State Notes

TOPICS OF LEGISLATIVE INTEREST

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Detroit Police Crime Lab Closure: Impact on State Police Forensic Science Division Backlog
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As a result of a series of events that began in the spring of 2008, the Department of State Police Forensic Science Division, has assumed the forensic laboratory needs of the City of Detroit, since early in fiscal year (FY) 2008-09. This responsibility previously was performed by the Detroit Police Department Crime Laboratory, now officially shut down. It has added a projected 20.0% increase in lab cases for the State system to process. What amounts to a major shift in State policy--handling the forensic needs of Detroit--has placed a significant strain on the resources of the State. This shift in responsibility has challenged the already-stressed State Police Crime Lab to take on this additional responsibility in the shortest time possible, while continuing to provide timely, quality laboratory service that meets standards of integrity and professionalism required by law enforcement and the criminal justice system.

Michigan State Police Forensic Science Division

The State Police Crime Lab has a long history. After the establishment of what was to become the Michigan State Police within Public Act (P.A.) 53 of 1917, a Bureau of Identification was created in 1925 and local police began to be required to forward fingerprints of arrested felons to the bureau. In 1932, construction of the present State Police administration building was completed in East Lansing (where it will be at least until January 2010, when Department headquarters will move to a new downtown Lansing location). This permitted a consolidation of Department services under one roof and made it possible for the Bureau of Identification to expand and become a full-service scientific crime laboratory. Growth later required the establishment of the Department's first satellite laboratories in Warren and Plymouth. Other regional facilities were added and a new 85,000-square-foot state-of-the art Lansing laboratory was built, opening in 2001. The State lab system is accredited by what is considered the most demanding and respected accreditation body for crime labs, the American Society of Crime Laboratory Directors (ASCLD).

Today, the Forensic Science Division consists of 216 employees (70 enlisted officers, 142 civilian State employees, and four contractual workers) who work at seven laboratories located in Bridgeport (opened in 1974, State-owned facility), Grand Rapids (opened in 1983, State-owned), Grayling (1982, leased), Lansing (2001, State-owned), Marquette (1987, leased), Northville (1976, State-owned), and Sterling Heights (1988, leased), as well as other locations for polygraph services. Together, they provide services to over 600 police agencies without charge, in a number of disciplines, including DNA/biology, drug analysis, firearms, latent prints, trace evidence, questioned documents, toxicology, blood alcohol, polygraph, bomb squad, and data entry into the Combined DNA Index System (CODIS), which is an nationwide DNA data base administered by the FBI. (The analysis and testing of deoxyribonucleic acid (DNA) are performed only at the Grand Rapids, Lansing, and Northville labs.)

The State lab system employs 158 people deemed "analytical staff" at various regional labs. Table 1 shows each regional State Police lab and the analytical staff assigned to it broken down by the type of discipline.

Table 1

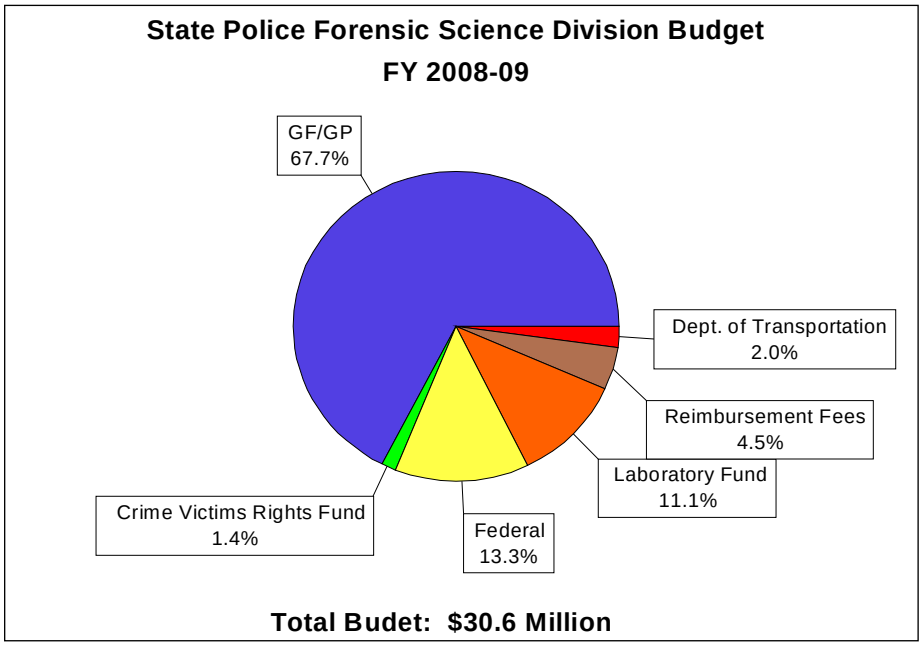
State Forensic Lab Analytical Staff by Discipline and Location								
	Bridgeport	**Grand Rapids**	**Grayling**	**Lansing**	**Marquette**	**Northville**	**Sterling Heights**	**Sub-total**
Drug Analysis	3	7	3	5	1	6	5	30
Trace Evidence	4	3	2	3		2	4	18
Polygraph (7)[a)]								7
Toxicology/Blood Alcohol				15				15
CODIS				10				10
DNA/Biology		10		14		11		35
Firearms	3	3	2	2	1	2	4	17
Latent Prints	4	5	4	4	2	3	4	26
Total	**14**	**28**	**11**	**53**	**4**	**24**	**17**	**158**
Total Analytical Staff: 158								
[a)] Polygraph analysis is offered at various sites as needed								

Source: Michigan State Police

Budget for the State Lab

The FY 2008-09 budget for the Forensic Science Division is $30,638,800, funded by $20,735,800 from State General Fund/General Purpose (GF/GP) funds, $4,067,100 from the U.S. Department of Justice, $3,402,600 from the State Forensic Laboratory Fund, $1,384,400 from forensic science reimbursement fees, $617,300 from the Michigan Department of Transportation, and $431,600 from the Crime Victim's Rights Fund as shown in Figure 1.

Figure 1



Funds provided by the U.S. Department of Justice have been primarily used for the operation of the DNA unit, including occasional outsourcing of DNA processing in efforts to lower backlogs. State Forensic Laboratory Fund revenue, originally created under P.A. 35 of 1994, comes from a percentage of court-imposed assessments made against people convicted of certain violations; these assessments support the Justice System Fund. Forensic science reimbursement fees, established under P.A. 250 of 1990, also are available through the Justice System Fund assessment and are used specifically for State Police costs relating to CODIS. Department of Transportation funds have been provided for costs related to blood alcohol analysis of suspected drunk drivers. Crime Victim's Rights Fund revenue is provided to help defray costs involved with lab scientists' giving testimony at trials.

Other Police Laboratories in the State

Currently, the Oakland County Sheriff's Department and the police agencies of Battle Creek and Kalamazoo are the only local police agencies that perform forensic laboratory services. Previously, Grand Rapids had been performing drug analysis until those services were assumed in 2001 by the Grand Rapids-based State regional lab, which had been established in 1983. Oakland County's crime lab, with an annual caseload of approximately 3,000, provides services in the disciplines of firearms, latent prints, and drug analysis. The Battle Creek police lab, with an annual caseload of approximately 900, provides firearms and latent prints services, while Kalamazoo offers some latent prints analysis. In addition to local general fund support, the Battle Creek and Oakland County Sheriff's labs qualify for support from the State Forensic Laboratory Fund, with Battle Creek receiving $12,200 and Oakland County $41,000. No local laboratory performs DNA analysis; since the Detroit lab closed, only the State Police crime lab has that capability.

Detroit Police Crime Laboratory

The Detroit Police Crime Laboratory had been one of the oldest city crime labs in the nation, dating back to 1927. Until recently, Detroit continued to support a crime lab separate from the State system, presumably due to the unique size and nature of its caseloads, the convenience and practicality of having a lab in close proximity to the day-to-day operations of its own police department, and to train its own crime scene investigators and the ability to set its own priorities for the lab, in accordance with city policies. In recent years, the lab took in approximately 20,000 cases annually according to State Police estimates and offered the following forensic services: firearms, biology (DNA), latent prints, drug analysis, toxicology, and alcohol analysis. Laboratory staff included 32 uniformed officers and 36 civilian employees. Analytical employees included eight in the biology unit, eight in the firearms/bomb squad unit, 10 in drug analysis, and three in latent prints analysis, plus two technicians who entered firearm data into the Integrated Ballistics Identification System (IBIS) and 30 crime scene technicians. The FY 2008-09 budget for the lab was approximately $8.0 million, with support coming from the city's general fund, Federal grant support, $250,000 from the State Forensic Laboratory Fund, revenue from forensic science reimbursement fees, and for FY 2008-09, a $200,000 grant from the State for the hiring of a quality control officer and a DNA biologist to operate a DNA extraction machine.

The State also had provided financial support to the Detroit crime lab in the past. Annual support of the city's lab was provided within a series of grants known as "Detroit Equity Grants" for several years until 1996. Support included the grants shown in Table 2.

Table 2

State Grants to Detroit Crime Lab
FY 1989-90 through FY 1994-95

	FY 1989-90	FY 1990-91	FY 1991-92	FY 1992-93	FY 1993-94	FY 1994-95
Grants	$487,500	$620,700	$440,900	$418,800	$418,800	$418,800

Source: Senate Fiscal Agency

Closure of the Detroit Police Crime Laboratory

Perhaps due to the challenge of providing sufficient resources for the increasing costs of technology, personnel, training, and maintenance within a city budget, the Detroit Police Laboratory recently found the quality and integrity of its work being questioned. Problems with the quality of the laboratory services provided by the Detroit Police lab, ultimately leading to its closure, became apparent in the spring of 2008, when an independent examiner retained by the Wayne County Prosecuting Attorney revealed that Detroit Police firearms examiners were wrong in concluding that 42 fired shell casings collected at a crime scene all came from a single weapon; instead, it was determined that those casings had come from at least two other weapons. This caused enough concern that the city asked the State Police lab immediately to take over responsibility for firearms cases for the city, and to audit the city lab's firearms unit. The State Police complied with the request and spent $596,686 from existing resources to perform this very time-consuming audit. Of this amount, the City of Detroit is expected to pay $152,900. In September 2008, the State Police released a preliminary audit that revealed, among other findings, an error rate of 10% in the 200 firearms cases it reevaluated. To put this in perspective, ASCLD, the accreditation body for the State lab, does not have an "acceptable" error rate. On September 25, 2008, the Detroit Mayor and Police Chief decided to shut down the entire Detroit lab, citing concern that the problems of the firearms unit were likely to indicate a systemic problem affecting other forensic disciplines as well.

Since the closure, the Office of the Mayor and the Chief of Police have been in close contact to see that all needed forensic work from the city is properly conducted. All forensic evidence related to crimes occurring in the City of Detroit is being sent to the site of the former city crime lab and immediately transferred to the Michigan State Police for analysis at one of the State's regional laboratories. The city lab's 33 uniformed police officers have been reassigned to other positions in the Detroit Police Department and some of the lab's 35 civilian employees also are being reassigned to other positions in city government, while those with professional training, such as biologists or chemists, will be given an opportunity to apply for a forensic science position within the State lab system.

Impact of Closure on the State Laboratory System

When the possibility that the Detroit Police Crime Lab might close was first realized, the State Police Forensic Science Division already was facing a growing backlog of cases that had been building for several years. Growth in the State lab caseload since 2000, as Tables 3 and 4 show, appears especially dramatic in the disciplines of firearms and DNA/biology.

Table 3

State Police Forensic Division Firearms Caseload 2000-2007

Calendar Year	Cases Submitted	Staff	Cases Per Staff	Backlog
2000	2,628	17.5	150	88
2001	2,763	18.0	154	304
2002	3,752	18.75	200	480
2003	3,199	16.0	200	730
2004	3,563	15.75	226	651
2005	3,651	15.5	236	755
2006	4,162	14.0	297	1243
2007	4,820	14.0	344	1180

Source: Michigan State Police

Table 4

State Police Forensic Division DNA/Biology Caseload 2000-2007

Calendar Year	Cases Submitted	Staff	Cases Per Staff	Backlog	Cases Outsourced
2000	3,929	27.25	144	360	0
2001	5,144	25.5	202	924	0
2002	5,730	28.25	203	1264	0
2003	7,067	29.0	244	1030	0
2004	8,176	26.375	310	5541	4,267
2005	9,130	28.5	320	3645	2,436
2006	11,009	30.25	364	3362	2,258
2007	11,519	26.0	443	2387	0

Source: Michigan State Police

The division was experiencing an overall caseload that had grown from 80,000 in 2005 to 108,000 in 2007, when P.A. 380 of 2008 was signed into law, requiring all people arrested on felony charges to have DNA samples taken and analyzed. This added another 6,000 DNA cases to be processed each year, and by Department estimates, will require an additional total cost of $1.0 million annually to assume. This sum includes $422,800 to hire four scientists, $121,330 to hire a latent print specialist, $86,500 for one technician, $240,000 for 6,000 DNA kits, and $129,400 for equipment, maintenance, and supplies.

The closure of the Detroit lab in October 2008 means that an estimated 20,000 additional cases annually have become the responsibility of the State Police Forensic Science Division. The added workload began in part back in April 2008, when the State lab began to take over Detroit's firearm cases. This takeover provided a sample of the additional workload from the Detroit lab that was to come. From April 2008 through December 2008, the State lab system took in 1,709 firearms cases unrelated to Detroit. Firearms cases taken in by the State lab during the same period from the City of Detroit numbered 2,686--representing a 150% increase in cases for this period.

The State lab thus faces a real crisis in its ability to complete requested lab services in a timely manner for law enforcement agencies and the courts. Courts have presented guidelines that all evidence should be processed and available for trial within 90 days; the State Police's stated

goal is to reach a 30-day turnaround on all forensic cases. High case backlogs make meeting those goals extremely difficult, if not impossible, certainly in the short term. Before the Detroit lab closed, the State Police already had estimated that bringing turnaround times for all disciplines in the State system to 30 days or less would require approximately $10.8 million in additional total funds, including $7.0 million for 65.0 full-time equated employees (FTEs), $3.3 million for additional equipment, and $0.5 million for information technology needs, not to mention the additional lab space required to operate. The immediate impact of the takeover of the forensic needs of the City of Detroit is displayed in Table 5, which shows the State backlog change between April 30, 2007, a year and a half before the assumption of Detroit caseloads, and the end of October 2008, the month when the full takeover began.

Table 5

State Police Laboratories Backlog Change
April 30, 2007 through October 31, 2008

	Bridgeport	Grand Rapids	Grayling	Lansing	Marquette	Northville	Sterling Heights	Total
Drugs								
04/30/07	101	23	31	614	141	523	374	1,807
10/31/08	310	380	250	573	112	114	94	1,833
+/-								26
Latent Prints								
04/30/07	114	19	103	111	75	439	181	1,042
10/31/08	131	102	111	438	191	446	144	1,563
+/-								521
Firearms								
04/30/07	531	191	76	36	8	96	73	1,011
10/31/08	226	442	77	129	74	238	1,271	2,457
+/-								1,446
Trace								
04/30/07	45	12	7	25	16	30	15	150
10/31/08	53	61	15	46	2	35	44	256
+/-								106
Biology								
04/30/07	285	115	95	544	0	31	67	1,137
10/31/08	61	497	114	1,024	11	730	196	2,633
+/-								1,496
TOTAL								
04/30/07	**1,076**	**360**	**312**	**1,330**	**240**	**1,119**	**710**	**5,147**
10/31/08	**781**	**1,482**	**567**	**2,210**	**390**	**1,563**	**1,749**	**8,742**
+/-								
Total Backlog Change	**(295)**	**1,122**	**255**	**880**	**150**	**444**	**1,039**	**3,595**

Source: Michigan State Police

The current backlog equates to the turnaround (processing) time for State labs for cases within the disciplines shown in Table 6.

This backlog affects every law enforcement agency in Michigan, as it is the policy of the State Police to handle all cases, from wherever in the State they originate, in the same order of priority, as follows: homicide, criminal sexual conduct (rape), assault and battery, property crime (breaking and entering, larceny, malicious destruction of property), and drug cases. This may cause lower-priority cases to have a much longer turnaround time than any law enforcement agency in the State has experienced before.

Table 6

State Laboratory Backlog Status by Discipline & Estimated Turnaround Time				
	31-60 Days	**61-90 Days**	**91-180 Days**	**181+ Days**
Firearms	321	253	662	19
Latent Prints	254	202	297	120
Drug Analysis	403	263	822	156
DNA/Biology	372	312	650	541
Trace Evidence	24	14	9	5
Questioned Documents	6	5	20	22
Toxicology	386	171	75	5
Bomb Squad	23	24	84	104
Total	**1,789**	**1,244**	**2,619**	**972**

Source: Michigan State Police

In addition to transferring all Detroit forensic cases to regional State labs, the Department of State Police is trying at this time to determine the scope of the problem that it faces. The Department expects that it will not know the exact size of the challenge until after the first year of taking over the responsibilities for Detroit. This is for many reasons, including the fact that the State labs will be providing trace evidence services, something the Detroit lab did not offer, which may increase activity for this discipline. In addition, the Department is still determining the backlog in the Detroit system that may exist--and indications are it could be significant. Overall casework also may exceed that of the previous level of the Detroit lab, due to the presence, professionalism, and resources of the State lab. In addition, it is anticipated that an unknown number of firearm-related convictions, obtained in the last five years with firearm evidence processed by the Detroit lab, may have to be reexamined by the State lab at the request of an appellate judge.

Strategies to Address the Problem

The first step in addressing the problem involves use of the State's existing regional labs and their employees (primarily the labs in Northville and Sterling Heights, and also to some extent those in Bridgeport, Grand Rapids, and Lansing), resulting in considerable overtime costs related to the higher caseloads they will have to assume. The use of overtime as a solution has its limitations, including the impact that added stress on scientists and equipment can have on quality standards. Other efforts to become as efficient as possible in the face of the backlog include outsourcing DNA processing as much as practical and encouraging more courtrooms in Detroit to become media-capable of receiving long-distance testimony from lab scientists, so they will not have to miss days of work traveling to testify in person.

The State lab also plans to hire this year an additional 45.0 FTEs, a majority of whom will be civilian scientists, along with enlisted personnel who will serve as firearms specialists and latent print technicians. The challenge for the Department with these hires is that it takes approximately two years to train a lab scientist to do his or her job at full capacity and the scientists will need space and equipment to do their work. (For accreditation, each lab scientist needs 1,200 square feet of space, and more is required for DNA scientists.) Regarding the first challenge, the State is attempting to work with the U.S. Bureau of Alcohol, Tobacco, Firearms and Explosives, the FBI, and others to make the training process more efficient and to minimize the considerable time existing on-staff scientists must spend to train new employees, which takes them away from

current caseload responsibilities. Regarding the lack of lab space for these new scientists, the Department is looking at various options such as finding space at existing labs or other locations, or simply establishing a second shift at certain labs. Many believe that a new regional laboratory will be required to handle this additional casework adequately.

The State Police budget for meeting Detroit's forensic needs for FY 2008-09 totals $5.1 million. This includes $2.3 million for hiring 45.0 FTEs (including 25 forensic scientists), $2.2 million to pay for overtime costs of current staff, and $600,000 for training, equipment, and supplies. The Governor has proposed an FY 2009-10 (full year) budget of $6.5 million for this purpose.

Every stakeholder in the resolution of the challenges facing the State Police Forensic Science Division in the wake of the Detroit lab closure presumably agrees that it will take a number of years to reach and will require the partnership of several elements of the law enforcement system. Regularly, the Department of State Police is in communication with representatives of the City of Detroit, the Detroit Police Department, Wayne County, and others. Discussions are under way to establish formal working relationships and protocol. Matters discussed include the potential location of a regional State Police lab within the Detroit city limits, a concept law enforcement professionals view as a must for a lab to perform its duties properly for a city this size. Possible locations in Detroit include a site at 1400 Rosa Parks Boulevard that the City of Detroit purchased for the location of a new crime lab. The cost of refurbishing this building to conform to the needs of a forensic lab has been projected by the city to be $20.0 million. The kind of partnership, if any, that will develop between the City of Detroit, Wayne County, and the State Police, or the possibility of using Federal stimulus funds to establish a city-based regional State lab, remains to be seen.

While the State budget has addressed the current additional State forensic lab caseload brought about by the Detroit lab closure, all forensic disciplines within the State lab system still face the challenge of meeting a standard maximum 30-day turnaround processing time. Achieving this can only exceed the $10.8 million cost estimated for the State Police to meet the 30-day goal before the Detroit crime lab closed. This is especially true in light of the much-anticipated and just-released two-year study by the National Academy of Sciences, which calls for much more sophisticated and precise performance by crime labs nationwide and the establishment of a new Federal agency to ensure that higher standards of lab service are met. Michigan is fortunate in this regard to have already a national reputation for excellence in its forensic lab performance. What everyone presumably agrees upon is that, if sufficient staff are hired and trained and state-of-the-art technical resources are up and running for the State Police to fully address the forensic laboratory needs of both Detroit and the State, it will by all accounts lead to the pursuit and prosecution of criminals and the vindication of the innocent more quickly, and--technology costs notwithstanding--in a more cost-effective way.