



2010

ANNUAL REPORT

**MARYLAND STATE POLICE
FORENSIC SCIENCES DIVISION
STATEWIDE DNA DATABASE**

REPORT

April 2010

TABLE OF CONTENTS

2010

STATEWIDE DNA DATABASE ANNUAL REPORT

Table of Contents	<i>i</i>
Executive Summary	<i>ii</i>
Background and Operations	<i>1</i>
Reporting Requirements	<i>4</i>
I. Total DNA Database Expenses in 2010	
a. Costs for Scientists and Support Personnel	<i>5</i>
b. Costs for DNA Collection Kits	<i>5</i>
c. Operational Costs	<i>6</i>
d. DNA Testing and Analysis Costs	<i>6</i>
II. Funds provided by the State per Municipality	<i>6</i>
III. Individual Data and Analysis	<i>7</i>
IV. Case-Specific Data Collection and Analysis	<i>8</i>

Executive Summary

The Statewide DNA Data Base was established in 1994 with the required collection of DNA samples from those convicted of rape and sexual offenses. The pool of qualifying offenders was expanded to those convicted of qualifying crimes of violence in 1999 and then again to those convicted of all felonies and two misdemeanor crimes as well as attempts of those crimes. The latest expansion which went into effect on January 1, 2009 includes the collection of DNA samples of those arrested and charged with qualifying crimes of violence, burglary, and attempts of those crimes.

In the first year of its implementation, the newly expanded portion of the law resulted in the collection of over 11,600 DNA samples. Samples from those individuals charged and having arraignment dates, a total of 5,047, were subjected to analysis. The DNA profiles from those samples eligible for entry into the database and not subject to automatic expungement, a total of 4,213, were uploaded and searched. A total of 37 hits were forwarded to law enforcement for further investigation. At the end of the year, 10 arrests had been made from the information provided by the 37 hits with one resulting conviction.

The second year of operation resulted in the collection of 11,486 DNA samples from individuals charged with qualifying crimes of which 6,030 were eligible to be uploaded and searched. There were over 60 matches reported to law enforcement which led to 13 arrests and 3 convictions.

As part of the newly expanded portion of the law, the following annual report has been generated to detail operating costs, list demographics of those from which samples have been collected, and categorize the outcomes of the investigations aided by the generation of hits from this new requirement of the law.

Background and Operations

The establishment of DNA databases emerged with the advent of DNA technology and its application to forensic sciences. Collected physical evidence now yields the potential to generate DNA profiles which can be stored and searched utilizing computer software programs. DNA testing has become a powerful tool to link the guilty to their crimes and exonerate the innocent.

Congress authorized the FBI to establish an index of DNA identification records with the passing of the DNA Identification Act of 1994, Public Law 103 322. These DNA identification records were those of convicted felons and DNA profiles from evidence collected in association with the investigation of crimes. The FBI developed software, CODIS (Combined DNA Index System) which is used to manage this DNA data at three separate levels: Local, State and Federal. The local forensic DNA laboratories analyze case evidence and collect the data in the Local DNA Index System (LDIS), then upload the qualifying DNA profiles to the State DNA Index System (SDIS). State laboratories analyze evidence and generate DNA profiles from crime scenes for entry into SDIS and are also tasked with the analysis of database samples from qualifying offenders. The DNA profiles both from casework and from offenders are then forwarded to the National DNA Index System (NDIS). Searches can result in candidate matches between cases or between cases and offenders. For matches that are confirmed, the information is then forwarded to the law enforcement investigators for further pursuance of the case.

In 1994, the State of Maryland followed the federal lead and passed legislation to establish the Statewide DNA database: Public Safety Article Title 2, Subtitle 5, ACM (prior to 2003 referred to as Article 88B, Section 12A, ACM). This first enacting of this law required the collection of DNA samples from those individuals convicted of rape in any degree, 1st-3rd degree sexual offenses, and child sexual abuse.

The list of qualifying convictions was expanded in 1999 to include not only those from 1994 but also specific violent crimes such as Murder, 1st degree Assault, Robbery and attempts of all

listed. Yet another expansion of qualifying crimes occurred in 2002 with the list being expanded to include all felons and two misdemeanor crimes: 4th degree burglary and breaking/entering a motor vehicle.

The most recent change of the Statewide DNA Database went into effect on January 1, 2009 when the law was expanded to include those arrested and charged with qualifying crimes of violence, 1st-3rd degree burglaries and any attempts of these crimes. Samples collected under this new revision are not to be analyzed until the arraignment date. Provisions for automatic expungement were also dictated. These restrictions require the tracking of the charged individual through the court system for the assignment of arraignment dates and the final court disposition.

The Maryland Statewide DNA Database receives DNA evidence profiles from six DNA laboratories: Maryland State Police, Anne Arundel County Police, Baltimore City Police, Baltimore County Police, Montgomery County Police and Prince George's County Police. The case evidence DNA profiles are forwarded for uploading into the State Level of CODIS which is managed and administered by the Maryland State Police, Forensic Sciences Division (MSP-FSD). The MSP-FSD is also the party responsible for the collection, analysis and storage of DNA samples collected from convicted offenders and those individuals charged with a qualifying offense.

Currently, the analysis of convicted offender samples and samples from those charged with a qualifying offense is outsourced to a commercial DNA typing laboratory. The responsibility of accuracy and uploading still falls on the MSP-FSD and an in-house technical review is required on all commercial analytical data prior to its acceptance for uploading into CODIS.

In preparation for this newest revision of the law, the Governor's Office of Crime Control and Prevention organized and hosted four regional summits to educate and update the law enforcement community as well as the judicial system on their vital responsibilities in enacting

this law. MSP-FSD developed and disseminated instructional videos on the collection of DNA samples and the use of the newly designed DNA Collection kits.

The successful implementation of the new procedures required for the 2009 revision is directly due to the cooperative efforts of several groups. The Department of State Police has been fortunate to be partnered with the Governor's Office of Crime Control and Prevention (GOCCP), State Attorney's Offices, the Department of Public Safety Information Technology and Communications Division, the Department of Corrections, the Department of Parole and Probation, Sheriff's Offices and Detention Centers. Combined efforts have gone to oversee the collection of samples, the transfer of court data, and verification that all individuals eligible for collections have had a sample taken and that those samples no longer eligible have been expunged.

As of the end of 2009, Maryland's Statewide DNA Database reported out a cumulative total of 1,591 candidate matches or hits, of which 37 were the result of samples collected from individuals charged with qualifying offenses. Formal charges were brought in 10 out of those 37 hits (information from GOCCP). Furthermore, over 82,000 convicted offender samples and over 4,200 samples from individuals charged with qualifying offenses were in CODIS at the end of 2009.

Cumulative totals at the conclusion of 2010 include over 92,000 convicted offender samples and over 10,000 samples from individuals charged with qualifying offenses in CODIS available for searching purposes. The Statewide DNA Database has reported out a program total of 1,998 candidate matches, of which 64 were from individuals charged with qualifying offenses. In 2010, the Governor's Office of Crime Control and Prevention reports 13 new arrests from 60 new candidate matches and 3 new convictions (see page 8).

The data contained within this report provides the information required as per Code of Maryland Regulations (COMAR 29.05.01.16). It should be noted as per the reporting requirements, the

Governor's Office of Crime Control and Prevention is responsible for collecting and reporting out the data on crime scene DNA evidence as supplied by local law enforcement and State Police. This information is contained within a separate document provided to the Office of Legislative Audits.

Reporting Requirements

The new law states that not later than April 1, 2010, and annually thereafter, the Department of State Police shall compile an annual report to the Governor and to the General Assembly and this report be posted on the website of the Department of State Police not later than April 1 of each year.

The content of the Report is as follows:

1. Total DNA Database Expenses in 2010
 - a. Costs for scientists and support personnel
 - b. Costs for DNA Collection kits (including transport costs)
 - c. Operational Costs (new hardware, software and maintenance)
 - d. DNA Testing and Analysis Costs (equipment, outsourcing)
2. Funds provided by the State, by municipality
3. Individual Data and Analysis (racial demographics of all individuals charged with qualifying crimes upon arrest in designated categories)
4. Case-Specific Data Collection and Analysis.

I. Total DNA Database Expenses in 2010

This section presents the expenses incurred in 2010 to operate the Statewide DNA Database System. Following the requirements of the bill, this section is organized under 4 subsections. Salary and benefit cost is presented in subsection (a) while subsection (b) is for costs related to DNA Collection. Subsections (c) and (d), respectively, present operational costs for the DNA database and testing/analysis. Accordingly, the total expenses in 2010 to operate the Statewide DNA Database System were \$1,537,450.03.

(a) Salary and Fringe Benefits Costs, for scientists and support staff assigned to the State Police Crime Laboratory (MSP-FSD) for DNA Database

In 2010 a total of \$981,791.13 was paid in salaries for scientists and support staff who were working on the Statewide DNA Database project. The corresponding fringe benefits cost during this period was \$73,355.65. The combined total of salaries and fringe benefits was \$1,055,126.78.

	Scientists (15)	Support Staff (7)	Total (22)
Salary Paid	805,571.96	176,219.17	981,791.13
Benefits-FICA	61,626.25	10,763.13	72,389.38
Benefits-Unemployment	805.58	140.69	946.26
Total Salary & Fringe Benefit	868,003.79	187,122.99	1,055,126.78

(b) DNA Collection Kit Costs, including costs required to transport kits from collection sites to the Crime Laboratory (MSP-FSD)

Maryland State Police spent \$140,580.00 for the purchasing of DNA Collection Kits and paid \$19,010.00 for postage for transporting the kits in 2010.

Item	Expense
Kits	\$140,580.00
Postage	\$19,010.00

Total DNA Collection	\$159,590.00
-----------------------------	---------------------

(c) DNA Database- Operational Costs

DNA database operation costs include purchasing new hardware, software and maintenance of old and new hardware/software. In 2010, a total of \$29,998.75 was spent to buy software for DNA database operations. No additional hardware was purchased in this report year for DNA database purposes.

Item	Expense
Hardware	0.00
Software	29,998.75
Maintenance	0.00
Total DNA database operation Cost	29,998.75

(d) DNA Testing and Analysis Costs

DNA testing and analysis costs for 2010 were \$292,735.25. The costs include in-house equipment purchased, associated maintenance of equipment, outsourced testing and in-house analysis.

Item	Expense
Equipment Purchased	0.00
Maintenance of Equipment	55,153.00
Outsourced Testing	219,009.75
In- House Analysis	18,572.50
Total DNA Testing & Analysis	292,735.25

II. Funds made Available by the State

The Governor's Office of Crime Control and Prevention (GOCCP) awarded \$535,919.00 in 2010 to assist in DNA Backlog Reduction under the Paul Coverdell Forensic Science Improvement Grant. The Maryland State Police, Prince George's County Police Dept., Montgomery County Police Dept., Baltimore City Police Dept., Baltimore County Police Dept., Anne Arundel County Police Dept., Hagerstown City Police Dept. and Office of the Chief Medical Examiner were the eight agencies who received funding under this program.

Funds made Available by the State (information provided by GOCCP)

Recipient	Source	
	Byrne Justice Recovery Act*	Coverdell Grant Program
MSP	\$374,871.00	\$159,445.00
Office of the Chief Medical Examiner		\$97,050.00
Prince George's County	\$209,798.00	\$25,000.00
Montgomery County	\$275,000.00	\$115,685.00
Baltimore City	\$375,000.00	\$68,683.00
Anne Arundel County		\$6,633.00
Baltimore County		\$49,912.00
Washington County-Hagerstown City		\$13,511.00
Total	\$1,234.669.00*	\$535,919.00

* The grant period for the Byrne Justice Recovery Act carried over from 2009 to 2010.

III. Individual Data and Analysis

This section deals with racial demographics of all individuals charged in 2010 with qualifying crimes upon arrest in designated categories. The information was generated through the MSP Sample Tracking program.

Number of Charged/Arrestees Collected by Race- 2010

Race	Number
Asian	63
African-American	7,009

White	3,985
Hispanic	259
Others	13
Unknown	75
Total	11,404

IV. Case-Specific Data and Analysis

A. Information provided by the Governor’s Office of Crime Control and Prevention.

The Number of DNA matches in Calendar Year 2010; Matches Resulted in Investigations, Formal Charges and Convictions

	Type of Collection/Analysis	Convicted MD offenders (CO)	Charged/ Arrestee (A)
a.)	DNA matches	183	60
b.)	Matches that resulted in the investigation of the individual identified in the match	142	51
c.)	Matches resulting in formal charges	56	13
d.)	Matches resulting in convictions	17	3
e.)	Convicted individuals exonerated by DNA matches in a calendar year	0	0
f.)	The number of matches resulting in convictions of individuals who were not already incarcerated	17	3

g) For convictions where a match to a convicted offender sample or charged/arrestee sample occurred, that individual’s prior offenses:

- (14/1) Offender Type 1- Hit conviction/charged arrest was for Burglary – Priors are CDS Possession, Burglary, Theft, Assault, 2nd Degree Rape, Prostitution, Concealed Deadly Weapon, Malicious Destruction of Property
- (1/1) Offender Type 2 – Hit conviction/charged arrest was for Robbery – Priors are Robbery with a Deadly Weapon, Burglary, CDS Possession, Illegal Possession of Handgun
- (1/1) Offender Type 3 – Hit conviction/charged arrest was for Theft – Priors are CDS Possession, Burglary, and Concealed Deadly Weapon
- (1) Offender Type 4 – Hit conviction was for Destruction of Property – Prior is Motor Vehicle Theft

B. MSP-FSD DNA Statistical End of Year Report

Year	Cumulative Number of	Cumulative Number of	Cumulative Number of	Cumulative Number of	MSP-FSD Biology
------	----------------------	----------------------	----------------------	----------------------	-----------------

	Convicted Offender Samples in CODIS	Arrestee/Charged Samples in CODIS	Hits (both CO and Arrestee/Charged)	Arrestee/Charged Hits	Casework Pending Requests
2009	82,906	4,213	1,591	40	347
2010	92,493	10,243	1,998	104	175