

National Institute of Justice

Office of Investigative and Forensic Sciences

Final Reports Submitted Under NIJ's Convicted Offender DNA Backlog Reduction
Program (In-House Analysis and Review)
Fiscal Year 2010 Awards

August 2012

This document presents final grant reports report submitted to the U.S. Department of Justice. These reports have not been published by the Department. Opinions or points of view expressed are those of the authors and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

FY10 Convicted Offender Final Reports

This table is a summary of Convicted Offender Awards issued in FY2010. Following this table are their respective Final Reports.

FY10 Recipient Name	Award Number	Award Amount
Oklahoma State Bureau of Investigation	2010-DN-BX-K022	\$550,000.00
California Department of Justice	2010-DN-BX-K023	\$473,967.00
New Hampshire Department of Safety	2010-DN-BX-K024	\$20,000.00
Mississippi Department of Public Safety	2010-DN-BX-K025	\$300,312.00
Georgia Bureau of Investigation	2010-DN-BX-K026	\$64,600.00
Maryland State Police	2010-DN-BX-K027	\$206,591.00
Las Vegas Metro Police Department	2010-DN-BX-K028	\$109,410.00
Tennessee Bureau of Investigations	2010-DN-BX-K029	\$506,527.00
Arizona Department of Public Safety	2010-DN-BX-K030	\$446,743.00
Honolulu Police Department	2010-DN-BX-K031	\$148,140.00
Delaware Health and Social Services	2010-DN-BX-K032	\$98,100.00
Vermont Department of Public Safety	2010-DN-BX-K033	\$19,153.00
Alabama Department of Forensic Sciences	2010-DN-BX-K034	\$593,807.00
Maine State Police	2010-DN-BX-K110	\$88,434.00
Wyoming Office of the Attorney General	2010-DN-BX-K133	\$64,000.00
South Dakota Office of the Attorney General	2010-DN-BX-K134	\$55,125.00
Washington State Patrol	2010-DN-BX-K135	\$242,040.00
Nebraska State Patrol	2010-DN-BX-K140	\$52,500.00
Oregon Department of State Police	2010-DN-BX-K142	\$220,000.00
North Dakota Office of the Attorney General	2010-DN-BX-K211	\$89,670.00
TOTAL FUNDING		\$4,349,119

FY10 Recipient Name: Oklahoma State Bureau of Investigation

Award Number: 2010-DN-BX-K022

Award Amount: \$550,000

Final Report: *This project is still in progress*

FY10 Recipient Name: California Department of Justice

Award Number: 2010-DN-BX-K023

Award Amount: \$473,967

Final Report: *This project is still in progress*

FY10 Recipient Name: New Hampshire Department of Safety

Award Number: 2010-DN-BX-K024

Award Amount: \$20,000

Final Report:

Goal 1: Process 500 offender samples utilizing funds for consumables

Grant funding was used to purchase consumables for analysis of CODIS samples. For the entire project period, the analysis of 735 samples has been completed utilizing consumables purchased with grant funds. During the grant period, the submission of CODIS samples to the laboratory increased greatly as agencies implemented collections in compliance with the recently expanded CODIS legislation. While this has led to a larger backlog in CODIS samples awaiting analysis overall, the grant funding allowed the lab to continue to process the samples to the best of our ability. This goal has been met and exceeded.

Goal 2: Purchase proficiency tests for a CODIS analyst to satisfy FBI Standards

Proficiency tests have been purchased with grant funds.

HIT INFORMATION: Several burglary cases were aided through offender samples analyzed and entered into CODIS under this grant. In total, eighteen separate investigations were aided. Twelve of the cases occurred in New Hampshire, and 6 additional cases were outside the state (Massachusetts, Maine, New York and Vermont). Two offender samples alone account for fourteen of the assisted investigations. One of the individuals was found to match evidence samples in seven cases in New Hampshire, each in separate towns and spanning over 5 years in time, as well as three cases from Massachusetts. Unfortunately, five of the NH cases were out of the statute of limitations and cannot be prosecuted; however, police departments were still grateful for the information so they could close out their cases, and the information that the same individual is potentially responsible for so many cases could have a sentencing impact on the remaining ones. Another offender's sample matched evidence in three NH burglary cases as well as another in Vermont. These hits show the importance of processing offender samples particularly in the New England area, where the relatively small sizes of the states allows for easy travel between them, and we find numerous out of state investigations are aided through CODIS.

FY10 Recipient Name: Mississippi Department of Public Safety

Award Number: 2010-DN-BX-K025

Award Amount: \$300,312

Final Report: *This project is still in progress*

FY10 Recipient Name: Georgia Bureau of Investigation

Award Number: 2010-DN-BX-K026

Award Amount: \$64,600

Final Report: The following goals were set for this award:

1. Complete analysis of 13 core STR loci for 3,400 offender samples.

Progress Oct-Dec 2010: No activity on award during this reporting period. State funds were being utilized for offender sample analysis.

Progress Jan-Jun 2011: No activity on award during this reporting period. FY2009 Offender Backlog award funds were being utilized for offender sample analysis.

Progress Jul-Dec 2011: Supplies listed in the table below were purchased using award funds to support the analysis of 1688 samples completed during this reporting period. At the end of the reporting period the backlog of offender samples was 209. This increase is a temporary uptick due to staff training and scheduled leave.

Description	Quantity	Description	Quantity
Identifiler kits	10	Taq Gold	2
10X buffer	5	QiaAmp Extraction kit	3
96 well reaction plate	21	50 ul filter tips	5
POP4	28	Filter tips	15
96 well septa strip	3	EZ1 extraction kit	5
Buffer tray septa strip	3	Formamide	3
LIZ standard	6	Capillary array	1
Matrix set	1		

Final Report: A cumulative total of 3579 offender samples were analyzed using funding from this award. This slightly exceeded the established goal of 3400 due to lower than expected repeat analysis of samples and cost saving of some supplies. The funding from this award purchased the supplies listed in the following table. This is a cumulative summary of purchases with the exception of approximately \$1500 spent on miscellaneous supplies like gloves and lab coats that were purchased using a state purchasing card.

Description	Total
10X buffer	5
96 well reaction plate	21
96 well septa strip	6
Buffer tray septa strip	6
Capillary array	1
EZ1 extraction kit	5
Filter tips, 1100 ul	15
Filter tips, 50 ul	5
Formamide	5
Identifiler STR kit	10
LIZ standard	10
Matrix dye set	1
POP4, 31xx	28
QiaAmp 96 Swab Biorobot extraction kit	3
Taq Gold	2

GOAL COMPLETED

2. Enter DNA profiles into CODIS within 30 days of completion of analysis.

Progress Oct-Dec 2010: No activity on award during this reporting period. State funds were being utilized for offender sample analysis.

Progress Jan-Jun 2011: No activity on award during this reporting period. FY2009 Offender Backlog award funds were being utilized for offender sample analysis.

Progress Jul-Dec 2011: The average time to enter DNA profiles into CODIS was 24 days from the date of sample receipt.

Final Report: More than 99% of the samples were entered into CODIS within 30 days of sample receipt in the laboratory.

GOAL COMPLETED

3. Search CODIS, identify possible 'hits' to unsolved cases and then confirm offender DNA profiles prior to agency notification.

Progress Oct-Dec 2010: No activity on award during this reporting period. State funds were being utilized for offender sample analysis.

Progress Jan-Jun 2011: No activity on award during this reporting period. FY2009 Offender Backlog award funds were being utilized for offender sample analysis

Progress Jan-Jun 2011: CODIS searches in December 2011 identified 11 matches to casework samples from the offender profiles generated as a result of award funded supplies. This data was provided by the CODIS Administrator.

Final Report: A cumulative total of 39 CODIS hits were identified to samples analyzed using this award. 35 of the hits were to Georgia cases, with 4 hits to cases from other states.

GOAL COMPLETED

Summary

The backlog of offender samples is obtained from the GBI Laboratory Management System and is based upon the number of samples where the analytical service has not been completed within 30 days of submission. This data is maintained in monthly reports generated in the lab. At the start of this award on October 1, 2010, the number of samples in backlog was 8. As of the end of any activity involving this award, March 1, 2012, the number of samples in backlog was 95. This increase can be attributed to completion of training of a third analyst that delayed some testing.

This is the final report for this award. The funding from this award was essential in maintaining uninterrupted offender sample analysis within the GBI Crime Lab (GBIDOFs). The GBI Crime Lab is appreciative of the support from Congress and the National Institute of Justice by making this funding available.

FY10 Recipient Name: Maryland State Police

Award Number: 2010-DN-BX-K027

Award Amount: \$206,591

Final Report:

This project is still in progress

FY10 Recipient Name: Las Vegas Metro Police Department

Award Number: 2010-DN-BX-K028

Award Amount: \$109,410

Final Report: *This project is still in progress*

FY10 Recipient Name: Tennessee Bureau of Investigations

Award Number: 2010-DN-BX-K029

Award Amount: \$506,527

Final Report: *This project is still in progress*

FY10 Recipient Name: Arizona Department of Public Safety

Award Number: 2010-DN-BX-K030

Award Amount: \$446,743

Final Report: *This project is still in progress*

FY10 Recipient Name: Honolulu Police Department

Award Number: 2010-DN-BX-K031

Award Amount: \$148,140

Final Report: The following information is the final report for Project Number 2010-DN-BX-K031, 2010 Convicted Offender and/or Arrestee DNA Backlog Reduction Program grant:

- Progress October-December 2010
 - Requisite Programmatic Environmental Assessment (EA) obtained for purchase of DNA analysis kits.
- Progress January-June 2011
 - A qualified DNA analyst began employment on this grant. Significant gains in reducing the convicted offender backlog were made.
- Progress July 2011-December 2011
 - The laboratory continued to test offender samples using one grant-funded employee and DNA amplification kits purchased from this grant. The laboratory validated and implemented reduced volume amplifications and a more streamlined extraction procedure. As a result, the laboratory was able to surpass original sample processing estimates. As of December 31, 2011 the convicted offender DNA backlog (greater than 30 days from receipt) was eliminated.
- Progress January 2012-March 2012
 - The laboratory continued to test offender samples using one grant-funded employee and DNA amplification kits purchased from this grant. The laboratory maintained a turnaround time of less than 30 days.

Summary: In 2008, the State of Hawaii implemented all-felon legislation. The laboratory's capacity was overwhelmed by the sudden surge of DNA samples and a backlog quickly

developed. The goal of this grant project was to significantly reduce the backlog of offender DNA samples awaiting processing. The means by which to accomplish this goal was to increase the laboratory's capacity by hiring a DNA analyst and reducing the backlog by obtaining supplies for testing.

At the start of the award period, the laboratory estimated that it could process 4,320 samples in the project period based on the laboratory's known capacity. To maximize the resources provided by the grant, the laboratory streamlined its technical procedures and incorporated partial volume amplifications. These improvements helped the laboratory exceed the original estimate and resulted in 6,953 samples processed and 6,684 profiles uploaded to CODIS.

232 CODIS hits were obtained from the DNA samples uploaded on this grant. One of the hits was to a 1989 cold case in which an 81 year-old woman was raped and murdered in a senior citizen housing complex. The offender has since been charged and is currently awaiting trial.

The laboratory successfully accomplished its goal of reducing the backlog of offender DNA samples. At the start of the award period the laboratory had 3,343 backlogged DNA database samples (samples older than 30 days) with an average turnaround time of 422 days. By the end of the award period the laboratory eliminated the database backlog with an average turnaround time of 16 days.

FY10 Recipient Name: Delaware Health and Social Services

Award Number: 2010-DN-BX-K032

Award Amount: \$98,100

Final Report: *This project is still in progress*

FY10 Recipient Name: Vermont Department of Public Safety

Award Number: 2010-DN-BX-K033

Award Amount: \$19,153

Final Report: The following goals and objectives were set for this award:

1. The original purpose of this grant was to enable us to analyze and upload 555 convicted offender samples to CODIS. Late in the grant period we requested and were granted a GAN to transfer funds from the underutilized personnel category to supplies, and with the transfer, to test 40 to 50 more CODIS samples. We have tested and uploaded a total of 589 offender samples, with more samples having been analyzed. This number represents the number of new offender samples profiled and uploaded and does not count the number of QC samples that have been run in connection with this work.
2. Funding through the grant allowed the purchase of laboratory supplies used for grant-related DNA analysis. The supplies requested were used for the analysis of the convicted offender samples processed under this grant. The Supply budget included supplies for the extraction of convicted offender samples using a manual approach using sucrose

extraction method, quantitation using an in-house quantitation system, amplification of the loci with a standard one-amplification kit (PowerPlex 16 Hot Start), and the analysis of amplified fragments using a Genetic Analyzer. The reagents and supplies necessary to support these functions are detailed as follows: extraction plastics, extraction reagents, Multiscreen plates; 96 well plates and caps, matrix tips, SYBR Mix, rotogene tubes, rainin tips, PowerPlex 16HS, Capillary Arrays, CE setup consumables, POP Polymer, Septa, formamide.

3. We have achieved the objectives of the grant request, with 589 new samples uploaded into CODIS. One investigative lead has been generated and reported to this set of convicted offenders to date. It should be noted, that these offender samples may match to future crime scene samples and provide investigative information in the future.
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FY10 Recipient Name: Alabama Department of Forensic Sciences

Award Number: 2010-DN-BX-K034

Award Amount: \$593,807

Final Report: The Alabama Department of Forensic Sciences had a very successful Final reporting period from January-March, 2012 for this Award. The State of Alabama's Goals for this Award are as follows:

1. Process a minimum of 16,760 offender samples using federally funded supplies and overtime for DNA Database analysts. This Goal is COMPLETE. The reporting period from January-March, 2012 saw the State test an additional 3,960 samples, with 3,123 reviewed and uploaded to CODIS. The January-March, 2012 time period also saw the State identify an additional 62 CODIS hits to offenders tested using funds from this Award. The cumulative award period saw the State test a total of 24,739 samples. With quality control and duplicate samples removed, the State successfully reviewed and uploaded to CODIS a total of 19,549 samples, far exceeding the initial Goal of this Award to test and upload a total of 16,760 samples. All samples tested under this Award have now been completed and reviewed, with all eligible profiles entered into CODIS and uploaded to NDIS. Further, of the 286 total CODIS hits identified through this Award, 69 of the hits were to arrestees collected pursuant to Alabama's new arrestee collection legislation, with 6 of the arrestee hits being to unsolved cases at the National (NDIS) level that originated from another State, which further demonstrates the positive nationwide impact of Alabama's effort in this important grant initiative.

Alabama is very proud of its achievements relating to this Award, specifically surpassing the Goal of offender samples tested, and identifying a total of two hundred eighty six (286) new CODIS hits at both the State and National level that arose from offender samples tested under this Grant initiative.

FY10 Recipient Name: Maine State Police

Award Number: 2010-DN-BX-K110

Award Amount: \$88,434

Final Report: *This project is still in progress*

FY10 Recipient Name: Wyoming Office of the Attorney General

Award Number: 2010-DN-BX-K133

Award Amount: \$64,000

Final Report: GPA Narrative: The following goal and objective were set for this award: *This projects goal and objective is to reduce the backlog of offender samples in-house using NIJ funding through this solicitation.*

Goal #1: *Reduce the backlog of Offender samples.*

This goal is complete.

All requested supplies have been purchased. All the PCR amplification kits requested and purchased were consumed by the end of this grant period.

During the entire grant period, the WSCL has devoted 210 overtime hours towards reducing the backlog.

All 1600 samples funded by this solicitation have been analyzed, reviewed and uploaded to NDIS. The WSCL sample designations for these samples are C1000345 through C1100726.

FY10 Recipient Name: South Dakota Office of the Attorney General

Award Number: 2010-DN-BX-K134

Award Amount: \$55,125

Final Report: The following goals and objectives were set for this award:

Save work for the State by entering acceptable profiles into NDIS as soon as possible and minimizing failed samples.

Progress - In Nov 2010, a new Vendor lab was chosen for samples still under FY09 offender grant funding that would also be utilized for testing of samples funded by the FY10 offender grant. Testing of FY09 funded samples was completed in June 2011. FY10 funded samples were shipped in May 2011. The first batch of FY10 funded data was received late June 2011 and was uploaded to NDIS on 6-29-11. Testing of FY10 funded samples was completed by end of December 2011. All samples were uploaded to CODIS within two weeks of receipt of data.

FY10 Recipient Name: Washington State Patrol

Award Number: 2010-DN-BX-K135

Award Amount: \$242,040

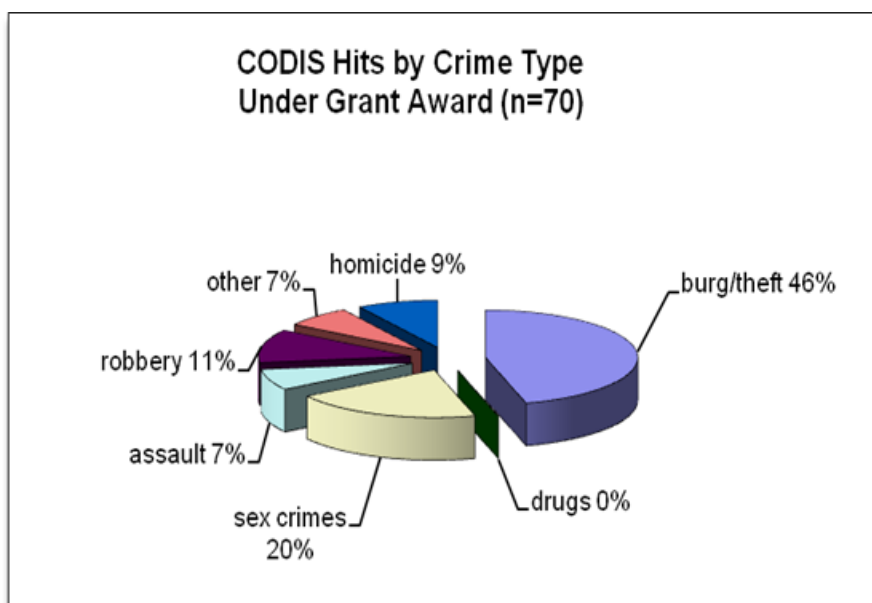
Final Report: Funds received under this solicitation were used to purchase laboratory consumables, service contracts for critical instruments, and convicted offender DNA collection kits previously approved in the grant application. The approved purchases enabled the WSP CODIS Crime Laboratory to complete timely DNA analysis on convicted offender DNA samples received between October 1, 2010-June 30, 2011. All testing was completed in-house and no overtime was utilized.

The following two goals and objectives were set for this award:

- Goal 1 – To analyze, review and upload 8,250 (non-duplicate) convicted offender DNA samples to NDIS between October 1, 2010 and March 31, 2012.
- Final Report – A total of 12,875 (non-duplicate) convicted offender DNA samples were uploaded to NDIS. [Note: Eleven additional samples were analyzed/reviewed during the grant period all of which were weak. Eight of the samples failed to produce a profile and three samples yielded partial profiles which were eligible for SDIS entry only (<10 core loci)].
- Goal 2 – To perform random reanalysis on 413 convicted offender DNA samples to ensure quality results between October 2, 2010 and March 31, 2012.
- Final Report – 578 convicted offender DNA samples were reanalyzed, entered into CODIS and uploaded using award funds. These profiles were subsequently searched in CODIS to ensure the profiles matched to duplicate samples previously typed. No unresolved discrepancies were observed.

Successes:

- The total number of non-duplicate convicted offender DNA samples uploaded to NDIS using award funds was 56% more than originally planned for. (12,875 uploaded/8,250 requested)
- Seventy hits resulted from the convicted offender DNA samples entered into CODIS as a result of this award.



FY10 Recipient Name: Nebraska State Patrol

Award Number: 2010-DN-BX-K140

Award Amount: \$52,500

Final Report: *This project is still in progress*

FY10 Recipient Name: Oregon Department of State Police

Award Number: 2010-DN-BX-K142

Award Amount: \$220,000

Final Report: *This project is still in progress*

FY10 Recipient Name: North Dakota Office of the Attorney General

Award Number: 2010-DN-BX-K211

Award Amount: \$89,670

Final Report: *This project is still in progress*
