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OFFICE OF THE COMMISSIONER

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Report recommending a long-term strategic plan regarding: Existing state/regional crime labs *and* new regional and local crime labs.

I. Introduction

Minnesota Session Laws 2008- chapter 179, section 5, subd. 9 states in part, that the Commissioner of Public Safety must develop a long-term strategic plan for maintenance and staffing of existing state and regional crime labs … and creation, maintenance, and staffing of new regional and local crime labs. The Commissioner of Public Safety must submit the strategic plan to the House and Senate committees with responsibility for public safety finance by February 1, 2009.

> Subd. 9 Crime Labs Strategic Plan
> The commissioner of public safety must develop a long-term strategic plan for maintenance and staffing of existing state and regional crime labs and creation, maintenance, and staffing of new regional and local crime labs. The strategic plan must include, but is not limited to, the following:
> (1) an assessment and explanation of the state's crime lab needs, including the need for additional regional or local crime labs;
> (2) specific recommendations for additional regional or local crime labs, including recommendations for locations for new labs, and a ranking of the specific regions, counties, or cities that need a crime lab in order of urgency;
> (3) a long-range plan for the training of state crime lab employees, including the possibility of sharing employee training costs with users of the state lab or entities that operate regional or local labs;
> (4) a long-range funding plan for the state crime lab and state owned regional labs;
> (5) an assessment of the state crime lab's response times and specific recommendations for improving the lab's response time; and
> (6) specific, clearly stated steps for implementing the strategic plan.
> The commissioner must submit the strategic plan, as a recommendation, to the house of representatives and senate committees with responsibility for public safety finance by February 1, 2009.

Minnesota Session Laws 2007-chapter 54, article 1 states, in part, that the Commissioner of Public Safety shall convene a working group to study and prepare a report on the appropriateness of additional regional forensic crime laboratories. The working group must submit its report and recommendations to the House and Senate committees with responsibility for public safety finance by February 1, 2008.

> Article 1
> The commissioner of public safety shall convene a working group to study and prepare a report on the appropriateness of additional regional forensic crime laboratories and regional crime strike task forces. The commissioner must consult with the chairs of the legislative committees with responsibility for public safety finance on the membership of the working group. The Forensic Laboratory Advisory Board, established under Minnesota Statutes, section 299C.156, and the Gang and Drug Oversight Council, established under section 299A.641, must provide advice and assistance to the commissioner and the working group as requested by the commissioner. The working group must submit its report and recommendations to the house of representatives and senate committees with responsibility for public safety finance by February 1, 2008.

The 2008 report was completed by the Forensic Laboratory Advisory Board (FLAB) serving as the "working group" as designated by the Commissioner of Public Safety.

The 2009 report is solely a product of the Commissioner of Public Safety. Taken together, the documents address relevant crime lab issues including assessing the need for additional forensic crime laboratories whether they are state or local facilities.

Notice to reader: Enclosed with this document is the (2008) Crime Lab Report prepared by the Forensic Laboratory Advisory Board. It is recommended this report be reviewed first, as it lays out a baseline framework of factors for consideration in discussions relating to expanding crime lab facilities. **The Commissioner of Public Safety fully endorses the report of the advisory Board and builds upon their recommendations by adding his specific recommendations in the 2009 report.** Again, taken together, the two documents provide background, analysis, and specific recommendations.

II. Background - Chronology

The initial report presented to the Legislative committees in February 2008 was the product of the Forensic Laboratory Advisory Board, a legislatively created body whose membership and duties are defined in Minn. Stat. § 299C.156. It should be noted that the selection of this Board to serve as the "core working group" to study and prepare a report, was a recommendation of the Commissioner of Public Safety with concurrence of the Chairs of the committees with responsibility for public safety finance. The report was presented to the respective House and Senate public safety finance committees in hearings during the early weeks of the 2008 session. This report provides an overview of crime lab issues. It also puts into context regional lab issues and productivity efficiencies. Further, the report sets forth three overarching recommendations:

A. There should be an overall increase in forensic laboratory services because current and projected demand requires greater capacity. The report also states that the "process for adding capacity should be part of a purposeful, comprehensive, statewide plan." System-wide criminal justice efficiencies and pure justice require greater capacity.

B. Expansion of regional forensic crime laboratories should be accomplished "systematically." Benefits of regionalization must be balanced with investments in capacity and other factors when deciding a statewide plan. Moreover, the report explicitly states that the "*Board strongly endorsed continued investment in the BCA laboratory and concluded that regional expansion should not be accomplished at the detriment of the BCA.*"

C. Seven factors were listed for the Legislature to consider when deciding whether to appropriate funds for regional laboratories:

1. Capacity
2. Operational Governance and Scientific Independence
3. Compensation Parity
4. Accreditation
5. Training
6. Demographics
7. Local Commitment of Resources

The first five would be addressed efficiently and become non-issues if regional laboratories were staffed with scientists employed by the BCA. Whether scientists were state or local employees would not have an effect on the last two.

Importantly, the membership of the Board reflects a cross-section of respected professionals from within the Criminal Justice Community giving a system-wide, not merely law enforcement, perspective to the crime lab topic.

During the same 2008 legislative session a parallel crime lab issue/request was under review for consideration in bonding committees. The bonding committees in both houses reviewed several public safety proposals, to include requests from local jurisdictions seeking funds for forensic laboratories. One particular request came from local officials on behalf of three counties seeking an appropriation to design, construct, furnish and equip a regional forensic crime laboratory for the use of Anoka, Sherburne, and Wright Counties to be located in Anoka County. Ultimately, this local request was favorably acted upon in conference committee. A grant to Anoka County in the amount of $3,000,000 was appropriated in Minnesota Session Laws 179 (2008), section15, subd. 2. Therefore, the final bonding legislation concluded with two laboratory issues: (a) the award to Anoka County, and (b) a directive to the Commissioner of Public Safety seeking his recommendations on laboratory issues. The Commissioner's recommendations are identified in Section III.

III. Recommendation Details of the Commissioner of Public Safety

Recommendation # 1
MANDATORY ACCREDITATION OF ALL MINNESOTA GOVERNMENTAL FORENSIC LABORATORIES.

A. Why mandatory accreditation? It demonstrates that a forensic laboratory's management, personnel, operational and technical procedures, equipment, and physical facilities meet established standards.

B. The vision of any professional forensic lab is to seek truth through science.

C. Science is neutral is not only an oft heard phrase within the scientific community but it is essential in serving the interests of our citizens. Professional education and subsequent training under the tutelage of a senior scientist needs to be a basic requirement of any individual authorized to seek truth in the dynamic field of forensics. Evidentiary reviews by individuals lacking proper education and professional ethics may result in adverse judicial rulings, potentially stifling the incredible advancements of our scientific community. The balance of guilt or innocence often rests in the hands of scientists who painstakingly analyze evidence, not on behalf of either the prosecution or defense, but simply in their role of seeking the truth.

D. Mandatory accreditation brings standards of education/training and accountability to the scientific community consistent with other professions. Scientists need to be held professionally accountable, similar to the police, the attorneys representing the prosecution and defense, and the courtroom judges, all of whom practice their respective professions within the criminal justice field.

Recommendation # 2
CONTINUATION AND EXPANSION OF THE ROLE OF THE FORENSIC LABORATORY ADVISORY BOARD.

A. Maintain FLAB's independence as an advisory Board to the Legislature and the Commissioner of Public Safety on current and future crime lab related issues. Accreditation matters are a logical extension of the Board's responsibilities as established in its enabling legislation Minn. Stat. § 299C.156.

B. Mandatory accreditation necessitates designating an agency to handle administrative functions. The Commissioner recommends assigning accreditation responsibilities to FLAB. In addition to the current BCA staffing support provided to the Board, minimal additional staff would be needed to handle the audit/compliance accreditation matters.

C. Provide rule-making authority to FLAB's enabling legislation to establish necessary accreditation requirements. The accreditation body will need necessary flexibility via rules, to address Minnesota's unique configuration of laboratories. Although a national body, ASCLAD/LAB, currently establishes accreditation standards for labs throughout the country, the Board needs flexibility in determining accreditation protocols in Minnesota. Considering the different levels/sizes of existing Minnesota labs, there may be a desire by the Board to create different levels of accreditation. FLAB as an independent Board is best suited to make such determinations.

D. FLAB to recommend to the Commissioner and Legislature a timetable for phasing in mandatory accreditation for Minnesota governmental forensic laboratories. Accreditation is a time-consuming process for applicants. FLAB would be best suited to make a recommendation to the Legislature for the timing of mandatory accreditation implementation.

Recommendation # 3
FORENSIC LABORATORY EXPANSION – SHORT-TERM CONSIDERATIONS

A. **State Regional Labs.** The Commissioner recommends that, at this time, the state should not invest funds for the construction or expansion of state regional labs. Until existing state facilities are fully staffed, appropriately equipped, and available space utilized, the Commissioner recommends a moratorium on lab expansion. Once existing state labs are at capacity, future considerations for new or expanded facilities should be recommended to the Commissioner and the Legislature by FLAB under their duties and responsibilities as outlined in this report.

B. **Priority must first be given to the needs of the BCA main lab facility and its regional lab in Bemidji**. Both labs are currently operating well under capacity. Both should be adequately staffed and equipped before serious regional expansion discussions take place. In their report of last year, FLAB was unanimous in its first of three recommendations: "The Board recommends an overall increase in forensic laboratory services to meet current and projected demand." The following sentence was added, in italics, to emphasize this paramount recommendation: *"The Board strongly endorsed continued investment in the BCA laboratory and concluded that regional expansion should not be accomplished at the detriment of the BCA."*

C. **Local Non-State Regional Labs.** The Commissioner recommends that, at this time, the state should not invest funds for the construction or expansion of non-state lab facilities. Again, the Commissioner recommends a moratorium on <u>all</u> lab expansion funded by the state until existing state-funded lab facilities are at capacity. However, there are alternative approaches presented by the Commissioner for consideration.

The Commissioner recommends new approaches when considering matters of regional non-state lab expansions. These recommendations are sensitive to the complicated issues which come to bear when the Legislature is called upon to provide lab funding, bonding or otherwise, to local units of government. In a time of dwindling resources, local units must answer a fundamental question concerning their core law enforcement mission: Is a crime lab central to their core local mission? Is it central enough to invest significant local funding in light of the fact that the state provides such services to them free of charge? The state of Missouri experiences illustrates the impact of the escalating lab costs on local units of government. In recent years, some local units of government have petitioned the state to take over their crime labs. Citing cost as the principal reason, several local labs have forgone the lab functions entirely or have merged their labs into the state lab system.

In light of this trend, at least two hybrid approaches merit consideration. Both take into account the relative value of local control as balanced with the considerable cost of operating a forensic crime lab. Research highlights two central themes that dominate the forensic laboratory issues of our day. First, whether it is a state or local facility, all crime labs grapple with turn-around time challenges. Second, a realization that "we don't need more labs we need more scientists" is a common

refrain seen in research articles and openly discussed at conferences within the national scientific community.

D. **New Hybrid Approaches**:

1. Partnerships to increase capacity utilizing current facilities.

   The BCA has lab space available for additional scientists. Some local agencies have resources available to increase the use of forensic science in combating local crime problems. This first partnership model is based on the BCA and local agencies sharing resources to expand today's forensic services and reduce turn-around times, without having any detrimental impact on core BCA laboratory services.

   A recent example of a working partnership: the Minneapolis PD's contractual agreement with the state. Under contractual terms, the City of Minneapolis pays the personnel costs of two BCA scientists assigned to work on their DNA cases. This model relieves the city from the enormous cost of adding DNA capabilities to their city crime lab. On the state's side, considering that Minneapolis cases are already part of the state lab's workload mix, the salary assistance is of benefit.

2. Partnerships to meet inevitable future needs.

   This second partnership model addresses longer term, statewide planning for forensic laboratory services. As noted in the 2008 FLAB report's second recommendation, regional expansion must be "systematic." Moreover, increasing capacity must be part of a "purposeful, comprehensive, statewide plan." Partnerships and economies of scale are always worth exploring, but are particularly worthwhile in challenging fiscal times. The Commissioner recommends that state funding should only be used for projects arising out of bona fide state/local partnerships.

   A recent example of this partnership potential: "If you build it we will come" is a phrase that recently emanated from a meeting the Commissioner had while visiting local law enforcement officials in the Duluth region. Negotiations concerning the co-location of the Duluth PD into the new St. Louis County Sheriff's facility are currently underway with local officials. There is an expressed desire by the sheriff and chief to expand their current lab capabilities by augmenting their existing lab staff with BCA scientists. This type of "Partnering" could expand the state's presence to the Northeast region of the state, effectively creating another regional lab. Accessibility to departments is desirable, especially in an area of the state which is so geographically expansive.

Both of these partnership models provide regional benefits commensurate with the commitment of regional resources. Further, both models promote strategic approaches in line with the factors set forth in the third, and final, recommendation in the 2008 FLAB report – that seven factors be considered before state funds are used to support regional labs:

1) Capacity and Need
2) Demographic Structure and Existing Services
3) Local or Regional Commitment of Resources
4) Operational Governance and Scientific Independence
5) Compensation Parity
6) Accreditation
7) Training

Recommendation # 4
EXPLANATION OF THE STATE'S CRIME LAB NEEDS

This recommendation is in response to the 2008 amendment that seeks the Commissioner's assessment and explanation of the state's crime lab needs. The needs for the BCA's lab are not unique to Minnesota. The economic slump in the post 9/11 era coupled with the current budget crisis impacted laboratories nationwide. Decreased revenue collections led to mandated cuts in budgets, including crime labs. The challenge to all laboratories is the battle of turnaround time!

For those who have worked in the forensic science profession for any length of time, case backlogs have become sort of a way of life. Except in rare instances, most publicly funded crime laboratories historically have suffered from low budgets, inadequate staffing, or a combination of the two. In 2002, an extensive study of 351 laboratories found that these labs ended the year with over 500,000 requests backlogged, which was an increase of more than 70% from the start of the year. It was estimated that it would take an additional 1,900 additional full-time employees to permit crime labs to complete analyses for their customers in 30 days. Since the analysis of evidence is often pivotal to the successful investigation and prosecution of a criminal case, speedy turnaround of casework has always been a matter of public safety.[1]

The three items listed below highlight the needs of the BCA to address turnaround time for its criminal justice customers.

A. **Staffing**. There is an increased interest from the BCA's criminal justice partners in physical evidence of all kinds and in particular DNA. DNA submissions increased 14% in 2008 alone. The BCA lab has increased the robotics and other analytical technologies to keep pace with the increased case load in the past; however, baring major scientific breakthroughs, this approach will provide limited relief for the future. The FY 08-09 budget included an increase of scientists to address turnaround time concerns. The Commissioner is pleased with the legislator's acknowledgement of the BCA lab's staffing issues. However, as a result of normal attrition, loss of staff to local labs, and costs associated with the Hay study, the net gain of scientists had minimal impact on turnaround time. Even with the modest addition of scientists, only about one third of the cases received from law enforcement are completed in 30 days or less. It is hoped that there will be continued cognizance of this issue and that the BCA lab can meet its scientific staffing requirements as future finances might permit.

[1] *Crime Lab Report*, March 14, 2008 <http://www.crimelabreport.com/library/monthly_report/3-2008.htm>

B. **Equipment**. Bonding funds were used to build and equip the BCA facility six years ago. Maintaining or replacing expensive scientific equipment is particularly challenging given the rapid changes in today's technology. Without a flexible solution aimed at keeping current with today's scientific equipment/technology, we will continue to find ourselves experiencing equipment failures in the lab. For example, examinations that would normally take a few hours stretch into days as repairs on fading equipment are attempted, thereby exacerbating turnaround time. The Commissioner recommends a systematic, scheduled replacement of equipment which would be economically prudent and improve turnaround time.

C. **Salary**. As highlighted in FLAB's report from last year, compensation parity among scientists in all laboratories is imperative. A recent Hay evaluation brought partial remedy to this situation and will be a positive factor in the recruitment and retention of scientists. Without supplemental funds to cover the added costs of the recent Hay study, the number of scientists will decrease.

Recommendation #5
LONG RANGE FUNDING PLANS FOR STATE LABS.

A. **DWI Reinstatement Fee**. The Commissioner urges the Legislature to once again revisit the DWI reinstatement fee issue. We respectfully request the Legislature to provide the BCA lab with some of the funds it originally identified for lab purposes some 20 years ago. At that time, the BCA was seeking funding to embark upon a new identification procedure involving DNA. Exciting as the DNA prospects seemed, the then House Finance Chair asked the BCA to recommend a funding strategy for the new DNA venture. The BCA responded to the Chair's request by proposing a 10% surcharge to be added to the DWI reinstatement fee. Although the BCA's surcharge proposal was considered, a different funding mechanism was passed in the 1988 Minn. Laws, ch. 684, art. 1, sec. 19. The new language directed 10% of the DWI reinstatement fee to the BCA: 80% to the lab and 20% for investigatory measures.

   Under current law, spending restrictions limit BCA spending from the account up to the amount that has been appropriated in session laws. Therefore, to gain access to any additional funds credited to the account, the Commissioner recommends amending Minn. Stat. § 171.29, subd. 2 by adding language which annually appropriates all funds within this account.

B. **Endowment-Gift Acceptance Amendment**. Amend the BCA's enabling legislation to provide explicit authority for BCA to accept endowments, gifts, grants, or donations, including in-kind donations from public or private sources. Corporate donors need a clear message that their intended lab donations are clearly permissible and fall within BCA's statutory authority. This amendment would be in addition to and not in conflict with the existing language of the gift acceptance language found in Minn. Stat. § 16A.013.

C. **Impose Drug Conviction Court Fines.** We have learned from other states with crime labs that the most successful means of improving funding for all crime laboratories is to levy fees in the form of court fines imposed on persons convicted of crimes. These are the same people who make crime laboratories necessary in the first place. Approximately half of all states supplement lab funding through this method. The state of Missouri enacted a law in 2003 requiring persons convicted of drug convictions, in which a lab analysis occurred, to pay a $150 fine into the State Forensic Laboratory Fund administered by the Missouri Department of Public Safety. This revenue funds crime laboratories in the state. The recommendation is to impose court fines on drug convictions and model the program after the 2003 law enacted in the state of Missouri.

Recommendation # 6
PLANS FOR THE TRAINING OF STATE LAB EMPLOYEES.

A. **Higher Education Support**. The Commissioner endorses the interest of higher educational institutions in creating forensic scientist degree programs. Minneapolis Community and Technical College is providing leadership on this subject and is reaching out to four year institutions to combine efforts in making this concept a reality. Additionally, the Commissioner commends and urges continuation of the BCA laboratory internship program. Over many years, the internship program has been successful in introducing young students to the forensic field. Today, many former interns are proudly practicing their profession as a BCA forensic scientist.

B. **Opposition to Fees for Service**. The Commissioner is opposed to the sharing of state lab scientist training costs with local police agency users if the intent is to charge fees for service. The idea of shifting to a pay for service model has been debated for many years. In virtually all state lab systems, it is the consensus among those labs that imposing fees on local agencies will negatively impact law enforcement efforts, the judicial system and the public.

C. **Contract Model**. The Commissioner endorses the previously mentioned contractual model between state and local governments. The city of Minneapolis, in recent years, has funded two BCA scientist positions under contractual arrangement with stipulation that their work will address the city's cases. This approach by all accounts appears to be working well and supports sentiments that more scientists should be hired in lieu of building more labs. Recent articles and reports from NIJ emphatically state ... WE DON'T NEED MORE LABS WE NEED MORE SCIENTISTS.

D. **Employment Contracts.** Investing in scientist training is costly and time consuming. The BCA as well as the FBI is plagued with incidents of training scientists only to see them move on to another lab shortly after their initial training is completed. Under discussion is the private sector's solution to the dilemma — employment contracts. A carefully written contract would stipulate that if a scientist left employment during a designated time frame they would be responsible for reimbursing the state for training costs.

Recommendation # 7

ASSESSMENT OF BCA LAB RESPONSE TIMES AND RECOMMENDATIONS FOR IMPROVEMENTS.

Improved turnaround time for the analysis of evidence is a need frequently identified by criminal justice practitioners. It is a goal of the BCA. Throughput is at the core of this capacity issue. There is a direct correlation between turnaround time and the amount of time a scientist spends at the bench analyzing evidence — a resource issue. There is a direct correlation between turnaround time and the amount of evidence to be analyzed — a demand issue. There are a number of factors that directly impact bench time and evidence submission rates. Capacity is affected by those determinative factors as well as other influencing factors:

1. Prioritization of cases based on public safety, investigative and judicial necessities
2. Rules of evidence (if the evidence will be consumed in analysis, the defense must be given an opportunity to have an expert observe the examination)
3. Pre-trial conferences/meetings with prosecutors
4. Discovery/meetings with defense attorneys
5. Testimony as expert witnesses
6. Crime scene responses
7. Training/education/accreditation
8. Quality assurance protocols

This chart provides a comparison of caseload levels for Fiscal Years 2002 through 2008:

Cases Received

Section	FY 02	FY 03	FY 04	FY 05	FY 06	FY 07	FY 08	%inc FY 02-08
Alcohol	6282	6257	6248	6410	6512	6387	8833	40%
Arson	168	188	163	161	202	237	230	37%
Nuclear DNA	1199	1717	1674	1941	2256	2792	2984	149%
Drugs	3603	3575	3984	4267	4210	4119	3308	NC
Firearms	469	524	661	814	958	910	567	21%
Latent Prints	830	1117	1177	1230	1465	1521	1369	65%
Documents	60	102	89	97	102	89	94	57%
Toxicology	1404	1775	2063	2481	2596	2554	2178	55%
Trace	106	136	143	141	129	148	164	55%
mt-DNA[1]					75	111	159	112%
Crime Scene	78	104	92	86	75	74	76	NC
Total	**14199**	**15495**	**16294**	**17628**	**18580**	**18942**	**19962**	**40%**

These two charts provide a more detailed perspective on turnaround time for FY 2008:

BCA Laboratory Average Turnaround Time Report: FY 2008

Section Name	Number of Cases	Days
Firearms	659	202
Trace	118	105
Drugs	2,517	60
Nuclear DNA	2,619	59
Latent Prints	1,089	49
Mitochondrial DNA	160	94
Questioned Documents	83	46
Crime Scene	82	44
Toxicology	2,074	43
Arson	213	41
Mitochondrial Hair	14	53
Alcohol	8,474	9

BCA Laboratory Performance Turnaround Time Report: FY 2008*

	Nuclear DNA		Latent Prints		Drugs		Alcohol	
Days	Cases	% Complete	Cases	% Complete	Cases	% Complete	Cases	% Complete
7	229	8%	2	3%	359	10%	4260	50%
14	183	14%	79	9%	387	21%	3702	93%
30	571	33%	249	27%	279	29%	563	100%
60	823	61%	455	60%	365	39%		
90	391	74%	224	76%	916	65%		
120	259	83%	89	83%	562	81%		
150	135	87%	62	87%	193	86%		
180	100	90%	52	91%	331	100%		

*1. Percent of all FY 2008 cases completed within 30 days = 60%
2. Percent of all FY 2008 cases (excluding alcohol cases) completed within 30 days = 26%

In the summer of 2008, the BCA commenced with a bureau-wide strategic plan. Incorporated in that plan is an assessment of how to improve lab services and, in particular, turnaround times. Increasing staff would undeniably have a positive impact. However, there are several other courses of action that would also positively impact turnaround time:

1. Increase the use of computerized systems, robotics and associated analytical technology
2. Install more DNA robotics for analyzing known samples
3. Evaluate DNA robotics for analyzing unknown samples
4. Expand video-conferencing for scientific testimony
5. Restructure crime scene response procedures
6. Implement pre-logging of evidence by local agencies
7. Implement electronic just-in-time communications to prevent unneeded analysis
8. Expand partnerships with local agencies to share in staffing costs
9. Consult with local agencies to evaluate external business practices
10. Aggressively pursue federal and state grants
11. Deploy field drug testing technology

SUMMARY OF COMMISSIONER'S RECOMMENDATIONS

STATE OF MINNESOTA

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

Report on the appropriateness of additional regional forensic crime laboratories.

Issue:

Should forensic services be expanded through additional regional laboratories?

Recommendation Summary:

1. It is recommended that an overall increase in forensic laboratory services be made to meet current and projected demand.

2. It is recommended that there be a systematic expansion of regional forensic crime laboratories in the State of Minnesota

3. If state funds are used to support regional forensic services, it is recommended that specific factors be considered.

I. Introduction

Minnesota Session Laws 2007 - Chapter 54, Article 1 states, in part, that the commissioner of public safety shall convene a working group to study and prepare a report on the appropriateness of additional regional forensic crime laboratories. The Forensic Laboratory Advisory Board ("Board"), established under Minnesota Statutes, section 299C.156, must provide advice and assistance to the commissioner and the working group as requested by the commissioner. The working group must submit its report and recommendations to the House of Representatives and Senate committees with responsibility for public safety finance by February 1, 2008.

Note: The Board has been selected by the Commissioner of Public Safety, with the concurrence of the chairs of the legislative committees with responsibility for public safety finance, to serve as the core group reporting on the appropriateness of additional regional forensic crime laboratories. The members of the group who prepared and endorse this report are:

- *Frank C. Dolejsi, Director MN BCA Forensic Science Service, Chair*
- *Sheriff Bruce Andersohn, Anoka County Sheriff*

- *Bart Epstein, Retired Assistant Director MN BCA Laboratory*
- *Christine A. Funk, Assistant State Public Defender*
- *Susan Gaertner, Ramsey County Attorney*
- *Chief Bob Jacobson, New Brighton Police Department*
- *Lt. Brian Kasbohm, Director Hennepin County Sheriff's Crime Laboratory*
- *Steven Lundeen, Lundeen Law Office*
- *Timothy J. O'Malley, Superintendent MN BCA*
- *Honorable Kevin Ross, MN Court of Appeals*
- *Eric Schieferdecker, Assistant Attorney General*
- *Mike Smith, Deputy Director of Special Investigations, MN Department of Corrections*
- *Sheriff Rich Stanek, Hennepin County Sheriff*
- *William Toscano, PhD University of Minnesota*
- *Lowell Van Berkom, Retired Director MN BCA Laboratory*

II. Background

The Board kept in mind an overarching goal of promoting justice by providing high quality, timely forensic science services to all Minnesotans affected by the Criminal Justice System. Veritable justice is at the heart of the Board's recommendations.

Advances in science and technology have led to enhanced abilities to collect, preserve and analyze evidence. As a result, scientific examination of physical evidence recovered from all types of crime scenes has increased exponentially in recent years. Forensic evidence, such as DNA, is now demanded by the criminal justice system and is of decisive importance in achieving justice. This demand for analysis of evidence will continue to rise. Increased capacity to meet that demand will be crucial to meaningful justice: free the innocent and convict the guilty. Punctual forensic analysis will result in the timely exoneration of innocent people and, in turn, their timely release from custody. Moreover, punctual analysis will lead to the prompt arrests of criminals before they commit additional crimes and victimize more Minnesotans. The process for adding capacity should be part of a purposeful, comprehensive, statewide plan.

Current Forensic Services:

The following is a list of state, city and county laboratories that provide crime laboratory services:

- BCA St. Paul - drug identification, trace evidence (hairs, fibers, glass, footprints etc.), latent fingerprints, firearms, questioned documents, toxicology, DNA, mitochondrial DNA, and crime scene processing (homicides and officer involved shootings). The BCA Laboratory also runs the DNA offender database program (referred to as CODIS, Combined DNA Index System) and the statewide breath alcohol testing program.

Note: Accredited by the American Society of Crime Laboratory Director/ Laboratory Accreditation Board (ASCLD/LAB).

- BCA Bemidji - drug identification, latent fingerprints, firearms, DNA/serology and crime scene processing. (See "Bemidji Laboratory Experience" section at the end of this report.)
  Note: Accredited by ASCLD/LAB and CODIS participating lab)
- Hennepin County Sheriff's Office - crime scene processing, latent fingerprint development and identification, firearms identification, computer forensics and DNA analysis. *Note: Accredited by ASCLD/LAB and CODIS participating lab.*
- Minneapolis Police Department - crime scene processing, latent fingerprint processing and identification and firearms.
- Anoka County Sheriff's Office - crime scene processing, latent fingerprint, computer forensics, and drug identification. The Sheriff indicates that they plan to expand their services to include DNA.
- St. Paul Police Department – drug identification, latent fingerprints, and crime scene processing.
- Ramsey County Sheriff's Office – latent fingerprints and crime scene processing
- Carver County Sheriff's Office – latent fingerprints and crime scene processing
- St. Louis County Sheriff's Office – latent fingerprints and crime scene processing.
- Minneapolis Health Department – drug identification (for Minneapolis PD and some suburbs).
- St. Cloud Police Department – latent fingerprints and crime scene processing.
- Duluth Police Department - latent fingerprints.

Current capacity:

The advisory Board report to the Legislature dated June 29, 2007 (attached) recommended that forensic analysis should occur within thirty days. The BCA, which is the largest forensic laboratory in the state, and offers the widest range of scientific specialties, has not been able to meet that goal.

Gap Analysis:

Over 60% of the thousands of cases worked by both BCA laboratories in 2007 took more than 30 days to complete. Since 2002, the BCA has seen an overall 31% increase in cases with a 144% increase in DNA cases. Other city and county laboratories have also experienced significant increases.

In addition, it is estimated that in a majority of property crimes, evidence is not submitted or even collected due to lack of capacity. For example, of the 30,000 burglaries reported in 2007, evidence from fewer than 1,000 of these crimes was submitted to the BCA and Hennepin County laboratories.

Consequences:

Delays in forensic analysis result in innocent persons, who have been incarcerated, remain in custody for protracted lengths of time despite exonerating evidence. FBI studies indicate that up to 30% of suspects are cleared on the basis of DNA analysis. On the flip side of that issue, the longer it takes to identify a suspect, the greater the likelihood that more crimes will be committed and more persons victimized. Forensic science is the invisible partner in the criminal justice system whose full potential is not being realized.

III. Recommendation Details

The Board sought to assess the current forensic science laboratory state of affairs, anticipate future demand for services as well as the resources needed to meet those demands, and make recommendations regarding key factors and criteria for legislators to consider if state funding is appropriated. Many of the suggestions in this report could apply to all laboratories that provide forensic analysis for use in criminal court proceedings. However, the Board's intent was to provide guidance for legislative decisions relating to state funded laboratories. In other words, the recommendations are not intended to regulate laboratories funded exclusively by local units of government or the private sector.

1. The Board recommends an overall increase in forensic laboratory services to meet current and projected demand.

The Board strongly endorsed continued investment in the BCA laboratory and concluded that regional expansion should not be accomplished at the detriment of the BCA.

BCA Forensic Science Service Workload Report
Cases Received

Section	FY02	FY03	FY04	FY05	FY06	FY07	FY08 Estimate[1]	% increase FY02-08
Alcohol	6282	6257	6248	6410	6512	6387	7194	15%
Arson	168	188	163	161	202	237	254	51%
Nuclear DNA	1199	1717	1674	1941	2256	2792	2920	144%
Drugs	3603	3575	3984	4267	4210	4119	3380	N/A
Firearms	469	524	661	814	958	910	686	46%
Latent Prints	830	1117	1177	1230	1465	1521	1530	84%
Documents	60	102	89	97	102	89	82	36%
Toxicology	1404	1775	2063	2481	2596	2554	2320	65%
Trace	106	136	143	141	129	148	186	75%
mt-DNA[2]					75	111	230	N/A
Crime Scene	78	104	92	86	75	74	104	N/A
Total	14199	15495	16294	17628	18580	18942	18886	31%

[1] Estimate based on doubling the cases received in the first six months of FY08.
[2] FBI funded, cases from MN and other states.

2. **The Board recommends a systematic expansion of regional forensic crime laboratories in the State of Minnesota.**

Why regionalization? Beyond capacity, there are other considerations affecting regional expansion, some positively correlated to increased productivity. These include:

- *Proximity to law enforcement clients*

  The BCA regional laboratory in Bemidji has experienced a three-fold increase in case submissions for the counties it serves compared to the number of case submissions from those same counties before the Bemidji laboratory became operational. In addition, client surveys indicate improvement in time and cost savings in getting their evidence to the laboratory. The process, which used to take up to one full day for most agencies, now takes 1–2 hours.

- *Proximity to crime scenes*

  Investigators, chiefs, sheriffs, county attorneys, and others served by the Bemidji laboratory have been interviewed. Consistently, they report improved service from the BCA after the Bemidji laboratory opened. The number one reason cited was the improved response time of the BCA crime scene team. Investigators value this because the team has been able to provide information about the scene during the first critical hours after an incident and, thereby, help provide direction to an investigation.

- *Access to attorneys*

  Both prosecutors and defense lawyers have opined that the cause of justice will be better served by providing lawyers close proximity to regional forensic laboratories. Such access will encourage and facilitate meetings of the lawyers and scientists at all stages of a criminal proceeding. These meetings will provide both sides with important information as to the strengths and weaknesses of the evidence. This information can result in early case resolution, as well as clarity of evidence presentation in trial.

- *Access to courts*

  Scientists from regional laboratories do not have to travel the distances that are required under a single state facility approach. Less time is spent traveling and more time is spent working in the laboratory. Additionally, travel expenses are reduced. In cases where the laboratory is in the same location as the court, the scientist can often be on call instead of traveling to court only to find the case has been settled or rescheduled.

- *Increased submissions*

  Although anecdotal, proximity is a reason cited to explain why some evidence is not being submitted to the BCA laboratory in St. Paul.

- *Local control*

  Laboratories operated and/or funded, in part, by cities or counties could better establish priorities aligned with local needs.

- *Training and Quality*

  Some benefits of regionalization are not readily measurable. For example, a significant benefit of the BCA's Bemidji laboratory is the ongoing education of law enforcement personnel, both through formal training sessions and informal means. During the first year in operation, the Bemidji laboratory held a series of evidence collection and packaging classes at no cost to the agencies. Over 300 officers participated in the training. The result was an immediate increase in the quality of evidence collection and packaging. Along these same lines, officers delivering evidence in person receive instant feedback from the laboratory intake staff on proper evidence handling and packaging techniques.

3. **If state funds are used to support regional forensic services, the Board recommends that the following factors be considered:**

   - *Capacity and Need*

     Overall statewide capacity and backlog should be considered when determining the need for regional laboratories.

   - *Demographic Structure and Existing Services*

     The distance traveled by law enforcement to deliver evidence, the distance the scientist must travel to testify in court and the value of having scientific expertise close at hand for consultation and training are considerations.

     Population distribution, crime rates, and current accessibility to forensic resources should be considered when determining the location of regional crime laboratories.

   - *Local or Regional Commitment of Resources*

     By requiring a tangible local commitment as a condition of state fiscal support, the legislature will ensure local buy-in and support for regional crime laboratories. Regions with pronounced needs would likely be willing to make a case to local taxpayers for support. Additional local resources in geographic regions with

added needs could readily tie into a comprehensive statewide approach and foster equal justice statewide.

- *Operational Governance and Scientific Independence*

  Two of the important aspects of regionalization of forensic services in Minnesota are the issues of governance and scientific independence. Scientific independence is essential to preserve the integrity and impartiality of regional forensic crime laboratories. Laboratory personnel, therefore, should report to, and be directed by, professionals within the laboratory chain of command. The governance structure should protect regional laboratories from even the appearance of conflict or outside influence by clearly articulating these lines of authority.

  A regional laboratory's governance structure should help position that laboratory to withstand later scrutiny regarding scientific independence. This may require the state to play an oversight role. That role could take several forms, but should relate to meeting minimum standards of operation and/or accreditation requirements. Such oversight need not interfere with local units of government establishing priorities based on local needs.

- *Compensation Parity*

  As additional state-funded laboratories become operational around the state, compensation parity among those employed in all laboratories would be imperative. Initial investments in staff are substantial. For some disciplines, scientists must train for up to 24 months prior to conducting independent analyses. Consequently, during that first phase of a scientist's employment, laboratory costs are high and benefits in terms of productivity are low. In fact, turn-around time temporarily suffers as some existing staff time is dedicated to training new staff. Further, training costs are not exclusively in house. Often new scientists must travel to the FBI laboratory in Virginia for certified instruction.

  Compensation parity would promote equal justice and discourage harmful competition. Laboratories would have the incentives to appropriately invest in staff, because of increased odds of a return on that initial investment through years of high quality, productive service. The outcome would be consistent service and fair treatment statewide. Compensation parity for employees of state-funded laboratories could be accomplished several ways including:

  - Scientists could be state employees, thereby compensated evenhandedly, regardless of location, or
  - State funding could be conditioned upon an agreement to compensate scientists not employed by the State in a manner consistent with state benefits and pay grids.

- *Accreditation*

  Crime laboratory accreditation demonstrates that a forensic laboratory's management, personnel, operational and technical procedures, equipment, and physical facilities meet established standards. The objectives of forensic laboratory accreditation are:

  - To improve the quality of lab services provided to the criminal justice system.
  - To meet or exceed established criteria, assess levels of performance, and strengthen operations.
  - To provide independent, impartial, and objective assessments of laboratories through comprehensive operational reviews.
  - To identify to the public and to users of laboratory services, those laboratories that have demonstrated levels of competency through the accreditation process.

  Currently, Minnesota statute 299C.156 encourages forensic laboratories to be accredited. *The Board recommends mandatory accreditation.*

- *Training*

  Forensic science laboratories should hire and maintain highly trained forensic scientists and provide continuing education. Certification of forensic scientists should be encouraged. Certification is a voluntary process of peer review by which a practitioner is recognized as having attained the professional qualifications necessary to practice in one or more disciplines of forensic science. The Board recommends these specific steps:

  - All forensic scientists should have a minimum of a Bachelor of Science degree from an accredited university in forensic science, chemistry, biology, or comparable field of study to be hired and work in a forensic science laboratory.
  - All forensic scientists must pass annual proficiency testing in their area(s) of expertise and participate in any appropriate correctional action or remedial training to resolve identified deficiencies.
  - Continuing education must be made available to all forensic scientists on an annual basis. Forensic scientists should receive at least 15 hours of training annually. Forensic scientists should participate in regional or national forensic meetings or conferences.
  - Certification of forensic scientists is encouraged.

  Note: Congress has passed legislation that tasks the National Academy of Sciences to report on the state of forensic science and to make recommendations for improvement. That report will be completed in late 2008. One of the issues that will be addressed is certification of forensic scientists.

Bemidji Laboratory Experience

Experience gained in operating the Bemidji laboratory has taught some lessons about the design, size, and make-up of a laboratory built to serve a multi-jurisdictional area. The types of evidence involved in violent crime do not lend themselves to easy transport due to size, packaging, or the presence of bio-hazards. The forensic disciplines provided on site at the Bemidji laboratory (DNA, latent prints, firearms, drug chemistry, and crime scene) allows for most of the evidence involved to be analyzed in one location. This becomes very important when evidence needs to be analyzed by more than one discipline, as the evidence does not have to be transported great distances to complete all analyses. Scientists exchanging evidence can have face-to-face consultations regarding how to handle an item to preserve all potential evidence.

The size of the staff in each section of the laboratory should also be carefully considered. Two person sections can easily become a one person section for extended time periods due to vacations or medical leave. Similarly, one person sections may be totally shut down for the same reasons. In these situations, the laboratory needs to have a plan on how to continue services. Small staffs also mean that a few scientists are constantly being called on to work rush cases for court or for an investigation in which a dangerous suspect is at large. This puts added stress on those few. The Bemidji laboratory has emphasized the importance of having sufficient depth in staffing to ensure no interruption in services due to temporary staffing shortages.

ATTACHMENT to February 1, 2008 Report on the appropriateness of additional regional forensic crime laboratories.

STATE OF MINNESOTA

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

June 29, 2007

Forensic Analysis Processing Time Period Guidelines:

BACKGROUND:

299C.156 Subdivision 7 "Forensic analysis processing time period guidelines" mandates that the Board shall recommend forensic analysis processing time period guidelines applicable to the Bureau of Criminal Apprehension and other laboratories, facilities, and entities that conduct forensic analyses by July 1,2007.

The Board has met four times since the last report. Two subcommittees were formed to address the issue of forensic analysis processing time period guidelines. Guidelines were presented to the Forensic Laboratory Advisory Board by the subcommittees and the Board voted to recommend the following:

GUIDELINE:

This guideline applies to all Minnesota laboratories, facilities, and other entities that conduct forensic examinations of physical evidence for the purpose of determining the connection of the evidence to a potential crime.

The completion of the forensic analysis, including the reporting of scientific conclusions to the requesting agency should occur within thirty days after the agency provides the testing entity with the evidence to be tested. *This guideline is a recommended goal and not a strict standard. Failure to meet this goal is not intended to form a basis for relief not otherwise provided by law.*

DISCUSSION:

There are a number of factors over which a laboratory has little or no control that may impact forensic analysis processing time. Consequently, such factors could justify exceeding the 30 day recommended goal. The following are offered as examples:

- Government laboratories do not have control over the volume of evidence being submitted by law enforcement agencies (a capacity issue).
- Completion of examinations may be dependent on the collection of standards and controls by the law enforcement agency if they were not provided with the original submissions.
- Some items of evidence require sequential examination by several scientific disciplines.
- It may not be technically or physically feasible to complete some scientific testing within 30 days (either due to the complexity of the examination or the size and complexity of the case).
- The Minnesota rules of evidence require that if the scientist determines that the evidence will be consumed in the analysis that the examination may not proceed without notification from both the prosecution and defense, when a defendant has been charged.
- Scientists are subpoenaed regularly to testify in court on cases they have examined. These court appearances may delay examinations.