STATE OF MINNESOTA

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

January 15, 2013

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:
A complaint dated November 3, 2011 was received regarding a request to review DNA test results and testimony from Hennepin County Sheriff's Office and Bureau of Criminal Apprehension Crime Lab Forensic Scientists. A Screening Committee reviewed the complaint and supporting documentation and came to the unanimous decision that:

- No negligence or misconduct occurred
- No corrective action was required of either laboratory
- No retrospective reexaminations of other forensic analysis was necessary
- No follow-up examination of the laboratories was necessary

The Board reviewed and approved the Steering Committee's conclusion and recommendation.

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 best to 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 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) mandating (with appropriate funding for annual accreditation fees and proficiency tests) these entities to become accredited by an appropriate accrediting body and implementing a process for them to report their accreditation status to the Board. Even the Board's capacity to provide meaningful, mandatory reports as directed by statute is inhibited without funding.

For 2012, the Board must comment on the alleged scandal in one of the State's municipal crime laboratories and the opportunity for improvement this incident provides the State. The allegations, among other issues cited:

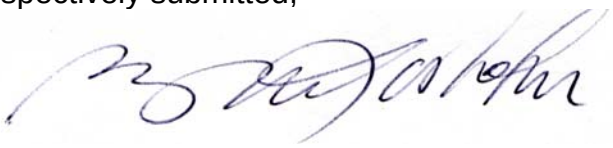
- a lack of any quality system
- no written policy or procedure manuals
- no proficiency testing
- lack of peer technical reviews
- lack of documented training
- lack of calibration and maintenance records

Without the recognition that is associated with accreditation, Minnesota crime laboratories have no way to demonstrate to the criminal justice system **and the public** that the laboratory conforms to strict standards and follows accepted scientific principles. Requiring crime laboratories to become accredited is the single most important step the Board can take toward improving forensic science services in Minnesota.

The Board has only a general understanding of what forensic science services are being provided by law enforcement agencies in the state. This knowledge was gained from volunteer responses to a survey. The Board, specifically an executive director and support staff, need funding to conduct a thorough inventory of the forensic science services being provided in order to adequately make recommendations for the future.

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 has attached statistical information from labs that submitted information. These statistics may help in assessing laboratory response times.

Respectively submitted,



Brian Kasbohm
Chairman
Forensic Laboratory Advisory Board

The BCA Forensic Science Services Laboratories in St. Paul and Bemidji continued to experience an overall increase in the number of cases submitted for analysis in all sections of the laboratory with the exception of Alcohol testing. The table below show the number of cases submitted to each laboratory section and compares that to the number of cases submitted to each section in 2011.

Number of Cases Submitted in 2012				
	St. Paul Lab		**Bemidji Lab**	
Section	**Cases**	**Change from 2011**	**Cases**	**Change from 2011**
Alcohol	7,704	-2,883	1,504	+466
Breath Testing	19,383	+6,759	-	-
Crime Scene	34	-1	16	-1
Chemical Testing	195	+23	-	-
Nuclear DNA	3020	+407	458	+20
Controlled Substance	4188	+1,208	1,207	+160
Firearms and Toolmarks	546	+170	52	-19
Latent Prints	1090	+54	299	+8
Mitochondrial DNA	72	+18	-	-
Question Documents	55	+4	-	-
Toxicology	2495	+329	-	-
Trace	204	+60	-	-

The BCA completed the deployment of the new Datamaster breath test instruments in September, 2012. As the table indicates, the number of cases in which breath testing technology was used increased dramatically in 2012 compared to 2011. Greater use of breath testing likely contributed to the decrease in the number of cases in which blood or

urine alcohol testing was requested. However, the lab did experience a sharp increase in the number of DWI cases in which testing for controlled substances was requested. This can be seen the 15% (329 cases) increase in Toxicology submissions in 2012.

The other section of the laboratory that saw a significant change in case submissions was the Drug Chemistry group. The lab experienced a 41% (1,208 cases) increase in the number of cases submitted to the St. Paul laboratory compared to 2011. The majority of this increase was seen in the second half of the year and is likely due to the increased caseload that resulted from the suspension of drug testing in the St. Paul Police Laboratory in July.

2012 Turn Around Time

Crimes Against Persons				
Case Type	**# of Reports**	**Change from 2011**	**TAT (days)**	**Change from 2011 (days)**
Attempted Homicide	102	+32	42	-3
Assault	566	+98	47	-4
Child Endangerment	19	+13	39	+1
Criminal Sexual Conduct	3316	-19	35	-3
Death Investigation	315	-52	44	-9
Fatality Study	135	+28	26	+1
Homicide	428	+111	52	-6
Hit and Run	40	+10	39	-34
Kidnapping	36	+39	36	-8
Robbery	266	+15	50	-2
Terroristic Threats	73	+14	55	+1
Criminal Vehicular Homicide	72	-19	38	+5
Stalking/Harassment	29	+10	50	-40
Total	**5,397**	**+241**	**43 (Ave)**	**-7**

Weapons				
Case Type	**# of Reports**	**Change from 2010**	**TAT (days)**	**Change from 2010 (days)**
Weapons	818	+240	46	-13
Total	**818**	**+240**	**46**	**-13**

Property Crimes				
Case Type	**# of Reports**	**Change from 2010**	**TAT (days)**	**Change from 2010 (days)**
Auto Theft	318	+109	47	-33

Burglary	2061	+534	50	-21
Fire Investigation	232	-11	63	-1
Forgery	33	+10	77	-8
Fraud	15	-1	76	-15
Theft	343	+30	47	-23
Vandalism	76	-10	48	-26
Total	**3078**	**+661**	**58 (Ave)**	**-18**

Drug Related				
Case Type	**# of Reports**	**Change from 2010**	**TAT (days)**	**Change from 2010 (days)**
Controlled Substance	5031	+345	45	+12
Total	**5031**	**+345**	**45**	**+12**

Traffic Related				
Case Type	**# of Reports**	**Change from 2010**	**TAT (days)**	**Change from 20110(days)**
Criminal Vehicular Operation	554	+20	30	-2
DWI	9,398	-2,795	24	+4
Open Bottle	56	+13	7	-2
Total	**10,008**	**-2,762**	**20**	**0**

The tables above indicate the number of reports that were issued by both laboratories and the average turnaround time per case type. The tables show an increase in the number of reports issued in nearly all case types and a modest improvement in average turnaround time for the broad categories of case types. The improvement in turnaround time is due to the increased use of automation where possible and changes in the work process that allow greater efficiency.

The exception to the improved turnaround time was seen in the Drug Chemistry area, where the increased work load was too great to be adequately addressed with current resources. The other trend that bears watching is the increase in requests for controlled substance testing of blood and urine samples in DWI cases. This type of testing is more complicated than alcohol testing and does not easily lend itself to automation. A continuation of this trend will likely result in an increase in the turnaround time in DWI cases in the future.

HENNEPIN COUNTY SHERIFF'S OFFICE
CRIME LABORATORY

The Hennepin County Sheriff's Office (HCSO) 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 L aboratory). All are accredited under the American Society of Crime Lab Directors/Laboratory Accreditation Board – International Program (ASCLD/LAB-International).

The United States Congress cut funding for the Alcohol, Tobacco, Firearms and Explosives (ATFE) National Integrated Ballistic Information Network (NIBIN) program. The NlBIN 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 HCSO Office Crime Laboratory's NIBIN equipment was scheduled to be deactivated in October, 2012, 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 seeking reactivation funding. ATF agreed to fund the system for the HCSO until April 2013.

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 HCSO Crime Laboratory secured, in 2009, an American Recovery and Reinvestment Act Grant (ARRA) 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 assisted with the backlog of cases awaiting analysis from inception through June 2012. In addition, the use of federal grants to purchase equipment and fund scientist overtime has helped the Latent Print section assist with its backlog.

2012 statistics

Section	New Cases	New Requests	Requests completed	Avg. TAT days. Violent crime/ Property Crime
Entire Lab	3,577*	7,365	6,912	40/56
Biology/DNA	1,379	2,225	1,862	57/64
Crime Scene Response	2,698	3,196	3,355	26/27
Firearm & Toolmark	270	287	244	37/62
Latent Prints	1,408	1600	1,402	36/110
Multimedia	43	57	49	24/55

- The Entire Lab total for new cases listed are not the sum of each of the section disciplines. Each section may or may not be involved in the analysis of the evidence submitted.

Offenses

Offense Type	Number of Cases 2012	2011	% Change
Accident/Crash	79	70	+13
Assault	350	292	+20
Burglary	1,243	1,236	+.6
Check Forgery	1	3	-67
Damage to Property	168	157	+7
Death	316	271	+17
Explosive Device	7	8	-12.5
Financial Crime	6	8	-25
Fire/Arson	25	27	-7
Fleeing a Peace Officer	11	11	0
Kidnapping	2	5	-60
Miscellaneous	74	65	14
Missing Person	1	3	-67
Narcotics	357	273	+31
Other	36	66	-45.5
Photo Detail	29	45	-35.5
Robbery	94	98	-4
Theft	581	558	+4
Weapons	163	99	+65

Tri County Regional Forensic Laboratory

2012 was a very productive year for the Tri County Regional Forensic Laboratory. The laboratory hired a full time Quality Assurance Manager with experience in the ASCLD/LAB assessment process to prepare the laboratory for International Accreditation. We were very fortunate to attract and hire four very talented and experienced Forensic Scientists in DNA and Drug Chemistry. We were also successful in purchasing a Laboratory Information Management System and DNA Analytical Instrumentation required for starting a new DNA Section.

During 2012 the Tri County Regional Forensic Laboratory experienced a large increase in the number of controlled substance cases submitted and saw a moderate increase in the number of blood and urine alcohol case submissions over 2011. The latent print section saw a decrease of nearly 100 cases during the same time period.

The decrease in case completion in the latent print section is due to the fact that the section currently has only one fully trained case working scientist. Additionally, the sole fully trained latent print examiner has been busy preparing the section for accreditation and has been a major contributor to the implementation of the LIMS. The extra duties that have been placed on the fully trained latent print examiner have greatly diminished the sections ability to complete casework. Further, the Quality Assurance Manager has devoted more time towards preparing for accreditation over working latent print cases. The laboratory is currently expediting forensic examinations to assist in timely investigations and/or rush court dates as requested, and will continue to do so in the future.

On a positive note, 2013 looks to be a very promising year for the Tri County Regional Forensic Laboratory. In the first quarter of the year, the laboratory will be bringing on another experienced drug chemist and a fully trained latent print technical leader. Moreover, during the first quarter of the year, the third latent print examiner that has been working as a processor, should complete the training program and be completing cases by late spring or summer. The DNA section of the laboratory is currently working on validation studies and writing standard operating procedures, this should conclude by late spring, at which time the DNA section will be able to start working select cases.

The laboratory continues to work towards functioning under the requirements laid out by ASCLD/LAB and the FBI Quality Assurance Standards. Upon completion of the preparatory work in the DNA section, the laboratory plans to apply for accreditation with ASCLD/LAB, with the hope of going through the accreditation process in late 2013 or early 2014. Once accreditation has been achieved, the laboratory plans to immediately gain access to the CODIS database. This should make the laboratory fully functional by mid 2014.

Below is a table of the statistics for the laboratory for the past three years.

Drug Chemistry

	2010	2011	2012
Case Intake	651	734	891
Cases Completed	639	612	644
Items Completed	1941	1920	1951
Average Turn Around Time (Days)	38	57	94

Latent Prints

	2010	2011	2012
Case Intake	398	407	318
Cases Completed	340	270	103
Items Completed	780	714	217
Average Turn Around Time (Days)	68	99	227

Alcohol Cases

	2010	2011	2012
Case Intake	451	489	511
Cases Completed	427	504	494
Items Completed	453	509	499
Average Turn Around Time (Days)	23	12	14

2012 Minneapolis Police Department Crime Lab Statistics

Forensic Video/Audio Services

Average Backlog	Avg. Turnaround Time	2012 Stats
8 Cases	3 Days	3281 Video Copies Made 65 Videos Analyzed 579 Videos Analyzed 3483 Stills Created 476 Discs Created

There has been a significant increase in the amount of services provided in 2012 compared to 2011, while still maintaining the same turnaround time and case backlog level. This increase in services provided is attributed to the increased experience, proficiency level and efficiency of the three Video Analysts in the section. These analysts continue to gain advanced training and certifications through LEVA course certification and work. In addition the volume of video services completed provides extensive "on-the-job" experience and knowledge that tends to result in increased efficiency among analysts as they progress through their first few years of forensic video analysis work.

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

Forensic Firearm and Tool Mark Services

Average Backlog	Avg. Turnaround Time	2012 Stats
13 Cases	6 Days	483 Guns Examined 4460 DCCs Examined 783 IBIS Entries Made 2605 Positive IDs Made 33 Serial Number Restorations

Average Backlog	Avg. Turnaround Time	2011 Stats
13 Cases	6 Days	428 Guns Examined 4295 DCCs Examined 946 IBIS Entries Made 2671 Positive IDs Made 35 Serial Number Restorations

Photo Lab Section

Average Backlog	Avg. Turnaround Time	2012 Stats
None	1-3 Days	191 Photo Evidence Developed 3048 Digital Photo Evidence processed to CDs 840 CDs copied 66 Imaging case/corrections

Minneapolis Police Department's change to primary use of digital cameras from film cameras continues to drastically reduce the number of photos being created and increase the use of CDs containing multiple images.

Average Backlog	Avg. Turnaround Time	2011 Stats
None	1 Day	997 Photo Evidence Developed 2889 Digital Photo Evidence processed to CDs 295 CDs copied 23 Imaging case/corrections

Field Operations Section

Average Backlog	Avg. Turnaround Time	2012 Stats
33 Cases	9 Days	25560 Items Processed 1601 Scenes Processed

		84369 Photos Taken 2089 Bio Samples Collected 51985 Latents Compared 255 Suspects ID'd 1286 Latents ID'd 1832 MAFIN Entries

Average Backlog	Avg. Turnaround Time	2011 Stats
30 Cases	8 Days	23748 Items Processed 1742 Scenes Processed 84476 Photographs Taken 1631 Bio Samples Collected 45119 Latents Compared 221 Suspects ID'd 999 Prints ID'd 1712 MAFIN Entries

Computer Forensic Examination Services

Average Backlog	Avg. Turnaround Time	2012 Stats
8 Cases	30 Days	303 Digital Examination Requests 860 Evidence Items Examined 576 Cellular Phones Examined 39 Internet Child Pornography Cases Investigated/Referred

Significant increases in all measured statistical categories related to examinations from 2011 to 2012 has caused an increase in backlog size and extended turnaround times for examinations.

Average Backlog	Avg. Turnaround Time	2011 Stats
4 Cases	21 Days	255 Digital Examination Requests 705 Evidence Items Examined 272 Cellular Phones Examined 71 Internet Child Pornography Cases Investigated/Referred

MAFIN

Average Backlog	Avg. Turnaround Time	2012 Stats
2	2 Days	94092 Latents Compared 97 Prints ID'd 65212 Reverse Searches Run 144 Fingerprint Cards Added to MAFIN

One of the two MAFIN examiners retired in June of 2012. This has resulted in a reduction in the amount of MAFIN Services provide and an increase in backlog and turnaround time in some cases.

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

Forensic Garage Services

Average Backlog	Avg. Turnaround Time	2011 Stats
2 Cases	4 Days	246 Vehicles Processed 30 VINs Checked

Average Backlog	Avg. Turnaround Time	2010 Stats
2 Cases	4 Days	258 Vehicles Processed 32 VINs Checked