



STATE OF MINNESOTA

FORENSIC LABORATORY ADVISORY BOARD
1430 Maryland Avenue East • St. Paul, MN 55106

January 14, 2012

Legislative Report:

This report responds to Minnesota Statutes section 299C.156, subdivision 6, which mandates that the Forensic Laboratory Advisory Board annually provide the governor and the legislature any report generated from investigations conducted by the Board relating to alleged negligence or misconduct of forensic laboratories.

Board Response:

After many years of discussion, drafts, and edits, the Board voted and approved its Policies and Procedures that include among other items, the processes for investigating complaints. A committee was formed to develop and make recommendations to the Board regarding the layout of a Complaint Submission Form, and to determine how to best notify the public of its existence and purpose. To date, the Board has not invited the public to report to the Board any concerns about negligence or misconduct because the Board continues to lack any funds to undertake any substantive investigation of those concerns.

The Board conducted no investigations during this reporting period. The Board received via certified mail its first formal complaint on November 16, 2011. The complaint was accepted at the January 5, 2012 meeting and a three-member panel was selected to review the complaint.

The Board lacks the financial resources necessary to carry out its principal missions. At a minimum, the Board believes that legislative funding for the Board's administrative and investigative services, secured either through employment or contract, is essential for the Board to provide the investigative and other services contemplated by statute as codified in section 299C.156, subdivision 2. These discretionary services include the following: (1) developing and implementing a statewide misconduct or negligence reporting system for all laboratories, facilities, or entities that conduct forensic analyses; (2) encouraging all such entities to report professional negligence or misconduct to the Board; (3) investigating any entity upon allegations of negligence or misconduct; and (4) encouraging these entities to become accredited by an appropriate accrediting body and implementing a process for them to report their accreditation to the

Board. Even our capacity to provide meaningful, mandatory reports as directed by statute is inhibited without funding.

Critical Funding Needs:

There is a comment from the Office of Revisor of Statutes, State of Minnesota, 299C.156 that reads "*FCD comment: the legislature did not provide a budget for this board, the author used the term may here so the bill would not have a fiscal impact. Should the board decide a staff is advisable, a budget initiative should be prepared and submitted for consideration*".

Fiscal Note Request Worksheets were prepared and submitted to the Office of Commissioner of Public Safety in 2008 and 2009. The worksheets sought general funding for administrative and investigative services in the amount of \$125,000 per year.

Minnesota crime laboratories use the National Institute of Justice's Paul Coverdell Forensic Science Improvement Grant and Forensic DNA Backlog Reduction programs to augment operating budgets. Future federal funding is uncertain.

The Paul Coverdell Forensic Science Improvement Grants Program awards grants to states and units of local government to help improve the quality and timeliness of forensic science and medical examiner services. Among other things, funds may be used to eliminate a backlog in the analysis of forensic evidence and to train and employ forensic laboratory personnel, as needed, to eliminate such a backlog. States may apply for both "base" (formula) and competitive funds. Units of local government may apply for competitive funds. A state or unit of local government that receives a Coverdell grant must use the grant for one or more of these three purposes:

1) To carry out all or a substantial part of a program intended to improve the quality and timeliness of forensic science or medical examiner services in the state, including those services provided by laboratories operated by the state and those operated by units of local government within the state.

2) To eliminate a backlog in the analysis of forensic science evidence, including, among other things, a backlog with respect to firearms examination, latent prints, toxicology, controlled substances, forensic pathology, questioned documents and trace evidence.

3) To train, assist and employ forensic laboratory personnel as needed to eliminate such a backlog.

The goal of the Forensic DNA Backlog Reduction Program is to assist eligible States and units of local government to reduce forensic DNA sample turnaround time, increase the throughput of public DNA laboratories, and reduce DNA forensic casework backlogs. These improvements are critical to preventing future DNA backlogs and to helping the criminal justice system use the full potential of DNA testing.

From 2006 – 2011, Minnesota crime laboratories have used the following grants to fund for example, the purchase of new instruments, high-throughput automation, laboratory information and digital information management systems, and scientist staffing and overtime. All purchases helped to enhance capacity infrastructure.

The grants significantly improved the quality of forensic services, aided crime laboratories and their criminal justice partners in reducing case backlogs and turn around times, and in reviewing thousands of old cases. In Hennepin County alone, over nine thousand three hundred cases were reviewed under the two-year, \$494,433 Solving Cold Cases with DNA Grant program. Almost two thousand cases were identified and screened for additional investigation and laboratory analysis. Five hundred seventy nine cases were submitted to the Hennepin County Sheriff's Crime Lab, From these cases, over 300 DNA profiles were generated and uploaded to the FBI's Combined DNA Index System "hitting" on 155 convicted offender samples and 40 forensic samples (case-to-case) in the databases. To date, dozens of suspects have been charged or convicted. Without the support of these federal grants, many enhancements and accomplishments like this would not have been realized.

This report also responds to Minnesota Statutes section 299C.156, subdivision 7, which mandates that the Board annually report to the legislature on recommendations to improve the turnaround time of forensic laboratory analysis services.

The Board issued its **Report on the Appropriateness of Additional Regional Forensic Crime Laboratories** (attached) to the legislature on February 1, 2008. The Board is aware of no state or local action undertaken since that report in the development or modification of crime laboratories, and the Board continues to stand behind the recommendations in that report as a means to improve turnaround times and forensic science services.

A Forensic Science Improvement Committee was formed and met three times during the year. The committee's purpose is to take information and prepare recommendations to the Board to be included in future reports to the Legislature. The committee's report is attached.

The Board has also attached state, county, and municipal laboratory statistics that may help in assessing laboratory response times.

Respectively submitted,



Brian Kasbohm
Chairman, Forensic Laboratory Advisory Board

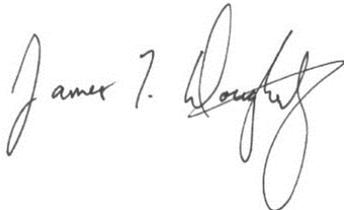
Forensic Science Improvement Committee Report

The Board created a five person sub-committee with the goal of making recommendations for overall improvement in forensic science services to the State of Minnesota. The sub-committee met three times in 2011. At this time, the committee is not prepared to make any formal recommendations to the Board. However, the committee does support the Board's overall recommendation to the legislature that all laboratories providing services in the State of Minnesota achieve accreditation by an appropriate accreditation body, such as ASCLD-LAB.

On-going topics of discussion in the committee meetings include:

- A move toward the sharing of resources by existing laboratories, which could result in faster-around times and better all-around service
- Increased level of access to laboratory services to non-law enforcement agencies
- Improve educational and information resources concerning laboratory capabilities and report interpretation for law enforcement and the judicial system
- How to cope the potential loss of funding currently being provided through federal grants such as the DNA Backlog Reduction grants and the Paul Coverdell Forensic Science Improvement Grant

Respectfully submitted,



James L Dougherty
Committee Chair

Bureau of Criminal Apprehension Forensic Science Service

The BCA Forensic Science Services Laboratories in St. Paul and Bemidji both experienced an overall increase in the number of cases submitted for analysis in most sections. The tables below show the number of cases submitted for to each laboratory by section and compares that to the number of cases submitted to each section in 2010.

Number of Cases Submitted in 2011				
	St. Paul Lab		Bemidji Lab	
Section	Cases	Change from 2010	Cases	Change from 2010
Alcohol	10,587	-3585	1,038	+1,038
Crime Scene	35	+3	17	+8
Chemical Testing	172	+4	-	-
Nuclear DNA	2,613	+425	438	+82
Controlled Substance	2,980	+226	1,047	+312
Firearms and Toolmarks	376	+23	71	+11
Latent Prints	1,036	+93	291	+43
Mitochondrial DNA	54	-23	-	-
Question Documents	51	+16	-	-
Toxicology	2,166	-65	-	-
Trace	144	+2	-	-
Missing Persons*	190	-9	-	-

*The Missing Persons section was created to perform DNA analysis in human remains and was funded through a cooperative agreement with the FBI. Funding for this section ending in September, 2011.

The table shows that most all sections saw an increase in the workload from the previous year. The exception was in the Alcohol and Toxicology sections. The decrease in submissions in each of these sections can most likely be attributed to an increase in the use of the Intoxilyzer in DWI cases in counties that had previously suspended its use due to issues related to the source code.

The Bemidji laboratory added to ability to perform blood and urine alcohol analysis in March o 2011. Prior to that time, all blood and urine alcohol analysis was performed in the St. Paul Lab.

The BCA Forensic Science Service Laboratories continued to prioritize cases based on case type. As can be seen in the tables below, the turn-around times for crimes against persons cases remained virtually unchanged from the previous year, even though the overall number of these types of cases increased dramatically. This can be attributed to several factors including the implementation of automation in the DNA section, with instrumentation purchased over the past several years using a combination of State and Federal funds. The overall decreased turn-around time in property crimes can also be attributed to increased automation as well as the formation of a group dedication to

performing DNA analysis in property crime cases. These personnel are primarily made up of personnel that had staffed the Missing Persons section.

Crimes Against Persons				
Case Type	# of Reports	Change from 2010	TAT (days)	Change from 2010 (days)
Attempted Homicide	70	-13	45	-16
Assault	468	-57	51	-12
Child Endangerment	6	+15	37	+15
Criminal Sexual Conduct	3,335	+576	38	-4
Death Investigation	367	+45	53	+8
Fatality Study	107	-42	25	-5
Homicide	317	-78	58	0
Hit and Run	30	-8	73	+28
Kidnapping	36	-15	44	+4
Robbery	251	-9	52	-22
Terroristic Threats	59	-10	54	-17
Criminal Vehicular Homicide	91	+40	33	-3
Stalking/Harassment	19	+28	90	+28
Total	5,156	+422	50	+2

Property Crimes				
Case Type	# of Reports	Change from 2010	TAT (days)	Change from 2010 (days)
Auto Theft	209	+3	80	-25
Burglary	1527	+16	71	-45
Fire Investigation	243	+39	64	-10
Forgery	23	-20	85	-19
Fraud	16	+5	91	+16
Theft	313	-34	70	-30
Vandalism	86	-20	76	-59
Total	2417	-11	76	-34

Drug Related				
Case Type	# of Reports	Change from 2010	TAT (days)	Change from 2010 (days)
Controlled Substance	4686	+406	33	+1
Total	4686	+406	33	+1

Traffic Related				
Case Type	# of Reports	Change from 2010	TAT (days)	Change from 20110(days)
Criminal Vehicular Operation	534	-85	32	0
DWI	12,193	-2,311	20	0
Open Bottle	43	-22	9	-2
Total	12,770	-2,418	20	0

HENNEPIN COUNTY SHERIFF'S OFFICE CRIME LABORATORY

The Hennepin County Sheriff's Office Crime Laboratory was formed in the early 1960's. The laboratory provides crime scene processing and forensic science services to the 32 suburban Hennepin County law enforcement agencies as well as a number of state and federal law enforcement agencies operating within the county.

The laboratory is one of only three accredited laboratories in the State of Minnesota (the others are the Minnesota Bureau of Criminal Apprehension Forensic Science Service Laboratory system and the Minneapolis Police Crime laboratory). All are accredited under the American Society of Crime Lab Directors/Laboratory Accreditation Board – International Program.

The United States Congress recently cut in half funding for the Alcohol, Tobacco, Firearms and Explosives NIBIN program. The National Integrated Ballistic Information Network program was established in 1999. The automated system acquires digital images of the markings made on fired cartridge cases and bullets recovered from crime scenes or gun test-fires and then compares those images against previously acquired entries. By searching in an automated environment either locally, regionally, or nationally NIBIN partners are able to discover links between crimes more quickly, including links that would never have been identified absent the technology.

Because of the funding cuts, the Hennepin County Sheriff's Office Crime Laboratory's NIBIN equipment was scheduled to be deactivated in October, 2011, leaving The BCA and Minneapolis Police laboratories as the only NIBIN entry points within a several state area.

Hennepin County Sheriff Richard Stanek felt so strongly about keeping the NIBIN program that he contacted ATF directors seeking reactivation. When those efforts failed, he found an alternate source of funding to support the \$43,000 program for 2012.

Case backlogs and report examination turn around times increased in previous years for many laboratories. The impact of DNA testing, especially in property crime cases, fueled much of the backlog. The Hennepin County Sheriff's Office Crime Laboratory secured in 2009 an American Recovery and Reinvestment Act Grant for \$1.13 million. The grant helped to establish the Property Crime DNA Initiative that expanded the use of DNA testing in property crimes investigations throughout the county and reduced the backlog of cases awaiting analysis 77% from inception through December 31, 2011. The use of federal grants to purchase equipment and fund scientist overtime has helped the Latent Print section become more efficient. This has also helped to slow the increase of backlogged cases in 2011.

Number of Cases Submitted in 2011

Section	Cases*	Change from 2010	TAT (days)**	Change from 2010
Biology/DNA	1,048	-206	48	-64
Crime Scene Response	2,871	-47	29	+8
Firearm & Toolmark	224	-22	14	-23
Latent Prints	1,318	+7	59	-18
Multimedia	27	-19	29	+8

*Does not include 764 backlogged cases completed in 2010 & 2011.

**Turn around times are averaged with violent and property crimes combined. All violent crime examination reports are turned around in 30 days or less (average) in all sections.

Note: Specialty 360 degree crime scene virtual reality videos added in 2011 skew the crime scene data negatively.

Offenses

Offense Type	Number of Cases	Change from 2010
Accident	70	-5
Assault	292	-211
Burglary	1,236	+120
Check Forgery	3	+3
Damage to Property	157	+5
Death	271	-10
Explosive Device	8	+1
Financial Crime	8	-6
Fire/Arson	27	+8
Fleeing a Peace Officer	11	+9
Kidnapping	5	+3
Miscellaneous	65	0
Missing Person	3	+2
Narcotics	273	-4
Other	66	-2

Photo Detail	45	+18
Robbery	98	-3
Theft	558	+38
Weapons	99	-30

Note: 2010 "Assault" cases included approximately 200 *Solving Cold Cases With DNA Grant* submissions

2011 Minneapolis Police Department Crime Lab Statistics

Video/Audio Forensics

<i>Average Backlog</i>	<i>Avg Turnaround Time</i>	<i>2011 Stats</i>
8 cases	3 Days	2451 Video Copies Made 38 Videos Analyzed 531 DVD/CDs Analyzed 3309 Still Prints Created 340 Discs Created

The 50% decrease in case processing/service completion turnaround time in 2011 compared to 2010 is attributed to the increased number of digital squad videos now in service, improved software programs and other equipment now available to examiners to assist them in efficiently capturing video, and increased knowledge among our users that enables them to view more video evidence independently.

Compared to 2010 figures

<i>Average Backlog</i>	<i>Ave Turnaround Time</i>	<i>2010 Stats</i>
8 cases	6 Days	1535 Video Copies Made 404 DVD/CDs Analyzed 1391 Still Prints Created

Firearms and Tool Marks

<i>Average Backlog</i>	<i>Ave Turnaround Time</i>	<i>2011 Stats</i>
13 Cases	6 Days	428 Guns Examined 4295 DCCs Examined 946 IBIS Entries Made 2671 Positive IDs Made 35 Serial Number Restorations

Compared to 2010 figures

<i>Average Backlog</i>	<i>Avg Turnaround Time</i>	<i>2010 Stats</i>
17 Cases	5 Days	539 Guns Examined 4047 DCCs Examined 993 IBIS Entries Made 1890 Positive IDs Made

Photo Lab Section

Average Backlog

None

Avg Turnaround Time

1 Day

2011 Stats

997 Photo Evidence Developed
2889 Digital Photo Evidence
processed to CDs
295 Cds copied
146 CDs backed up
16,665 prints created
23 Imaging case/corrections

The change in statistic information and categories for 2011 compared to 2010 reflect the Minneapolis Police Department's change to primary use of digital cameras from film cameras. Drastically fewer photos are being created and more CDs are being created containing multiple images.

Compared to 2010 figures

Average Backlog

None

Avg. Turnaround Time

1 Day

2010 Stats

48,093 Photo Evidence Developed
8116 Digital Prints Created
60,832 Photographs Printed

Field Operations

Average Backlog

30 Cases

Avg Turnaround Time

8 Days

2011 Stats

23748 Items Processed
1742 Scenes processed
84476 Photographs Taken
1631 Bio Samples Taken
5119 Latents Compared
221 Suspects ID'd
999 Prints ID'd
1712 MAFIN Entries Made

Compared to 2010 figures

Average Backlog

30 Cases

Avg Turnaround Time

13 Days

2010 Stats

22986 Items Processed
1650 Scenes Processed
79527 Photographs Taken
1384 Bio Samples Taken
47546 Latents Compared
244 Suspects ID'd
1053 Prints ID'd
1582 MAFIN Entries Made

Computer Forensics

<i>Average Backlog</i>	<i>Avg Turnaround Time</i>	<i>2011 Stats</i>
4 Cases	21 Days	255 Digital Forensic Exams Requested (Cases) 705 Evidence Items Examined 272 Cellular Phones Examined 71 Internet Child Pornography Cases Investigated/Referred

The dramatic reduction in backlog cases is attributed to having an additional and fully trained examiner in the section (he started in 2009 but the first year in the section requires a great deal of time in training); a significant increase in cellular phone examinations with a decrease in computer hard drive examinations, resulting in much faster pace of examination; and the procurement of tools such as FastScan and Rimage EDS which enables examiners to locate contraband images more efficiently.

Compared to 2010 figures

<i>Average Backlog</i>	<i>Avg Turnaround Time</i>	<i>2010 Stats</i>
24 Cases	18 Days	244 Digital Forensic Exams Requested (Cases) 556 Evidence Items Examined 207 Cellular Phones Examined 128 Internet Child Pornography Cases Investigated/Referred

MAFIN

<i>Average Backlog</i>	<i>Avg Turnaround Time</i>	<i>2011 Stats</i>
None	1 Day	98628 Latents Compared 114 Prints ID'd 56511 Reverse Searches Run 702 Fingerprint Cards Added to MAFIN

Compared to 2010 figures

<i>Average Backlog</i>	<i>Avg Turnaround Time</i>	<i>2010 Stats</i>
None	1 Day	104391 Latents Compared 109 prints Id'd 71560 Reverse Searches Run 733 Fingerprint Cards added to MAFIN

Forensic Garage

<i>Average Backlog</i>	<i>Avg Turnaround Time</i>	<i>2011 Stats</i>
2 Cases	4 Days	258 Vehicles Processed 32 VINs Checked

The reduction in case backlog is attributed to the increased knowledge and efficiency of the assigned Forensic Scientist, who is now in their second year in this assignment and has the benefit of a full year of training and experience.

Compared to 2010 figures

<i>Average Backlog</i>	<i>Avg Turnaround Time</i>	<i>2010 Stats</i>
5 Cases	5 Days	211 Vehicles Processed 30 VINs Checked

Looking ahead to 2012:

In 2012 the Minneapolis Police Department Crime Lab looks forward to the implementation of a Laboratory Information Management System (LIMS). The LIMS is sure to provide us with efficiencies in many areas including report management, statistical compilations, evidence and service tracking, etc.

Tri County Regional Forensic Laboratory



In February of 2008, the Anoka County Sheriff's Office entered into a cooperative agreement with Wright and Sherburne Counties to make possible a Tri County Regional Forensic Laboratory. This agreement combines the resources of the three counties in order to provide forensic laboratory services to its citizens. Through a collaborative agreement with Hamline University, the laboratory is currently working with students who are interested in a career in forensic science. Future plans include laboratory accreditation and DNA analysis.

The Tri County Regional Forensic Laboratory in Andover provides Controlled Substance, Latent Print, and Blood/Urine Alcohol analyses of Forensic Evidence that originates from Anoka, Sherburne, and Wright counties. The Tri County Regional Laboratory has experienced increases in both the number of cases and the number of items submitted for analyses in the three specialty areas that it performs Forensic Examinations. Case submissions for the past three years are included below.

In review of the data it appears that the increased caseload and increased number of items per case has lengthened turnaround times. In 2010 the Drug Section began performing blood and urine alcohol examinations to improve the timeliness for alcohol testing, because of the reduced use of the Intoxilyzer in DWI cases due to source code challenges. This increased caseload for the Drug Section Criminalists has contributed to the longer turnaround times in the Drug Chemistry Section. We are hopeful that the recent purchase of an auto sampling instrument for blood and urine samples will improve the overall turnaround times for the controlled substance casework.

With only one fully trained Latent Print examiner and an increasing caseload the Latent Print turnaround times have significantly increased in the past years. We are hopeful with the addition of a Quality Manager in early 2012 who joins the Lab with numerous years of Latent Print experience can assist with improving the caseload backlog and enhance the training of another Criminalist in the LP area, which should improve the turnaround times for the Latent Print Section. We are currently expediting forensic examinations to assist in timely investigations and/or rush court dates as requested and we will continue to do so in the future.

In 2012 the Tri County Regional Forensic Laboratory is pleased to announce that they will be purchasing and implementing a Laboratory Information Management System (LIMS). A LIMS can greatly improve the efficiency of the Laboratory and provide detailed information. Our law enforcement agency clients will receive the information they need to investigate crimes more quickly and completely. Forensic Criminalists will spend less time on report generation and evidence tracking and more time performing evidence analysis. Laboratory management will be able to accurately track workloads, turnaround times and evidence submission data. A LIMS will increase efficiency, productivity and analytical capacity.

Statistics are on the next page:

Tri County Regional Forensic Laboratory Statistics

	2009	2010	2011
DRUGS			
Case Intake	659	651	734
Cases Completed	605	639	612
Items Completed	1604	1941	1920
Average Turn Around Time	14	38	57
LP			
Case Intake	273	398	407
Cases Completed	225	340	270
Items Completed	568	780	714
Average Turn Around Time	43	68	99
ALCOHOLS			
Case Intake	0	451	489
Cases Completed	0	427	504
Items Completed	0	453	509
Average Turn Around Time	0	23	12