# **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:

Narrative:

The following goals and objectives were set for this award:

- 1. State the goal or objective. Next, state whether you have achieved this goal or if it is still pending. Note any difficulties you have encountered in meeting this goal. If you haven't achieved the goal by the final report, tell us why you couldn't meet the objective.
- 2. Follow the same procedure as in # 1 for additional goals and objectives.
- 3. Note any successes that have arisen from this award.
- 4. Provide any discussion of the performance metrics that you desire.

# Example:

Report 1 –

• Goal 1 – To increase capacity of the DNA lab by purchase of automated equipment.

• Progress – In this reporting period the lab sent out requests for bids to purchase 2 robotic workstations, and sent out orders for 3 new 96 well thermal cyclers that were requested in our budget.

Note – You can build on prior reports using this format – see example below. The beauty of this approach is you simply update your last narrative with respect to the goals and objectives.

- Goal 1 To increase capacity of the DNA lab by purchase of automated equipment.
- Progress Oct-Dec 07 In this reporting period the lab sent out requests for bids to purchase 2 robotic workstations, and sent out orders for 3 new 96 well thermal cyclers that were requested in our budget.
- Progress Jan-June 08 In this reporting period the lab received, validated and put the 3 new thermal cyclers on line for casework analysis. The two robots have been received and are undergoing validation testing.
- Progress July-Dec 08 All equipment authorized and described above has been received, validated and is in use in the DNA lab.
   Goal completed

# Goal completed

Goal – to profile 25,000 offender samples.

**Progress made (Oct – Dec 2010):** purchased supplies allowing for the amplification of approximately 6100 offender samples. 1584 samples analyzed and 1382 profiles uploaded to CODIS.

**Progress made (Jan – June 2011):** Purchased supplies allowing for the amplification of approximately 6300 offender samples, and extraction of approximately 8900 offender samples. 4919 samples analyzed and 4814 profiles uploaded to CODIS.

**Progress made (June 2011 – Dec 2011):** Purchased supplies allowing for extraction of approximately 6000 offender samples. 4482 samples analyzed and 4131 profiles uploaded to CODIS. In October 2011, the OSBI CODIS Unit implemented a half volume amplification procedure. The implementation of this procedure saves the OSBI approximately \$9 per sample. As a result, we have not been using as many amplification kits and have slowed our expenditures on the grant. Based on this, the OSBI will be requesting an extension for this grant.

**Progress made (Jan 2012 – June2012):** Purchased supplies allowing for amplification of approximately 7000 offender samples. 4928 samples analyzed and 4071 profiles uploaded to CODIS. Total samples analyzed to date: 15,913.

**Progress made (July 2012-Dec 2012):** Purchased supplies allowing for the extraction of approximately 2500 offender samples and 6 months worth of consumables for the 3730 DNA Analzyer. 4122 samples analyzed and 3668 profiles uploaded into CODIS. Total samples analyzed to date: 20,035

**Progress made (Jan 2013-June 2013):** Purchased supplies to collect 10,000 offender samples, and approximately 6 months worth of amplification and extraction chemicals. 3784 samples analyzed and 3344 profiles uploaded into CODIS. Total samples analyzed to date: 23,819. **Progress made (July 2013-September 2013):** Purchased approximately 3 months of amplification and extraction chemicals. 2464 samples analyzed and 2314 profiles uploaded into CODIS. Total samples analyzed and 2314 profiles uploaded into CODIS. Total samples analyzed to date: 26,283. When compiling total numbers for the grant period, it was noted that the number of CODIS hits reported for the reporting period of July 1, 2012 – Dec 31, 2012 inadvertently reported all of the CODIS hits for that period, not just those that occurred as a result of this award. The correct number of CODIS hits that occurred as a result of this award is 59. The total number of CODIS hits that occurred as a result of this award is 280. **GOAL COMPLETED** 

#### FY10 Recipient Name: California Department of Justice

Award Number: 2010-DN-BX-K023

#### Award Amount: \$473,967

Final Report: The following accomplishments have been made in this reporting period with regard to this Convicted Offender-Arrestee Backlog Reduction Program (CA DOJ 2010): After the exhaustion of the 90 grant-funded Applied Biosystems Identifiler® Plus ("ID Plus") kits in the last reporting period, we had planned to consume approximately \$30,000 of surplus funds in the award by purchasing seven more kits and continuing to use award funding for overtime for data analysis, technical review and administrative review tasks. This tactic was approved in concept by the Grant Manager and would have required a GAN. However, the amount of time available for this purchase, given the very difficult purchasing environment in our agency, was deemed to be insufficient to complete that element of the plan in the remainder of the grant period, so the idea was abandoned. Consequently, it was decided to simply use the surplus funds on overtime in the same manner but applied to plates of samples amplified with non-grant-funded kits ("non-grant-amp'd" or NGA) plates. This proposal was also approved by the grant manager in a conversation in the early part of 2013 and was carried out. The grant plate tracking log that had been established was maintained and the "grant-amp'd" (GA) and NGA plates were tracked separately in their own category. In completing the performance metrics section of this final report the total numbers of buccal samples processed, total samples uploaded and hits made to total samples uploaded were reported. In order to be precise, however, the metrics are split here to reflect the results of both the GA and NGA plates.

Parameter	Grant-Kit- Amp'd	Non-Grant-Kit Amp'd	Total
No. samples analyzed	28,895	14,868	43,763
No. CODIS Uploads	27,106	13,284	40,390
CODIS offender* hits	159	77	236
Hits-fraction of uploads	0.58%	0.58%	0.584%

\*The term "offender" as used in this report includes "convicted offender" as well as "arrestee".

In addressing the comparison of the total number of samples analyzed, 43,763, with the current umber of samples uploaded to CODIS, 40,390, as of June 18, 2013, it should be understood that not all samples analyzed will ultimately yield a qualified DNA record for CODIS upload. Data Bank Program policy is to complete the laboratory analysis of all submissions; sometimes this is complete while administrative issues yet remain. Of the 3,300 samples not yet uploaded, 2,567 are currently in a set-aside table in STaCS with a status code of "Processing Complete— Pending"; they are awaiting further evaluation of apparent conflicts in the documentation of their legal qualifications for inclusion in the offender database. We have a conflict management team assigned to research these samples. Another group of 553 samples, while having been through the analytical process, are still scheduled for repeat work at one of the various stages, and will be either ultimately successful or found not to be capable of producing a DNA profile suitable for upload to CODIS. The remaining 180 samples are in a variety of states reflecting analytical or administrative failures; some 73 of which will result in requests for resubmission. Thus, we expect that more than <sup>3</sup>/<sub>4</sub> of the 3,300 samples processed with grant funding but not yet uploaded will likely make it into CODIS in the not-too-distant future.

The number of offender hits in CODIS obtained so far (236) from the uploaded convicted offender and arrestee DNA sample profiles in this project is in keeping with our past experience since the passage of Proposition 69 in November of 2004 that led to the major growth of the California offender DNA database. That is, we have seen between approximately ½ to 2 percent return in numbers of offender hits for the quantity of offenders added to the database on a monthly basis. Here the return is just above ½ percent.

A search was made of available media for links to offenders to whom CODIS hits were made with profiles uploaded from samples processed under this award. Presented here are three anecdotal examples of the effect of the 236 hits of this project.

(1) In 2009 a victim was stabbed to death by multiple assailants in the fall of the year in a beach resort and college town on the California Central Coast. One of the perpetrators was arrested in mid-2010 and was ultimately convicted in May of 2012 of voluntary manslaughter and sentenced to 31 years in state prison. A DNA sample was collected from this convicted offender in September of 2012 and was processed under the award and uploaded in October of 2012. In the next weekly search at CAL-DNA (CA SDIS) it hit a forensic unknown profile from an attempted murder in another town in the same county that had occurred in 2006, thus aiding the investigation of the earlier case.

(2) An offender in the San Joaquin Valley region of California was convicted of felony possession of a stolen vehicle in early 2012, and a DNA sample was collected from him in April of that year. The sample was submitted to CAL-DNA in August of 2012, and was processed under the award; it was uploaded to CODIS in October of 2012. Meanwhile, a middle school was burglarized in the area and blood was recovered from the crime scene. This was processed by the California DOJ Fresno Regional Laboratory and the resulting forensic unknown profile was uploaded to CAL-DNA three days following the upload of the vehicle thief's profile. At the next weekly search in the beginning of November 2013, an offender hit was made. The subject was arrested for the burglary and received another felony conviction early in 2013.

(3) A northern California member of a Bay Area county board of supervisors, with a checkered past that included suspected embezzlement of public funds to feed a gambling habit, was arrested in early 2013 for his suspected crimes including perjury, a felony. He was thus required to provide a DNA sample as a felony arrestee under California law. The sample was processed in the CAL-DNA Data Bank under the award and uploaded to CODIS. At the next weekly search in the spring of 2013, his profile matched a forensic unknown generated by past work of the county crime lab from the adhesive envelope flap of a political mailer. The mailer contained falsely identified campaign material in a "dirty tricks" smear attempt during a local election held several years earlier. The mailer was intended to appear to have originated from, and to thereby discredit, the opponent of a political crony of the former supervisor by associating the opponent's photo with the flag of an Asian communist country. As a result of this investigative aid provided by CODIS, the supervisor now faces additional felony charges of violating election laws in California.

# 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**: The objective set for this award is to accomplish the analysis and review of DNA database samples collected by the state from convicted offenders in order to provide timely CODIS-compatible data for State and national DNA databases and to significantly reduce the number of DNA database samples in the backlog. This objective is to be achieved by contracting with an accredited fee-for-service vendor to conduct DNA analyses and utilizing existing qualified laboratory DNA analysts working overtime to conduct data review of the DNA database profiles generated by the vendor lab.

Progress Oct-Dec 10 – No award funds have been expended. The NIJ FY 09 Convicted Offender DNA Backlog Reduction Program is still active and is the focus of current activity.

Progress Jan-June 10 – No award funds have been expended. The NIJ FY 09 Convicted Offender DNA Backlog Reduction Program is still active and is the focus of current activity.

Progress July-December 2011- The Mississippi Crime Laboratory (MCL) negotiated a lower price for vendor lab contracts than was projected in the original budgets of the FY 2009 DNA CO Backlog Reduction Grant or the FY 2010 DNA CO Backlog Reduction Grant allowing the analysis of additional samples. The end result was insufficient funds in the FY09 Grant to pay overtime wages for the review of all profiles. The review of two sets of review packets was funded by the FY 2010 DNA CO Backlog Reduction Grant along with the analysis of the final group of samples processed by Orchid Cellmark. MCL solicited bids with a new RFP for the analysis of samples collected using the Bode Buccal Collection Kits. All subsequent samples will be processed by Bode.

The funds that would be needed in the Personnel/Fringe Budget Categories were significantly underestimated in the original budget. We are requesting a budget modification to move funds from the Contract Category to the Personnel/Fringe Budget Categories to address the problem.

The technical Leader made a site visit to Bode. A test packet was sent to Bode and the profiles reviewed. MCL was invoiced \$34,007 for the analysis of 1296 samples in this reporting period. Orchid Cellmark was paid \$4,665 for the final group of samples they processed.

MCL DNA Analysts were paid \$6,515 in Overtime Wages. The Social Security Match was \$498.

The Objective of the Program is being met.

Progress Jan – June 2012 – During this reporting period, \$266,992 was paid to The Bode Technology Group Inc., the vendor lab with whom MCL has a contract to perform Forensic DNA testing. \$266,992 plus \$4665, which was paid to Orchid CellMark Inc., during the last reporting period equals \$271,657, which was the amount budgeted in the Grant for outsourcing convicted offender samples.

The analysis portion of the Objective of the Program has been accomplished.

The review of the DNA database profile data generated by the vendor lab by qualified MCL DNA analysts working overtime is ongoing. \$12,779 was expended this reporting period for Overtime Wages and Fringe Benefits (Social Security Match). \$8,232 remains in the Grant Budget for Overtime Wages and Fringe Benefits. Data review will continue to be funded by this program until all funds have been expended. The Program End Date is now September 30, 2012. The review portion of the Objective of the Program is being accomplished.

Progress July – September 2012 – In this reporting period \$3,498 for Overtime Wages and Fringe Benefits (Social Security Match) was paid to MCL DNA analysts for reviewing the DNA database profile data generated by the vendor lab. Fewer overtime hours were worked than was projected leaving a small overage in the Personnel / Fringe Benefits categories. A GAN was requested and approved to transfer these funds to the Contractual Category to be added to the payments to The Bode Technology Group. \$49,998 was paid to Bode for DNA testing in this reporting period.

The objective set for this award to accomplish the analysis and review of DNA database samples collected by the state from convicted offenders in order to provide timely CODIS-compatible

data for State and national DNA databases and to significantly reduce the number of DNA database samples in the backlog has been met.

# 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.

Descriptio	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:

- $\Box$  <u>Goal</u> Utilize internal operations to meet or improve on a 10 day turn around time with a cost of less than \$32.25 per sample.
  - <u>Progress</u> During the reporting period, the 10 day analysis turn around time and cost of \$32.25 per sample has not only been achieved but it has been surpassed.

In January of 2012 convicted offender samples were brought in house. For four months both Convicted Offenders and Arrestees were completed in house. On April 24<sup>th</sup>, 2012 the Maryland Court of Appeals decided in *King v. State*, No. 68, 2012 Md. LEXIS 211, that the collection of DNA samples from individuals charged with crimes of violence is unconstitutional. As of July 2012, the State appealed the case to the Supreme Court of the United States and a stay was granted allowing Maryland to reinstate collections and analysis of samples collected at the time of booking.

Therefore, from April 24<sup>th</sup> to July 18<sup>th</sup> only Convicted Offender samples were being analyzed.

The turnaround time for analysis for both sets of samples (convicted offender and arrestees) during the entire period of this award (convicted offender and arrestees) was reduced to approximately 4 days.

Supplies at an approximate cost of \$200,574 have been purchased during this award period. The average cost per sample is calculated to be approximately \$20.45.

- $\Box \quad \underline{Objective \#1} Complete the validation of the internal DNA Database operations prior to the start of the award.$ 
  - <u>Progress</u> During the reporting period having the validation of the internal DNA Database operations completed and reviewed allowed us to add Convicted Offender samples to these operations in Jan. 2012. The analysis of Arrestee samples was paused between April 24<sup>th</sup> and July 18<sup>th</sup> due to the Court of Appeals decision mentioned above. However, operations have resumed since July 19<sup>th</sup> 2012.
- □ <u>Objective #2</u> Complete the analysis of 8,426 DNA Database samples during the award period at a cost of approximately \$22.45 per sample and with a turn around time of approximately 5 days.
  - <u>Progress</u> The total number of samples analyzed under this award is 9,806. 4,698 of these samples are from individuals charged with a qualifying crime and 5,108 are from Convicted Offenders. From these samples 8,771 were uploaded into CODIS. From these 4,433 correspond to individuals charges with a qualifying crime and 4,338 correspond to Convicted Offender samples. This resulted in a total of 54 hits during this award period. The cost per sample that was achieved by using this award is \$20.45 and the turnaround time that we have achieved for our in-house analysis is 4 days.

FY10 Recipient Name: Las Vegas Metro Police Department

Award Number: 2010-DN-BX-K028

**Award Amount**: \$109,410

**Final Report**: GOAL 1: Overtime funds will be used to process 3,126 database samples and reduce the number of convicted offender samples in the backlog. DNA samples will be tracked through analyses and profiles will be entered into CODIS.

Objective 1: The Laboratory will report the number of DNA database samples awaiting DNA analysis at the beginning of the award period.

Objective 2: The Laboratory will accession, prepare, analyze, track and report the total number of DNA database samples analyzed with 2010 Convicted Offender/Arrestee Backlog Reduction funds.

Objective 3: The Laboratory will process, analyze and report the number of DNA profiles entered into CODIS with 2010 Convicted Offender/Arrestee Backlog Reduction funds. Objective 4: The Laboratory will track and report the number of CODIS hits from profiles developed with 2010 Convicted Offender/Arrestee Backlog Reduction funds.

<u>Progress 01 October - 31 December 2010</u>: Overtime to process offender samples will be utilized in the next reporting period (see "General Comments 01 October - 31 December 2010" for details). Goal 1 and Objectives 1 - 4 are still pending.

<u>Progress 01 January – 30 June 2011:</u> The LVMPD tracked and reported all required objectives during this reporting period. Federal funded overtime was used to analyze and enter 439 offender samples into CODIS during this reporting period, resulting in 0 CODIS hits. Goal 1 Objective 1 has been completed. Progress towards completing Goal 1, Objectives 2 - 4 is ongoing. <u>Progress 01 June – 31 December 2011:</u> The LVMPD tracked and reported all required objectives during this reporting period. Federal funded overtime was used to analyze and enter 799 offender samples into CODIS during this reporting this reporting period, resulting in 11 CODIS hits (3 CODIS hits were confirmed in July 2011, but the offender sample was entered into CODIS January 1 – June 30, 2011). Goal 1 Objective 1 has been completed. Progress towards completing Goal 1, Objectives 2 – 4 is ongoing.

<u>Progress 01 January – 30 June 2012</u>: The LVMPD tracked and reported all required objectives during this reporting period. Federal funded overtime was used to analyze and enter 1,175 offender samples into CODIS during this reporting period, resulting in 41 CODIS hits. Goal 1 Objective 1 has been completed. Progress towards completing Goal 1, Objectives 2 - 4 is ongoing.

<u>Progress 01 July – 31 December 2012:</u> The LVMPD tracked and reported all required objectives during this reporting period. Federal funded overtime was used to analyze and enter 765 offender samples into CODIS during this reporting period, resulting in 49 CODIS hits. An additional 32 CODIS hits occurred from samples processed and entered into CODIS during the July 1 – December 31, 2011 and January 1 – June 30, 2012 reporting periods. Therefore, the total number of CODIS hits during this reporting period was actually 81. During the life cycle of this grant, the LVMPD processed and entered 3178 offender samples into CODIS resulting in 133 CODIS hits. Goal 1 Objectives 1-4 have been completed.

GOAL 2: Supplies for the collection and processing of database samples will be purchased. Objective 1: The Forensic Lab will purchase scalpels over the life cycle of the grant which will be used to cut buccal swab database specimens. Objective 2: The Forensic Lab will purchase DNA IQ kits over the life cycle of the grant for extraction of database samples.

<u>Progress 01 October - 31 December 2010:</u> Purchase orders for scalpels and DNA IQ kits will be submitted during the next reporting period and as needed during the life cycle of the grant. Goal 2 and Objectives 1 and 2 are still pending.

<u>Progress 01 January – 30 June 2011:</u> Purchase orders for scalpels and DNA IQ kits will be submitted as needed during the life cycle of the grant. Goal 2 and Objectives 1 and 2 are still pending.

<u>Progress 01 June – 31 December 2011:</u> Purchase orders for scalpels and DNA IQ kits will be submitted as needed during the life cycle of the grant. Goal 2 and Objectives 1 and 2 are still pending.

<u>Progress 01 January – 30 June 2012:</u> Purchase orders for scalpels and DNA IQ kits will be submitted as needed during the life cycle of the grant. Goal 2 and Objectives 1 and 2 are still pending.

<u>Progress 01 July – 31 December 2012:</u> Scalpels were purchased and received in February 2012. In July and November 2012, GANs were approved to purchase lysis buffer for extraction, and Identifiler and PowerPlex 18D kits for amplification. DNA IQ kits were also purchased during this reporting period. All funds have been spent on this grant. Goal 2 and Objectives 1 and 2 have been completed.

<u>General Comments 01 October - 31 December 2010</u>: Overtime to begin processing 3,126 offender samples will be initiated in the next reporting period. During this reporting period the LVMPD focused on training 3 new DNA employees in offender processing and training the LVMPD's incoming CODIS Administrator in preparation for the previous CODIS

Administrator's retirement. With the training of 2 newly hired staff members nearly complete and the new CODIS administrator settling into her required duties, the Biology/DNA Detail has made processing offender samples on overtime a priority for 2011.

<u>General Comments 01 January – 30 June 2011:</u> The Biology/DNA Detail released 3 DNA scientists from their training programs during this reporting period. These scientists, along with the remaining members of the Biology/DNA Detail, analyzed and entered 439 offender samples into CODIS resulting in no CODIS hits. As there is a CODIS hit reporting lag due to confirmation testing requirements, the number of CODIS hits from these 439 offender samples may increase in the next reporting period. Federal funded overtime to process and enter 2,687 remaining convicted offender profiles into CODIS associated with the primary objective of this grant will continue into the next reporting period.

<u>General Comments 01 June – 31 December 2011:</u> The Biology/DNA analyzed and entered 799 offender samples into CODIS and obtained 11 CODIS hits. Three of the CODIS hits were attributed to the same offender who was linked to three different burglary scenes. As there is a CODIS hit reporting lag due to confirmation testing requirements, the number of CODIS hits from these offender samples may increase in the next reporting period. Federal funded overtime to process and enter 1,888 remaining convicted offender profiles into CODIS associated with the primary objective of this grant will continue into the next reporting period. In addition, a GAN will be submitted to extend the life of this grant in the next reporting period.

<u>General Comments 01 January – 30 June 2012:</u> The Biology/DNA analyzed and entered 1,175 offender samples into CODIS and obtained 41 CODIS hits. Federal funded overtime to process and enter 713 remaining convicted offender profiles into CODIS will continue into the

next reporting period. In addition, a GAN to extend the life of this grant and move funds from the Personnel Category to the Supplies Category to purchase additional items for database sample processing will be submitted in the next reporting period.

<u>Final Comments 01 July – 31 December 2012</u>: In July 2012, a GAN was approved to extend the life of this grant from September 30, 2012 through December 31, 2012. During this period the Biology/DNA Detail analyzed and entered 765 offender samples into CODIS and obtained 81 total CODIS hits from samples processed during this reporting period in addition to samples processed and entered from July 1 – December 31, 2011 and January 1 – June 30, 2012. Funds awarded from this grant enabled the forensic lab to eliminate 3,178 offender samples from the DNA backlog of the Biology/DNA Detail, which is 52 offender samples above and beyond the original goal of analyzing and entering 3,126 convicted offender samples into CODIS. The 3,178 offender samples processed and entered into CODIS produced 133 hits.

In addition, funds from this grant enabled the Biology/DNA detail to purchase supplies for offender processing to include scalpels, DNA IQ kits, lysis buffer, Identifiler kits and PowerPlex 18D kits. As the LVMPD continues to face a tough fiscal climate, the purchase of these supplies was critical for ensuring the ongoing success of the Biology/DNA Detail's ability to process convicted offender samples.

This grant has been another successful program and cooperative effort between the Las Vegas Metropolitan Police Department Forensic Laboratory and the National Institute of Justice.

FY10 Recipient Name: Tennessee Bureau of Investigations

Award Number: 2010-DN-BX-K029

Award Amount: \$506,527

### Final Report:

GOAL 1: To utilize NIJ funds to outsource convicted offender and sex offender samples.

Progress Oct-Dec 2010:

In this reporting period, solicitations for contract bids were sent to the following companies: Bode Technology Group, Chromosomal Laboratories Inc., Laboratory Corporation of America, Orchid Cellmark, and Strand Analytical Laboratories. As of the end of this reporting period, three laboratories responded with additional questions concerning the solicitation. These inquiries are being addressed at which time a review panel will complete the final contract vendor selection through a process of free and open competition.

### Progress Jan-June 2011:

As a result of free and open competition, a contract was awarded to Orchid Cellmark and is set to run from February 3, 2011 to December 31, 2012. This contract was signed between the TBI and Orchid Cellmark March 3, 2011 and passed through the State of Tennessee March 29, 2011. Upon validation of the outsource contract, the first batch of samples was shipped to Orchid Cellmark March 31, 2011. As of the end of this reporting period, 4,678 grant funded samples

had been shipped to the outsource laboratory.

### Progress July-Dec 2011:

As of the end of this reporting period, 8,422 grant funded samples had been shipped to the outsource laboratory.

### Progress Jan-June 2012:

As of the end of this reporting period, 2,310 grant funded samples had been shipped to the outsource laboratory.

Progress July-Sep 2012:

As of the end of this reporting period, 1,264 grant funded samples had been shipped to the outsource laboratory.

Total number of samples shipped to outsource lab:

Totaled from the progress reports above, 16,674 grant funded samples were sent to the outsource laboratory.

<u>Note:</u> Due to differences in time from the sample send date from TBI and invoice paid date, not all samples sent to the outsource laboratory were reflected in the totals above. A complete number of samples sent to the outsource laboratory is 19,364. Please refer to the table at the end of this final report for an explanation of the missing samples from the progress reports above.

Additionally, in reviewing the data for the previous progress reports and all grant invoices, numerical discrepancies were noted in two progress reports and corrected above. Those discrepancies are described here:

Progress report Jan-June 2011 indicated 4,676 samples shipped, but should have read 4,678. Progress report July-Dec 2011 indicated 8,442 samples shipped, but should have read 8,422.

GOAL 2: To utilize NIJ funds for overtime review of outsourced data analyzed.

Progress Oct-Dec 2010:

In this reporting period, no DNA profiles were analyzed due to a funding freeze, which is in place until a contract vendor has been selected as discussed in Goal 1.

Progress Jan-June 2011:

In this reporting period, 1,330 DNA profiles were reviewed, with all 1,330 uploaded into the CODIS database; no CODIS hits were obtained.

Progress July-Dec 2011:

In this reporting period, 15,855 DNA profiles were reviewed. 13,685 were uploaded into the CODIS database resulting in 25 CODIS hits.

Progress Jan-June 2012:

In this reporting period, 5,000 DNA profiles were reviewed. 6,846 were uploaded into the CODIS database resulting in 26 CODIS hits.

Progress July-Sep 2012:

In this reporting period, 4,147 DNA profiles were reviewed. 7,843 uploaded into the CODIS database resulting in 5 CODIS hits.

Total number of profiles reviewed and uploaded and CODIS hits:

Totaled from the progress reports above, 26,332 DNA profiles were reviewed. 29,704 were uploaded into the CODIS database with a total of 56 CODIS hits.

Shipment Date	Invoice Date	# in Shipment	Grant	DOC	TBI	Total	Data Packets received from Orchid
3/31/2011		501	474	1	26	501	7/1/2011
3/31/2011	7/12/2011	1406	985	345	76	1406	5/1/2011
4/1/2011	8/3/2011	1469	1080	313	76	1469	6/27/2011
5/10/2011	8/3/2011	1454	1008	370	76	1454	6/30/2011
5/24/2011	9/20/2011	1458	1131	251	76	1458	6/30/2011 thru 7/25/2011
7/7/2011	10/21/2011	1325	1015	234	76	1325	8-24-2011 and 8-26-2011
7/7/2011	10/21/2011	1429	1089	265	76	1430	8-24-2011 and 8-26-2011
8/9/2011	11/18/2011	1411	1153	182	76	1411	9/26/2011 and 9/29/2011
8/9/2011	11/18/2011	1344	996	272	76	1344	9/26/2011 and 9/29/2011
9/19/2011	2/2/2012	1480	1195	209	76	1480	10/31/2011
9/19/2011	2/6/2012	1191	1128		63	1191	11/17/2011
10/12/2011	2/6/2012	900	761	85	54	900	12/16/2011
10/12/2011	3/19/2012	1360	1085	214	61	1360	11-29-2011, 11-30-2011, 12-1-2011
11/13/2011	4/23/2012	1430	1088	266	76	1430	1/25/2012,1/26/2012, 1/27/2012
12/2/2011	5/25/2012	1415	1011	328	76	1415	3/17/2012, 3/18/2012, 3/24/2012
12/13/2011		617	591		26	617	5/19/2012, 5/21/2012
1/4/2012		541	490	25	26	541	4/3/2012
1/9/2012	5/9/2012	1447	1140	231	76	1447	3/31/2012
1/9/2012	5/2/2012	915	680	159	76	915	3/23/2012
2/9/2012	11/8/2012	1479	1264	139	76	1479	5/16/2012 and 5/18/2012

Grant = samples funded by 2010 CODIS grant

	Samples sent to vendor
Progress report #1	0
Progress report #2	4678
Progress report #3	8422
Progress report #4	2310
Progress report #5	1264
Missed samples included in final report	2690
Total # sent to vendor lab	19364

FY10 Recipient Name: Arizona Department of Public Safety

Award Number: 2010-DN-BX-K030

**Award Amount**: \$446,743

**Final Report**: The Arizona Department of Public Safety Crime Laboratory was able to meet and exceed the goals of this grant as stated in the original grant request. Based on the backlog of DNA database samples at the State of Arizona, the DPS Crime Laboratory applied for and was awarded an FY10 grant to outsource 14,000 database samples. With the grant AZ DPS was able to accomplish the following:

- 18,525 DNA samples were sent to an outsourcing laboratory for processing

- 18,525 DNA sample results, received from the outsourcing laboratory, were technically reviewed by AZ DPS DNA analysts, completing the allele calls and establishing the final DNA profiles

- 18,525 samples processed is 32% more than the original grant request to process 14,000 samples and was accomplished with significantly less funds.

- 525 of the DNA samples processed were quality control samples as required by the national DNA database guidelines

- 18,000 of the DNA samples processed were actual DNA database samples

- 17,886 of the DNA database samples yielded DNA profiles appropriate for uploading and searching at the combined DNA Index System (CODIS)

- 152 hits were recorded by the uploaded DNA database profiles against DNA profiles from casework samples in Arizona and other states. This equates to one hit for every 118 DNA database samples added to CODIS.

- The 152 hits were to the following unsolved cases:

- $\Box$  23 Sex Assaults
- $\Box$  12 Homicides
- □ 94 Burglaries
- $\Box$  4 Assaults
- □ 7 Non-Violent Crimes
- □ 12 Unknown Offense

AZ DPS submitted its original grant request with an estimated outsource cost of \$35.00 per sample, based on previous experience. However, DPS received a highly advantageous bid of \$19.17 per sample, a 55% cost savings.

AZ DPS received approval to send additional samples over and above the original 14,000 samples and sent an additional 4,525 samples. In the request to send additional samples, AZ DPS had estimated it would send 8,640 more samples to the outsource company. However, with assistance from an FY11 DNA backlog reduction grant, AZ DPS only needed to send 4,525 database samples on this FY10 DNA outsource grant. Therefore, AZ DPS has de-obligated \$53,656.84 which can be potentially reallocated to other crime labs to reduce their DNA database backlogs.

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.

<u>Summary</u>: 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: Convicted Offender samples were processed using Promega PowerPlex 18D
beginning in May 2013 (online in January 2013, Material Modification signed off by TL in April 2013).

Funding was granted to process 3954 CO samples. Due to the high risk designation and subsequent freezing of funds, Convicted Offender samples were not processed using grant funding from 2010-DN-BX-K032 until January 2013. A Material Modification of Promega PowerPlex 16 was not completed until April 2013. Therefore, no Convicted Offender samples were processed from February 2013 to April 2013.

Amplification kits and applicable 3130 supplies have been purchased to process 3954 Convicted Offender samples. 1620 Convicted Offender samples have been processed (1440 uploaded to CODIS) as of the end date of this award. The remaining 2334 Convicted Offender samples have been inventoried and are in the analysis queue to be analyzed using the kits and supplies purchased with grant funds for 2010-DN-BX-K032 and uploaded to CODIS.

### 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.

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**: The purpose and goal of this grant is to analyze convicted offender data-basing samples and upload them into the CODIS database. This generates hits against unknown forensic DNA profiles to solve crime. The sole use of this grant is to partially support a DNA Forensic Analyst that works with a state-funded technician. The grant pays approximately 3/5 of the salary of the analyst. The other 2/5 of her time is spent on DNA casework under another federal DNA grant. Those activities are kept separate and are reported under the 2010 DNA Casework grant. \*A GAN was approved to reallocate remaining funds to outsource convicted offender samples to a vendor selected under a 2011 DNA Backlog reduction Program grant. See 7/1/2012 - 12/31/2012 progress below.

10/1/10 -12/31/10: We recently completed a very large project to complete nearly 3600 databasing samples and also did review/QC of nearly 1600 outsourcing samples. None of those numbers are included in this report whereas those activities are associated with other grants/funds and were reported under those grants/funds. However, it should be noted that the QC of 365 samples of those samples were done by the analyst working under these funds in this reporting period. The 133 samples reported in this grant are completely new samples processed and uploaded under this grant. Beginning in January of 2011 this grant funded analyst is only working on additional new samples and is no longer doing the QC work. That is being done by a state funded analyst.

The one CODIS hit from these 133 samples was on a Portland PD burglary. A CODIS sample from a Maine Convicted Offender hit against a profile from blood on a towel left at the scene. (We have a total of 578 CODIS hits since the beginning of our participation with CODIS.)

1/1/11 - 6/30/11: During this reporting period the grant funded analyst (24 hours per week) analyzed, tech reviewed and/or QC'ed 1068 data-basing samples that have all been uploaded into CODIS. This resulted in 24 CODIS hits. Those 24 hits were on cases as follows: (1) Robbery, (1) Theft, (16) Burglary, (1) Aggravated Assault, (3) Criminal Mischief and (2) Gross Sexual Assault. One of the burglaries was interesting in that the DNA profile came from a spoon of peanut butter that was left by the suspect.

7/1/11 - 12/31/11: The grant funded analyst (24 hours per week) was moved to the 2011 DNA Backlog Reduction Program on 10/1/11. The work reported here was done with 24 hours/week in the months of July, August, and September. During this time the analyst analyzed 617 data-basing samples with the help of a state-funded part-time technician. All of these samples have been uploaded into CODIS. This resulted in 6 CODIS hits. Those 6 hits were all on burglary cases.

One of the burglaries was an interstate hit in which a Maine convicted offender hit against an unsolved burglary case from Orange County, FL in which they had no suspect.

We will be submitting a GAN to request a reallocation of the remainder of the funds under this grant.

1/1/12 - 6/30/12: As stated above we did reorganization during the last reporting period. We placed the analyst that had been working under this grant under another award and her activities are reporting under that award.

We did obtain a GAN to reallocate the remainder of funds in this grant (\$36,228.93) to an outsourcing contract established under a 2011 DNA Backlog Reduction Award. The vendor (Orchid Cellmark) was selected through a competitive process. We are conducting an on-site inspection of the vendor a few weeks from now prior to shipping samples to the vendor. Once we ship database samples to the vendor we will track these samples in a manner in which we will be able to determine which samples are outsourced under each award.

7/1/2012 - 12/31/2012: We completed our review of the vendor facilities and capabilities. We shipped a total of 1661 samples for outsourcing. This amount will exhaust the remaining funding under this grant. 1000 of the samples have been completed by the vendor and the data has come back. We have performed technical reviews on the data and have conducted required reanalysis on a percentage as quality control. This was done with state-funded staff. We have uploaded the 1000 profiles into CODIS. This upload resulted in 20 hits in the CODIS database. These hits include 3 gross sexual assaults, 1 robbery, 1 aggravated assault, 10 burglaries, 4 thefts and 1 criminal mischief case.

The second batch of 661 samples was sent out but has not come back yet. We should receive these results very soon. As such we have not received or paid this invoice yet. We will be able to submit a final report once these results are reviewed, data is uploaded, hits are identified and the invoice is paid. This grant expires on 3/31/13. We do not anticipate needing an extension.

1/1/2013 - 3/31/2013: The profiles and data related to the 661 samples were returned, reviewed, quality control checked and uploaded into CODIS. The upload resulted in 9 additional hits. Two of these were on sexual assault cases and the remainder was on burglaries.

CUMULATIVE FINAL REPORT: The purpose and goal of this grant was to analyze 2,576 convicted offender data-basing samples and upload them into the CODIS database. This would generate hits against unknown forensic DNA profiles to solve crime. The use of this grant was to partially support a DNA Forensic Analyst that worked with a state-funded technician to analyze these samples. The grant paid approximately 3/5 of the salary of the analyst. The other 2/5 of her time was spent on DNA casework under another federal DNA grant. Those activities were kept separate and were reported under the 2010 DNA Casework grant. A GAN was approved on 6/29/12 to reallocate approximately \$37,000 of these funds to outsource convicted offender samples to a vendor selected under a 2011 DNA Backlog Reduction Program grant. 3,479 Convicted Offender samples were analyzed with this grant funding. This is far above the stated goal. All profiles were uploaded into CODIS and searched against profiles from unsolved cases. 60 hits were obtained. These hits against forensic unknowns provided critical links in both crimes against people and property crime cases. Specifically the hits were as follows: (7) Sexual Assaults, (2) Aggravated Assaults, (2) Robberies, (40) Burglaries, (5) Thefts and (4) Criminal Mischiefs. The majority of the hits were in-state but some hits provided links across state borders. Our backlog of convicted offender samples was reduced by more than half during this grant program. It was reduced from 2400 samples at the beginning to 1197 samples at the end. This backlog will be effectively eliminated with current grant funding coupled with recent capacity building and enhancements.

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: <u>*This*</u> projects goal and objective is to reduce the backlog of offender samples in-house using NIJ funding through this solicitation.

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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**: To reduce the backlog of convicted offender DNA samples by accelerating the data review of convicted offender DNA database samples and the upload of convicted offender sample data to NDIS.

Performance Measure:	Reduce the convicted offender DNA backlog from an estimated
	13,000 samples to approximately 650 samples for a 95%
	reduction in sample backlog.

<u>Performance Measure:</u> Increase the number of CODIS hits resulting from the upload of convicted offender DNA sample profiles.

Progress Report 1: October – December 2010

• In this reporting period the lab has obtained approval to hire a Laboratory Technician I, however the position posting is still pending. No overtime has been initiated for review of the samples because we only recently received our first data package from the outsourcing laboratory and the review of the samples was not completed during this reporting period.

Progress Report 2: January – 30 June 2011

• The lab has hired a Laboratory Technician II. This employee has begun assisting with numerous support duties in the database lab. While the Technician will continue to train to qualify for additional duties, their primary responsibilities at this time are sample accessioning and management. The Technician is not currently involved with sample processing. During this reporting period, 61.5 hours of overtime has been used by qualified Forensic Scientists for technical review of data analyzed under the Convicted Offender Outsourcing/Contract Program.

Progress Report 3: July 31– December 2011

□ The Laboratory Technician II has been a very valuable addition to the database unit. This person has completely relieved qualified DNA analyst's from spending time taking care

of sample accessioning and management and allows the analysts to spend time doing sample analysis. The technician is currently in training to become qualified in performing several of the steps in the actual DNA process, which will allow for an even higher sample throughput.

□ Technical review of the data analyzed under the Convicted Offender Outsourcing/Contract program has been completed utilizing overtime from this grant award. Overtime from this grant award has been used to begin the in-house analysis and/or review of the remaining of the backlogged convicted offender samples. The remaining overtime will be used by analysts to continue performing and/or reviewing the analysis of backlogged convicted offender samples.

Progress Report 4: January 1 – June 30, 2012

- □ The Laboratory Technician II has continued to be a valuable asset to the Database section of our Biology Unit. In addition to being primarily responsible for sample accessioning and management, she has completed training to perform sample extraction. This has proved to be very helpful in the processing of database samples.
- Overtime funds from this award have also been used to process database samples, review database sample data, and to convert to CODIS 7.0, the most current version of the CODIS software as mandated by the FBI.

Progress Report 4: July 1 – September 30, 2012

- □ The Laboratory Technician II has continued to be primarily responsible for sample accessioning and management. In addition to completing her training in sample extraction, she has continued training in downstream sample processing. She will be completing her competency test for all downstream processing up to, but not including, data interpretation within the next 30 days. This will further decrease the workload of other analysts in the laboratory.
- □ Overtime funds from this award have been used to process database samples and to review database sample data. Additionally, overtime funds were used to update the laboratory's LIMS for convicted offender samples received prior to the implementation of the current LIMS system. This will result in increased efficiency as we need to confirm hits and in the tracking of statistical information.

Final Report: September 30, 2012

- □ The Laboratory Technician II has been a great addition to our laboratory. The effect of her efforts cannot be properly expressed. Her contributions have greatly increased the efficiency of the entire Biology Unit by her taking on many duties previously assigned to fully trained scientists. This has freed up a lot of time for the scientists allowing them to spend their time doing casework and database sample analysis. As the Laboratory Technician II completes her training in downstream processing in the very near future, the Biology Unit will see another great reduction in convicted offender database sample processing turn-around time. As a small lab, the ability to reduce the duties shared amongst each person is of great importance.
- □ Overtime funds from this award were used to conduct technical reviews on 4,649 of the 10,500 convicted offender samples analyzed by a contractor funded by a separate NIJ award. Overtime funds were also used to upload and verify 10,440 of the 10,500 outsourced samples. An additional 2,079 samples were analyzed in-house with overtime funds. Of the 2,079 samples analyzed in-house, 1,711 were uploaded to NDIS. The remaining 368 samples were pending review and upload at the end of this award

reporting period. Due to a possible error in prior performance metrics reporting for the second reporting period, the correct reporting period performance matrixes are show in the table below.

	Samples Analyzed	Samples Uploaded	Hits
Report 1	0	0	0
Report 2	4649 reviewed*	5067	9
Report 3	364	5373	2
Report 4	1213	1213	11
Report 5	502	498	4
Final Report	6728	12151	26

\*This 4,649 value was previously reported in error as 5,067 samples in the performance matrix.

Had the overtime funds not been available, the time required to upload the samples to CODIS would have been greatly increased, thereby reducing the effectiveness of the database. Additionally, time spent on updating the LIMS will have an impact on the laboratory's efficiency for many years to come.

#### FY10 Recipient Name: Oregon Department of State Police

# Award Number: 2010-DN-BX-K142

**Award Amount**: \$220,000

**Final Report**: The Convicted Offender and/or Arrestee DNA Backlog Reduction Program Grant (Award Number 2010-DN-BX-K142) was awarded to the Oregon Department of State Police, Forensic Services Division on September 17, 2010 for the budget period of October 1, 2010 through March 31, 2012. This report will detail progress made toward achieving the objectives as outlined this grant titled: *Initiation of In-House Processing and Analysis of Convicted Offender Samples* 

The scope of this proposal is to reduce the convicted offender sample backlog and provide dedicated full time staff for the in-house processing and analysis of our convicted offender (CO) samples. The objectives set for this award are to 1.) Re-initiate the full time processing and analysis of convicted offender samples in-house, through continued support of a FS position, 2.) provide overtime for the processing, analysis and review of CODIS samples to reduce the backlog to a manageable level and 3.) provide funds for the purchase of supplies needed for the processing of these samples.

Report #1 - October 1, 2010 through December 31, 2010

Objection 1: Re-initiate the full time processing and analysis of convicted offender samples inhouse, through continued support of a FS position

As of September 1, 2010, we had a newly renovated CODIS unit, all the essential equipment and methods validated and implemented, and 1.5 forensic scientists dedicated to processing and analysis of CODIS samples in-house. We have an additional CODIS forensic scientist dedicated to the processing and analysis of CODIS samples, who is supported by this grant, and who is currently in training. This analyst should complete training and be authorized to process CODIS samples by March 1, 2011. Thus, we anticipate an additional increase in capacity when this

analyst is brought on line. All processing and analysis of convicted offender samples is being completed in-house.

Objective 2: Provide overtime for the processing, analysis and review of CODIS samples to reduce the backlog to a manageable level

Our CODIS backlog as of October 1, 2010 was 3,130 samples. We have continued to use overtime to work the backlogged samples to keep the backlog at a minimum. During this reporting period, 120 hours of overtime were used to work 1,409 backlogged CODIS samples with 676 profiles being uploaded into CODIS resulting in 34 hits. At the end of this reporting period, December 31, 2010, the backlog was at 7,700 samples.

Report #2 - January 1, 2011 through June 30, 2011

Objection 1: Re-initiate the full time processing and analysis of convicted offender samples inhouse, through continued support of a FS position

We have been processing all CODIS samples in-house. We continue to dedicate 1.5 forensic scientists to the analysis of DNA database samples. These forensic scientists are supported by Oregon State Police general funds but use supplies supported from this grant to work CODIS samples. In addition, we have one forensic scientist supported by this grant who has continued to progress through their training. During this reporting period, this analyst completed their training and a competency test. This analyst should be authorized to perform independent casework by the end of July.

Objective 2: Provide overtime for the processing, analysis and review of CODIS samples to reduce the backlog to a manageable level

Our CODIS backlog at the end of this reporting period was 5882. We received 5309 samples during this reporting period. We have continued to use overtime to do the initial processing of backlogged samples. Processing includes punching of the samples to prepare the CODIS trays and processing the trays through DNA extraction. During this reporting period, 117 hours of overtime were used to process 3984 samples. In addition, analysts supported by OSP general fund monies analyzed 3901 samples and uploaded 3,856 profiles into CODIS which resulted in 29 hits. All CODIS samples worked during this period were processed using supplies purchased with monies from this grant.

Reporting Period	Backlog	# Samples Received	# Samples Analyzed	# Samples Uploaded	# Hits
October 1, 2010 – December 31, 2010	3130 (10/1/10)	2332	1409	676	34*
January 1, 2011- June 30, 2011	7700 (1/1/11)	5309	3901	3856	29
July 1, 2011 – December 31, 2011	5882 (7/1/11)				
January 1, 2012 – June 30, 2012					

\*Note: In the first progress report, we mistakenly reported the cumulative number of hits obtained during the three month period. Of the 34 hits reported during October 1, 2010 through December 31, 2010, only 3 were a direct result of the 676 profiles uploaded to the database during this period. The other hits were due to other samples that had been uploaded to the

CODIS database during this period but the processing and analysis were supported by funds from previous grants.

We had a significant increase in sample processing efficiency during this last reporting period (11.7 samples/hour to 34 samples/hour). This is primarily due to increased experience with the CODIS tray set-up, punching, and washing and streamlining this process to be able to process multiple trays simultaneously. In addition, analysts purchased electronic pipettors which improved efficiency of the wash step.

Progress Report 3# - July 1, 2011 through December 31, 2011

Objection 1: Re-initiate the full time processing and analysis of convicted offender samples inhouse, through continued support of a FS position

We continue to process all CODIS samples in-house. However, during this reporting period we had a reduction in the number of forensic scientists dedicated to the analysis of DNA database samples from 1.5 to 1.0. In addition, our CODIS puncher instrument broke and was taken out of service on 12/13/11. The instrument continues to be out of service. Currently, analysts are punching these samples manually. This has caused a huge reduction in CODIS sample processing efficiency. We have a call in for the repair of the puncher and hope to have this rectified by the end of January. We have one forensic scientist supported by this grant that completed training and was authorized to perform independent CODIS database sample analysis as of July 24, 2011.

Objective 2: Provide overtime for the processing, analysis and review of CODIS samples to reduce the backlog to a manageable level

Our CODIS backlog at the end of this reporting period was 7115. We received 4143 samples during this reporting period. We have continued to use overtime to do the initial processing of backlogged samples. Processing includes punching of the samples to prepare the CODIS trays, and processing the trays through DNA extraction. During this reporting period through September, two analysts worked 31.75 hours of overtime. In addition, one forensic scientist supported by this grant completed training and was authorized to process/analyze CODIS samples as of July 24, 2011. The total number of CODIS samples processed was 998 with 1334 profiles uploaded into the database which resulted in 2 hits. After October, any overtime was worked utilizing the 2011 DNA backlog grant. Additional CODIS supplies for the processing of samples were purchased during this reporting period as well.

Reporting Period	Backlog	# Samples Received	# Samples Analyzed	# Samples Uploaded	# Hits
October 1, 2010 – December 31, 2010	3130 (10/1/10)	2332	1409	676	3
January 1, 2011- June 30, 2011	7700 (1/1/11)	5309	3901	3856	29
July 1, 2011 – December 31, 2011 <sup>1</sup>	$\frac{5882}{711} (7/1/11) \\ 7115 (12/31/11)^2$	4143	998	1334	2
January 1, 2012 – June 30, 2012					

<sup>&</sup>lt;sup>1</sup> No samples were analyzed after September 30, 2011 using overtime funds from the 2010 CODIS grant. Numbers for this reporting period reflect samples analyzed up through September 30, 2011.

 $<sup>^{2}</sup>$  Backlog = samples received, bar coded and entered into Proflog database.

By October 1<sup>st</sup> we had completed the grant obligation for the number of CODIS samples that needed to be processed. Because of this we switched our focus to process samples that had already been processed but failed to give a complete profile. These samples are called holes because they are not in CODIS. When doing these samples a second time, they are processed individually and are run on the extraction robot and quantitated. We have found that this process provides us great success in obtaining a DNA type in most all samples. However, the disadvantage in using this process is that it takes a significant about of extra time to process the samples. Thus, this is the reason for the reduction in efficiency.

During this reporting period, we had a switch in the CODIS Database Administrator with the previous administrator not being available for consultation. Because of this switch, we had difficulty determining the method used by the previous administrator for the calculation of backlogged CODIS DNA samples. We could not find a definition of backlog that was in use when these numbers were calculated or determine how the previous backlog was calculated. Thus, we drew a line in the sand, defined "backlog" and determined the backlog using this current definition.

Backlog equals the number of DNA CODIS samples received that have been bar coded, uploaded into the Proflog database and waiting to be processed/analyzed.

Final Progress Report – January 1, 2012 through June 30, 2012

Objection 1: Re-initiate the full time processing and analysis of convicted offender samples inhouse, through continued support of a FS position

We continue to process all CODIS samples in-house with one full time analyst supported by grant funds dedicated to the analysis of DNA database samples. The CODIS puncher instrument was fixed and put back in service during this reporting period and as such our CODIS sample capacity increased. Capacity at the beginning of the grant period was approximately 314 new sample attempts per analyst per month. This capacity increased to 974 new sample attempts per analyst per month at the end of the reporting period.

Objective 2: Provide overtime for the processing, analysis and review of CODIS samples to reduce the backlog to a manageable level

During this reporting period, we did not use grant funds for overtime or to purchase supplies. However, we had one full time forensic scientist dedicated to processing CODIS samples. As described in the previous progress report, during the July-December 2011 reporting period we had a switch in the CODIS Database Administrator with the previous administrator not being available for consultation. During this reporting period (January to June 2012), we performed a quality control audit of our grant metric tracking mechanisms, including but not limited to the CODIS backlog samples analyzed, profiles entered and hits generated, and have revised our numbers based on our current definitions. We have implemented a transparent system for tracking and calculating these numbers. Thus, the numbers in the table for this final progress report have been updated accordingly. Updated numbers can be found in bold red text. Additional entries with new, clarifying, information are in green text. Please note that the numbers contained in the previous progress reports have *not* been updated.

Our CODIS backlog at the end of this reporting period was 9270. We received 5184 samples during this reporting period. The total number of CODIS samples (new attempts) processed during this reporting period was 7287 with 5472 profiles being uploaded into the database. This resulted in 55 hits.

<b>Reporting Period</b>	Backlog at end of Reporting Period	# Samples Received	# Samples Analyzed	# Samples Uploaded	# Hits
	3130 (10/1/10)				
October 1, 2010 – December 31, 2010	7700	2332	1409 (new attempts) 180 (redo attempts) <b>Total = 1589</b>	676	3
January 1, 2011- June 30, 2011	5882	<del>5309</del> 5447	3901(new attempts) 1574 (redo attempts) <b>Total = 5475</b>	<del>3856</del> <b>3919</b>	29 137*
July 1, 2011 – December 31, 2011 <sup>3</sup>	7 <del>115</del> 9558 <sup>4</sup>	414 <del>3</del> 3836	998 <sup>3</sup> 1660 (new attempts) 1401 (redo attempts) Total = 3061 <sup>5</sup>	1334 2376	2 11
January 1, 2012 – June 30, 2012	9270	5184	7287 (new attempts) 3404 (redo attempts) Total = 10,691	5472	55
Cumulative Totals		16, 799	20,816	12,443	206

\*The original figure reported for January – June of 2011 was, in fact, only for the second quarter of that year (April to June 2011). The 137 hits was obtained using the improved tracking and counting mechanisms we have put in place and covers the entire six month reporting period (January 1 to June 30, 2011).

# FY10 Recipient Name: North Dakota Office of the Attorney General

Award Number: 2010-DN-BX-K211

### Award Amount: \$89,670

### Final Report:

Project Goals and Objective

The primary goal of the Convicted Offender and/or Arrestee Backlog Reduction Program is to reduce the backlog of samples by accomplishing two objectives:

Objective 1: The DNA Unit of the crime laboratory will process **2,562** convicted offender and/or arrestee samples (including QA/QC samples) with the funding available.

Objective 2: After data is analyzed the profiles will be expeditiously be uploaded to the National DNA Index System (NDIS).

Report 1 10/01/2010 to 12/31/2010

No funds have been drawn down on this grant during this reporting period.

Report 2 01/01/2011 to 06/30/2011

No funds have been drawn down on this grant during this reporting period.

<sup>&</sup>lt;sup>3</sup> No samples were analyzed after September 30, 2011 using overtime funds from the 2010 CODIS grant. Numbers for this reporting period reflect samples analyzed up through September 30, 2011.

<sup>&</sup>lt;sup>4</sup> Backlog = samples received, bar coded and entered into the Proflog database minus the convicted offender count in the CODIS database.

<sup>&</sup>lt;sup>5</sup> This is the number of samples analyzed by the grant funded analyst. Not previously reported in the last progress report but mistakenly reported in the 2011 DNA backlog grant.

#### Report 3 07/01/2011 to 12/31/2011

Funds were used to purchase DNA supplies and profiling kits. Samples-A total of 375 samples were analyzed during this reporting period as a result of funding from this grant. Zero profiles were uploaded to CODIS as a result of funding from this grant. Zero CODIS hits occurred as a result of funding from this grant.

#### Report 4 01/01/2012 to 06/30/2012

Funds were used to purchase DNA supplies and profiling kits. A total of 1,497 samples were analyzed and 1,167 profiles were uploaded to CODIS as a result of funding from this grant. Two CODIS hits occurred as a result of this award.

#### Report 5 07/01/2012 to 12/31/2012

Funds were used to purchase DNA supplies and profiling kits. A total of 213 samples were analyzed and 851 profiles were uploaded to CODIS during this reporting period. Five CODIS hits occurred as a result of this award.

Report 6 01/01/2013 to 06/30/2013

Funds were used to purchase DNA supplies and profiling kits. A total of 375 samples were analyzed and 371 profiles were uploaded to CODIS during this reporting period. Four CODIS hits occurred as a result of this award.

#### Final Report 07/01/2013 to 10/31/2013

Funds were used to purchase DNA supplies and profiling kits. A total of 3,087 samples were analyzed and 3,078 profiles were uploaded to CODIS during this reporting period. Eleven CODIS hits occurred as a result of this award.

	10/01/2010 to 12/31/2010	01/01/2011 to 06/30/2011	07/01/2011 to 12/31/2011	01/01/2012 to 06/30/2012	07/01/2012 to 12/31/2012	01/01/2013 to 06/30/2013	07/01/2013 to 10/31/2013	Total numbers
Samples Analyzed	0	0	375	1497	213	375	3,087	5,547
Samples Uploaded	0	0	0	1167	851	371	3,078	5,467
CODIS Hits	0	0	0	2	5	4	11	22
Processing Time	0	0	0	155	142	144	142	

Cumulative Totals

The laboratory analyzed a total of 5,547 samples and 5,467 profiles were uploaded to CODIS during the entire project period. 22 CODIS hits occurred as a result of this award.

On the original grant application the laboratory anticipated processing 2,562 offender samples with the funding from this grant. The laboratory has met and exceeded this processing goal by 2,905 samples. The average processing time for this time period was 142 days; while the range for processing was from 225 days to 29 days.

The DNA Unit has significantly decreased the current backlog of offender database samples. As of January 22, 2014, the current backlog is less than 40 days. The laboratory has 85 samples that are being processed and 170 are awaiting review; only 255 samples that haven't been uploaded into CODIS.

These funds had a direct impact on the ability to process offender samples for DNA analysis. The funds enabled the laboratory to purchase consumables and profiling kits.

Corrections have been made to the metrics that were previously reported and approved. The laboratory tracks the lot numbers of the profiling kits for each funding source on a spreadsheet and in a field in CODIS. Some lot numbers were recorded incorrectly on the spreadsheet and needed to be corrected. Corrections were made to accurately reflect the correct funding source and metrics.

Reconciling the grant expenditures a discrepancy was found, a Yfiler amplification kit (\$3,032.60) was charged to this grant and should have been charged to the 2011 DNA Reduction Grant.