quarterly reports generated from the accounting system and segregated by cost center for each award. We tested the 4 most recent quarterly FFRs for each award and determined the reports were accurately prepared based on the supporting expenditure documentation provided by Philadelphia’s accounting system. We also tested each FFR for timeliness using the criteria noted above and found that Philadelphia submitted its reports within OJP prescribed timeframes.

*Progress Reports*

Progress reports provide information relevant to the performance of an award-funded program and the accomplishment of objectives as set forth in the approved award application. According to the OJP Financial Guide, these reports must be submitted twice yearly, within 30 days after the end of the semi-annual reporting period, for the life of the award.

For each of the awards, we reviewed and tested a sample of progress reports for accuracy and timeliness. In doing so we looked at the statistical data cited and the related accomplishments included with each progress report and tested to ensure there was available verifiable documentation to support Philadelphia’s reported progress and accomplishments. We also tested to ensure the reports were
submitted within required timeframes. Based on our review we determined that the reports accurately described the work accomplished to meet the program’s objectives for each award, and the reports were filed timely.

**Drawdowns**

According to the OJP Financial Guide, recipients should time their drawdowns requests to ensure that Federal cash on hand is the minimum needed for disbursements/reimbursements to be made immediately or within 10 days.

At the time of our fieldwork, all grant funds had been fully drawdown for the 2009 and 2010 awards. For the 2011 award Philadelphia had requested funding for $376,580 of the $1,146,517 award budget, or 33 percent. To determine if drawdowns were completed in advance or on a reimbursement basis, we interviewed Philadelphia Officials and reviewed a sample of documentation supporting actual expenditures. We determined that drawdowns were requested on a reimbursement basis and Philadelphia’s drawdown procedures were adequate, supported by verifiable documentation, and complied with award requirements.

**Compliance with Other Award Conditions**

Award requirements are included in the terms and conditions of a cooperative agreement and special conditions may be added to address special provisions unique to an award. We reviewed a sample of the special conditions found in the award documents that we determined to be within the scope of our audit and that were not specifically tested elsewhere in our audit. We determined that Philadelphia complied with the awards special conditions that we tested within the context of our audit objectives.

**Monitoring Contractors and Consultants**

The OJP Financial Guide says direct award recipients should ensure that they monitor contractors in a manner that will ensure compliance with the overall financial management requirements imposed by the Guide. The Guide defines a consultant as an individual who provides professional advice or services and a contractor is a person or entity that contracts with the Federal Government to provide supplies, services, or experimental, developmental, or research work.

For all of the awards collectively we identified 2 consultants and 8 contractors paid with grant funds totaling $392,530. We tested a sample of contractor and consultant expenditures totaling $166,271. The Philadelphia Laboratory manager told us the laboratory follows the City of Philadelphia’s normal contracting procedures including using contractors who have been approved for citywide work and have a record of satisfactory performance. During our testing, we found evidence of oversight from the Philadelphia Laboratory, and other departments within the City to evaluate and validate the work performed by award-funded contractors.
We also found that contractor and consultant expenditures charged to the three awards were allowable, supported and accurate, and were within the award budgets approved by OJP. Moreover, we determined Philadelphia provided adequate oversight of the award funded contractors and consultant.

Conclusions

We reviewed Philadelphia’s compliance with key award conditions and found Philadelphia generally met the terms and conditions of the awards. We found Philadelphia met the performance measurement standards established for the awards because the laboratory demonstrated improvements in most of the performance measurements we tested. However, we found performance measurement results were sometimes difficult to interpret and could lead to unanticipated outcomes. We also found one instance, related to the management of accountable property, where Philadelphia did not meet the standards established by the OJP Financial Guide.

Recommendation

We recommend that OJP:

1. Ensure that the Philadelphia Laboratory updates its property and equipment inventory records to be in compliance with OJP requirements covering accountable property and equipment.
OBJECTIVES, SCOPE, AND METHODOLOGY

The objective of the audit was to determine whether reimbursements claimed for costs under the cooperative agreements were allowable, reasonable, and in accordance with applicable laws, regulations, guidelines, and the terms and conditions of the awards. We also assessed the Philadelphia Laboratory’s program performance in meeting the awards objectives and overall.

We conducted this performance audit in accordance with generally accepted government auditing standards. These standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

In conducting our audit, we used sample testing while testing award program expenditures. In this effort, we employed a judgmental sampling design to obtain broad exposure to numerous facets of the award reviewed, such as high dollar amounts or expenditure category based on the approved award budget. We tested $1,232,566 of $3,108,905 awarded to the City of Philadelphia, Philadelphia Police Department, Forensic Science Bureau Criminalistics Unit (Laboratory). This non-statistical sample design does not allow for the projection of the test results to the universes from which the samples were selected.

We audited a total of $3,108,905 awarded through the Office of Justice Programs to the City of Philadelphia, Philadelphia Police Department, Forensic Science Bureau Criminalistics Unit (Laboratory). Funding was awarded as part of the DNA Backlog Reduction Program to reduce DNA backlogs in state and local government crime laboratories by enhancing the laboratories capability to analyze DNA samples. Our audit concentrated on, but was not limited to the initial award in October 2009, through the end of our fieldwork in April 2014.

We tested compliance with what we considered to be the most important conditions of the award. Unless otherwise stated in our report, the criteria we audited against are contained in the Code of Federal Regulations: 28 CFR § 66, Uniform Administrative Requirements for Grants, incorporated in the Office of Justice Programs Financial Guide, and the award documents. We also reviewed Philadelphia’s Single Audit reports for fiscal years 2010, 2011, 2012.

In conducting our audit, we reviewed the internal controls of Philadelphia’s financial management system specific to the management of DOJ funds during the award period under review. However, we did not test the reliability of Philadelphia’s financial management system as a whole. We also performed limited tests of source documents to assess the accuracy and completeness of drawdown (reimbursement) requests, personnel and fringe benefit and other non-personnel expenditure charges, Federal Financial Reports, progress reports, and compliance with select award special conditions.
October 29, 2014

Dear Ms. Taylor:

This is in response to the recommendation cited on the draft audit report issued on October 9, 2014, by the U.S. Department of Justice Office of the Inspector General, Philadelphia Regional Audit Office, of the audit of the Office of Justice Programs cooperative agreement numbers 2009-DN-BX-KI42, 2010-DN-BX-KI14, and 2011-DN-BX-K425, awarded to the City of Philadelphia.

The draft audit report recommends that the Criminalistics Unit of the Philadelphia Police Department Office of Forensic Science (OFS) update its property and equipment inventory records to conform with OJP Requirements cited in section 3.7 of the “Postaward Requirements” of the OCFO 2014 Financial Guide covering accountable property and equipment. While the OFS maintained an inventory of all equipment purchased with federal grant funds, it did not maintain a single comprehensive inventory file with the format recommended by the Office of Justice Programs. The OFS concurs with the recommendation of maintaining a single comprehensive inventory record formatted using OJP guidelines.

In response to the recommendation, on March 7, 2014 the Criminalistics Unit began maintaining an equipment inventory database that meets all of the requirements of the OJP Financial Guide Section 3.7. The entire inventory records from the old equipment inventories were transferred to the new inventory database. The additional required information was added to the records as appropriate.

Attachment 1 is an example of the database structure being used by the Criminalistics Unit to track all equipment purchases and maintain equipment inventory files.

Sincerely,

Richard Negrin, Esq.
Deputy Mayor/Managing Director

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7 The attachment to Philadelphia’s response was excluded from this final report.
OFFICE OF JUSTICE PROGRAMS
RESPONSE TO THE DRAFT AUDIT REPORT

U.S. Department of Justice
Office of Justice Programs
Office of Audit, Assessment, and Management

Washington, D.C. 20531

MEMORANDUM TO: Thomas O. Puerzer
Regional Audit Manager
Philadelphia Regional Audit Office
Office of the Inspector General

FROM: Jeffery A. Haley
Acting Director

SUBJECT: Response to the Draft Audit Report, Audit of the Office of Justice Programs, National Institute of Justice DNA Backlog Reduction Program Cooperative Agreements Awarded to the City of Philadelphia, Pennsylvania

This memorandum is in reference to your correspondence, dated October 9, 2014, transmitting the above-referenced draft audit report for the City of Philadelphia (Philadelphia). We consider the subject report resolved and request written acceptance of this action from your office.

The draft report contains one recommendation and no questioned costs. The following is the Office of Justice Programs' (OJP) analysis of the draft audit report recommendation. For ease of review, the recommendation is restated in bold and is followed by our response.

1. We recommend that OJP ensure that the Philadelphia Laboratory updates its property and equipment inventory records to be in compliance with OJP requirements covering accountable property and equipment.

   OJP agrees with the recommendation. We will coordinate with Philadelphia to obtain a copy of written policies and procedures, developed and implemented, to ensure that the Philadelphia Laboratory’s property and equipment inventory records are in compliance with applicable OJP requirements.

We appreciate the opportunity to review and comment on the draft audit report. If you have any questions or require additional information, please contact Linda J. Taylor, Lead Auditor, Audit Coordination Branch, Audit and Review Division, on (202) 514-7270.
cc: Linda J. Taylor
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   Audit and Review Division
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OJP Executive Secretariat
Control Number IT20141010120713
OFFICE OF THE INSPECTOR GENERAL ANALYSIS AND SUMMARY
OF ACTIONS NECESSARY TO CLOSE THE REPORT

The OIG provided a draft of this audit report to Philadelphia and the Office of Justice Programs (OJP). Philadelphia’s response is incorporated as Appendix 2 of this final report, and OJP’s response is included as Appendix 3. In response to our audit report, OJP agreed with our recommendation and discussed the actions it will take to address our finding. The following provides the OIG analysis of the responses and summary of actions necessary to close the report.

Recommendation:

1. We recommend that OJP ensure that the Philadelphia Laboratory updates its property and equipment inventory records to be in compliance with OJP requirements covering accountable property and equipment.

Resolved. The Philadelphia Laboratory and OJP concurred with our recommendation. Philadelphia said in its response that the Criminalistics Unit of the Philadelphia Police Department Office of Forensic Sciences began maintaining an equipment inventory database that meets all of the requirements of the OJP Financial Guide. Additionally, OJP said it will work with Philadelphia to obtain a copy of written policies and procedures developed and implemented to ensure compliance with OJP requirements.

This recommendation can be closed when we receive documentation demonstrating the implementation of policies and procedures covering accountable property and equipment that meet OJP requirements.
The Department of Justice Office of the Inspector General (DOJ OIG) is a statutorily created independent entity whose mission is to detect and deter waste, fraud, abuse, and misconduct in the Department of Justice, and to promote economy and efficiency in the Department’s operations. Information may be reported to the DOJ OIG’s hotline at www.justice.gov/oig/hotline or (800) 869-4499.