



State of Illinois
Illinois State Police
Hiram Grau, Director

FY 2012 DNA Testing Accountability Report



in accordance with ILCS 730 5/5-4-3a



Illinois State Police



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OVERVIEW

By statute, the Illinois State Police (ISP), through its Division of Forensic Services, provides forensic science analytical services to more than 1,200 state, county, and local criminal justice agencies. The ISP forensic science laboratory system, established in 1942, had long been recognized as the third largest crime laboratory system in the world, after the United Kingdom's Forensic Science Service and the Federal Bureau of Investigation (FBI). (In early 2012, the United Kingdom's Forensic Science Service was dissolved.) The ISP system, currently comprised of seven operational (caseworking) laboratories and a Research and Development laboratory, analyzes evidence from criminal cases in the following specialty areas: drug chemistry, trace chemistry, toxicology, microscopy, forensic biology/DNA, latent prints, firearms/toolmarks, footwear/tiretracks, and questioned documents. Each operational laboratory serves a specific geographical region of the state, providing forensic science analysis of evidence collected from crimes in that region. Whenever possible, the ISP laboratories assist each other in analyzing cases from other regions in an effort to provide more timely service to all Illinois agencies. In Fiscal Year (FY) 2012, the ISP laboratory system received a total of 106,681 cases and completed analysis on 101,076 cases.

The ISP continues to maintain its long-standing commitment to providing high quality services to the Illinois criminal justice system. To that end, the ISP forensic laboratory system adheres to an extensive Quality Assurance (QA) program. The emphasis of the QA program is on prevention and/or correction of analytical problems, and providing a course of action if the quality of the work/result is questioned. A key component of the QA program is accreditation. The ISP laboratory system became the first in the world to become accredited through the American Society of Crime Laboratory Directors/Laboratory Accreditation Board (ASCLD/LAB) in 1982. Since then, the laboratories have continuously maintained accreditation under the strictest criteria. During FY12, ISP laboratories remained accredited under the International Organization for Standardization (ISO) criteria. This ISO accreditation was originally granted in 2005 by Forensic Quality Services – International (FQS-I) under ISO/IEC 17025:2005 and FQS-I Forensic Requirements for Accreditation. ISO accreditation has been maintained since that time, with periodic on-site assessments to ensure continued compliance. All of the nearly 500 employees assigned to the Forensic Sciences Command – including Forensic Scientists, Evidence Technicians, forensic science managers, and support staff – adhere to the ISO accreditation criteria and standards to ensure the work provided by the ISP laboratories is of the highest quality.

THE DNA PROGRAM – MEETING THE NEEDS OF AGENCIES

The ISP DNA Program consists of two components: **casework** and **offender database**.

The **casework** component involves the forensic analysis of evidence from crime scene cases submitted to the ISP laboratories by any Illinois law enforcement agency. Most cases which ultimately undergo DNA analysis are first received into the laboratory as Forensic Biology (FB) cases. The first step in the analysis of these cases is the detection and identification of a biological stain/material using various physical and chemical techniques to identify suitable and probative (i.e., can potentially help solve the case) biological material. For example, looking for the victim's blood on the suspect's clothing is important investigative information, while finding the victim's blood on the victim's clothing may not provide any probative information. If sufficient probative material is identified through the FB processes, the case then becomes a DNA case and undergoes separate, highly-technical analytical processes to obtain a DNA profile from the material. The DNA profile developed from the evidence is then compared to known standards from the victim and suspect to determine the source of the profile. If a suspect is not known, the evidence DNA profile may be entered into, and searched against, the state and national DNA database known as the Combined DNA Index System (CODIS).

In the **offender database** component of the ISP DNA Program, all convicted felons in Illinois, as well as some other individuals as allowed by law, are required to submit a biological sample for DNA typing and inclusion in CODIS. In CODIS, when an unknown DNA profile developed from evidence matches a known offender's DNA profile, or when an unknown DNA profile from one crime matches an unknown DNA profile from another crime, the match is referred to as a "hit." A CODIS hit gives police the ability to identify possible suspects to a crime or link crime scenes, thus providing crucial investigative information to help solve the crime.

To ensure the needs of all aspects of the criminal justice system are met, each ISP laboratory works with law enforcement and criminal justice entities to prioritize cases based on investigative and court needs. Upon submission of a case, the submitting agency communicates their priority to the laboratory, including a specific date when results are needed, if applicable. When prioritizing cases, factors which would warrant a higher priority include cases which have an established court date, subpoena, or court order associated with the forensic analysis; rush cases to meet an urgent investigative need such as in the case of a suspected serial murderer, and violent (versus property) crime cases. The ISP laboratory considers the submitting agency's requested priority for a particular case in conjunction with the priority of cases already submitted by other agencies to determine the order in which cases will be processed. For example, one agency may submit a case stating results are needed for court in two weeks. That same day, another agency may submit a "rush" case stating results are needed within 48 hours before the murder suspect is released from custody. A third agency submits a routine burglary case later that day. The priority order for those three cases would be: first, the "rush" case needing results in 48 hours; second, the case needing results for court in two weeks; and third, the routine burglary case. This process is used to ensure court dates are met and rush cases are completed to meet the needs of the user agencies.

These priorities are constantly reviewed by laboratory management and may need to be adjusted upon submission of additional priority cases. If necessary, ISP laboratories transfer cases to other ISP laboratories as an internal approach to meet the priority needs of the criminal justice system.

FORENSIC BIOLOGY AND DNA CASE SUBMISSIONS

As in previous years, the number of FB and DNA cases received in the ISP laboratories represents only a small fraction of the total number of cases received annually for all forensic disciplines within the ISP forensic laboratory system. The table below compares FY11 and FY12 FB/DNA case submission figures. In FY11, a sharp increase in both FB and DNA case submissions began, directly attributed to the passage of the Sexual Assault Evidence Submission Act (PA 96-1011) which became effective September 1, 2010. Prior to that in FY10, FB case submissions totaled 5,167 and DNA case submissions totaled 5,240. In FY12, FB case submission figures were still high, but the rate of submission decreased compared to FY11, after the bulk of previously-unsubmitted sexual assault cases had been received at the laboratories. However, FY12 DNA case submissions were again at a record level.

FB/DNA Case Submissions

Cases Submitted	FY2011	FY2012	% Difference from FY11	% of Total FY12 Cases
Forensic Biology	8,621	7,440	-14 %	7.0 %
DNA	6,182	6,439	+4 %	6.0 %

SEXUAL ASSAULT EVIDENCE SUBMISSION ACT (PA 96-1011)

In accordance with ILCS 730 5/5-4-3a, the ISP is required to include in the reported backlog the number of cases still in the custody of law enforcement agencies which had not yet been submitted to an ISP laboratory (if notified by these agencies in writing by June 1 of each year). While the ISP had not received notification from any agency under this particular statute during FY12, the department did receive notification pursuant to Section 20 of the new Sexual Assault Evidence Submission Act (PA 96-1011). The ISP continued to be significantly impacted by this Act during FY12.

The Act, signed by the Governor on July 6, 2010, became effective September 1, 2010, and mandated several changes regarding how law enforcement agencies address the submission of sexual assault (SA) evidence to forensic laboratories for analysis. The two major changes were 1) all law enforcement agencies must submit new criminal SA cases within 10 days of collection to a forensic science laboratory for analysis (Section 10 of the Act); and 2) all law enforcement agencies must submit for analysis all criminal SA cases in their possession which had not previously been submitted to a forensic laboratory (Section 20 of the Act). In accordance with the Act, the ISP established mechanisms for agencies to submit an inventory list of "Section 20" SA cases in their custody. Both the ISP and the Illinois Attorney General's Office subsequently spent considerable time and effort working with agencies on compliance with this provision; this effort continues today. As of June 30, 2012, of the 987 law enforcement agency offices required to submit an inventory list to the ISP, 942 (95 percent) were in compliance. The Act also required the ISP to submit a plan to address the analysis of the "Section 20" SA cases, including a timeline and resources required. This plan was submitted to the Governor, the Attorney General, and both chambers of the Legislature on February 14, 2011. The original plan is summarized in the following paragraphs, with updates for FY12 (as of June 30, 2012) included in bold.

Section 10 Impact

Plan summary: As early as June 2010, even before the September 1, 2010, effective date of the law, the ISP laboratories began seeing an increase in the number of new SA case submissions. Prior to June 2010, SA submission rates to ISP laboratories averaged 149 cases per month. By the time the plan was developed, SA submission rates had risen 47 percent to an average of 218 cases per month. At this new rate of about 70 additional SA cases submitted each month, an average of 840 additional new SA cases were anticipated to be submitted annually to ISP laboratories. This impact of Section 10 of the Act is expected to be permanent.

FY12 Update: From July 2011 through June 2012, the submission rate for SA cases pursuant to Section 10 averaged 208 cases per month, for an annual rate of approximately 2,500 cases. This is a rate of about 60 additional SA cases submitted each month (720 more per year) than the rate prior to the passage of the Act.

Section 20 Impact

Plan summary: Based on inventory information provided by the agencies using ISP laboratories, approximately 4,000 "Section 20" cases were expected to be submitted to ISP laboratories. The total number of cases to be submitted by the agencies was anticipated to change over the course of this program as additional cases are identified and/or non-applicable cases are removed from the lists. Some cases to be submitted dated as far back as 1978, while some were as recent as July 2010. In accordance with state statute 730 ILCS 5/5-4-3a, the ISP began including the "Section 20" backlog figure in its backlog reports as of January 2011.

FY12 Update: Please note the following figures reflect only "Section 20" cases to be submitted to ISP laboratories, and do not include "Section 20" cases submitted to DuPage County Forensic Science Center or the Northeastern Illinois Regional Crime Laboratory.

- Cases reported to be submitted by agencies = 4,000
- Cases received in ISP laboratories (upon request by ISP) = 3,770
- Cases completed = 2,316
- Cases pending (in-progress or unstarted) = 1,454
- Cases remaining to be submitted from agencies (upon ISP request) = 230
- CODIS hits made in completed cases = 504
 - NOTE: The significance of any CODIS hit is not known and cannot be determined by the ISP; it is determined by the law enforcement agency and may require additional investigation.

Analytical Approach/Timeline

Plan summary: The ISP intends to analyze all new/current cases (i.e., "Section 10" cases) using in-house resources (ISP forensic scientists). Timely analysis will be accomplished through the use of various efficiency measures implemented over the past several years (e.g., robotics) as well as the implementation of new technologies to save time and costs. The use of federal grant funding for FB/DNA case backlog reduction will continue to be aggressively pursued and applied to assist in improving the backlog of these cases through the use of overtime and the purchase of additional commodities and equipment to address this need. All new SA cases submitted pursuant to Section 10 of the Act will be immediately incorporated into the analytical schedule of the laboratory in accordance with current practice.

FY12 Update: The new “Section 10” cases are currently being incorporated into the ISP in-house analytical schedule and are being addressed as noted above. These cases become part of the normal caseload and are not being tracked separately.

Plan summary: For the older “Section 20” cases, outsourcing will be utilized to the fullest extent possible to enable in-house resources to focus on meeting investigative and court needs of current cases. A general timeline was developed for this effort that began in FY11 and is projected to end in FY14. ISP’s outsourcing schedule assumes sufficient funding is sustained and the outsourcing vendor maintains the ability to meet the ISP’s established high-quality expectations. Continuous monitoring of those quality expectations will be conducted by the ISP. Should insufficient funding, unsatisfactory quality, or any other factor adversely affect this outsourcing schedule, the ISP’s back-up plan is to incorporate “Section 20” SA cases into the in-house analytical schedule amongst current cases, prioritized to ensure the statute of limitations deadlines are met. In the event all “Section 20” SA cases must be analyzed in-house, not only would years be added to the analytical timeline for completion of these cases, but this will also negatively impact the timeline for completion of all types of new/current cases in the FB/DNA section.

FY12 Update: Outsourcing to the contractual vendor laboratory, Orchid Cellmark, began in March 2011 and is ongoing. By the end of FY12, a cumulative total of 2,097 “Section 20” cases had been shipped to the vendor laboratory. ISP anticipates continuing to outsource approximately 1,200 such cases per year as resources permit. The ISP remains on target to complete this outsourcing program in FY14.

Resources Needed (Headcount and Funding)

Plan summary – Headcount: Based on the observed increase in CY10 SA case submissions (originally projected at 840 additional SA cases annually), the ISP requires five additional headcount to hire more forensic scientists to address the permanent increase in new SA submissions (“Section 10” cases), and assist with the “Section 20” cases requiring in-house analysis. These positions would be permanent and in addition to refilling any current vacancies within the FB/DNA section due to attrition. To be most effective in addressing the SA caseload, the new positions, as well as the current vacancies, must be filled immediately. The extensive training program for FB/DNA requires approximately 18 months to complete, so these new hires will not have an immediate impact on the SA caseload.

FY12 Update: In November 2011, ISP hired and began training eight forensic scientists to refill vacant positions in the FB/DNA section which resulted from normal attrition. The ISP still requires the five additional headcount (and associated funding) originally requested in the February 2011 Plan in order to address the permanent increase in “Section 10” case submissions and to reduce the backlog of all types of FB/DNA cases.

Plan summary - Headcount Funding: As stated in the February 2011 Plan, the ISP requires additional General Revenue funding for the five new forensic scientists described above. Assuming a July 1, 2011, hire date, the FY12 cost (including salary, benefits, and insurance) was projected at approximately \$407,500. This would result in a permanent increase in the amount of headcount funding required.

FY12 Update: As noted above, the ISP still requires the five additional headcount (and associated funding) originally requested in the February 2011 Plan in order to address the permanent increase in “Section 10” case submissions and to reduce the backlog of all types of FB/DNA cases. Assuming a January 1, 2013, hiring date, the associated funding for these positions is now projected at approximately \$483,000.

Plan summary - Other Funding: Based on the measured analytical timeline, the ISP projects all other costs associated with addressing the impact of this new Act (outsourcing costs are estimated at more than \$2.6M for “Section 20” cases) will be met over the course of several fiscal years through current General Revenue appropriations, as well as through the use of the following sources:

Grants – The ISP plans to continue its aggressive pursuit and expenditure of appropriate federal grant funding to assist in the timely analysis of all FB/DNA cases. Current and future DNA backlog grant awards would encompass any in-house analysis of SA cases submitted pursuant to Section 10 and Section 20 of the new Act. These funds are used for overtime, commodities, equipment, and other needs to help reduce FB/DNA backlogs. ISP has also been awarded a Violence Against Women Act (VAWA) grant via the Illinois Criminal Justice Information Authority (ICJIA) to specifically assist in outsourcing the backlog of “Section 20” cases.

State Offender DNA Identification System Fund – These funds, collected pursuant to state statute 730 ILCS 5/5-4-3 (k), are already used extensively to support FB/DNA analysis in ISP laboratories. The ISP has identified monies in this fund to cover anticipated “Section 20” outsourcing costs beyond those which will be provided through grants each fiscal year. Assuming receipts remain at or above current levels each fiscal year and no statutory transfer or borrowing from the fund occurs, this support is expected to continue throughout the course of the “Section 20” backlog reduction program.

NOTE: Should the anticipated funding provided through grants and/or the State Offender DNA Identification System Fund drop below current projections, the ISP will reevaluate the need to request additional General Revenue appropriations in future fiscal year budgets.

FY12 Update: The current status of the availability of federal grant funding and the State Offender DNA Identification System Fund remain as noted above.

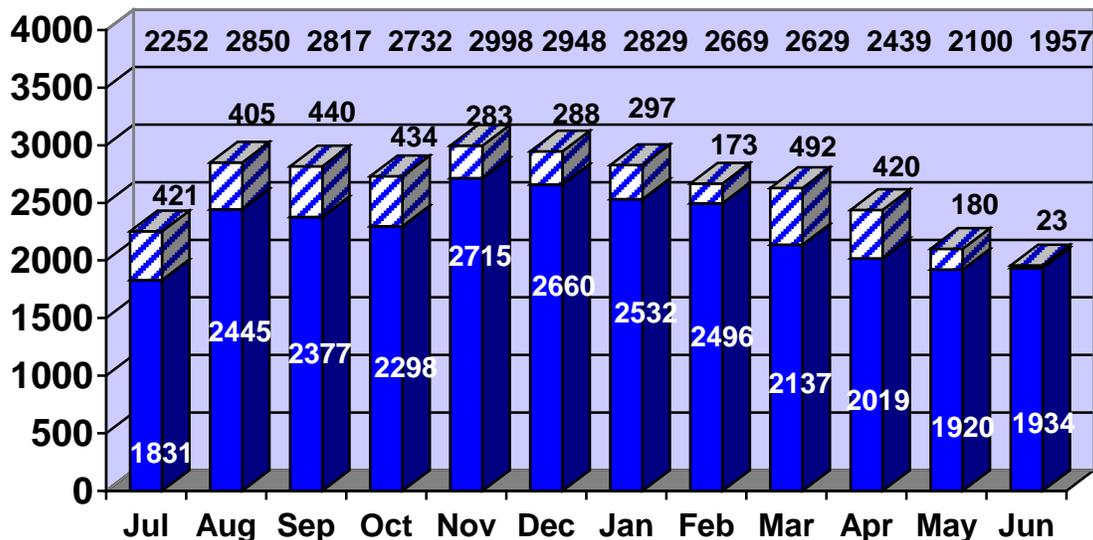
FORENSIC BIOLOGY AND DNA CASE BACKLOGS

As a result of ongoing evaluation and implementation of various technology and efficiency measures, each year the FB/DNA section continues to increase the annual number of cases completed in-house. However, it must be noted that laboratories do not control the number of cases being investigated and subsequently submitted for analysis by agencies. When the number of cases submitted exceeds the capacity of the laboratory staff to conduct the analysis within a 30 day time period, a “backlog” occurs. This backlog includes both cases that are currently in-process of analysis and those which are not yet started. Select cases can take longer than 30 days to complete due to any number of factors including the complexity of the case, the number of exhibits in the case, or the number of additional items of evidence submitted over a period of weeks or months of an ongoing investigation, and thus these cases also become part of the backlog figures.

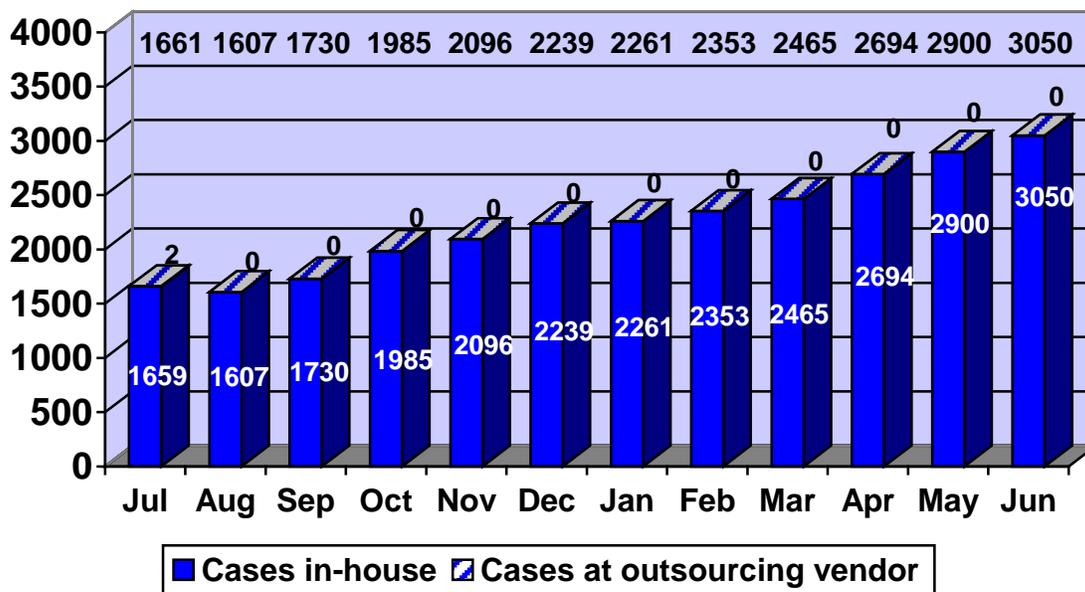
The monthly FB and DNA backlogs for FY12 are shown in the following charts. Prior to the effective date of PA 96-1011 in FY11, the backlog of FB cases had been declining, from a previous high of 2,604 cases in September 2007 to a low of only 128 cases by the end of June 2009, largely as the result of various measures implemented within the FB/DNA section. After PA 96-1011 became effective in FY11, ISP experienced a 68 percent increase in FB case submissions. As noted previously in this report, FY12 FB case submissions were 14 percent

less than in FY11; however, the 7,440 cases still significantly impacted the backlog. At the end of FY12, the total FB backlog was 1,957 cases; of these, 23 were in-progress at the outsourcing vendor laboratory. The remaining 1,934 cases on the ISP backlog were in-progress or pending in-house analysis at the ISP laboratories, or were at the ISP laboratories awaiting shipment to the outsourcing vendor. The FY12 FB backlog is 7 percent lower than the FY11 figure (2,094 cases); this progress is expected to continue as ISP works through the remaining "Section 20" cases.

FY12 Monthly Forensic Biology Case Backlog



FY12 Monthly DNA Case Backlog



As FB cases are analyzed in-house, the result is a proportional increase in the number of DNA cases to be analyzed since approximately 65 percent of FB cases are found to have sufficient

biological material suitable for DNA analysis. In FY12, the ISP analyzed nearly 5,000 DNA cases in the laboratory system (4,973); this is only slightly less than the FY11 figure of 5,202 cases but is still 8 percent more than what was accomplished in-house in FY09 (4,590). Overall, the ISP saw a 93 percent increase in the DNA backlog compared to FY11. As with the FB case backlog, this significant increase is a direct result of PA 96-1011. This increase was anticipated and ISP continues to address it but it must be recognized that it will take time and additional resources to significantly reduce this DNA backlog. Any outsourcing program requires significant non-analytical time on the part of forensic scientists to perform various tasks associated with the effort. Such tasks include receiving, triaging, and preparing evidence for shipment; performing quality assurance checks of the vendor's analysis; technically reviewing the analytical data received from the vendor; and uploading appropriate DNA profiles into CODIS. Once the "Section 20" case outsourcing program is completed, the scientists currently assigned to perform these duties can be redirected to assist in reducing the in-house DNA case backlog.

FB/DNA Backlog and Outsourcing Analysis

NOTE: Most cases are first analyzed in the Forensic Biology (FB) section before being analyzed in the DNA section. A case is tracked separately for each section. ISP concurrently works to address the backlog* in each section.

	Forensic Biology		DNA	
	FY11	FY12	FY11	FY12
Total pending cases as of June 30 of previous fiscal year (both > and ≤ 30 days)	617	3,027	1,125	2,082
Cases received in the labs**	8,621	7,440	6,182	6,439
Cases worked in the labs (in-house)	(5,923)	(5,998)	(5,202)	(4,973)
Cases outsourced with grant funding***	(33)	(435)	0	0
Cases outsourced with state funding***	(255)	(1,319)	(23)	(9)
Total number of pending cases ≤30 days	933	758	505	489
Total number of backlog* cases at ISP (in-house)	1,911	1,934	1,568	3,050
Total number of backlog* cases at vendor laboratory (outsourced but not yet completed)	183	23	9	0
TOTAL BACKLOG* CASES (in-house and outsourced)	2,094	1,957	1,577	3,050

* "Backlog" is defined as in-process and unstarted cases in the FB or DNA section for more than 30 days.

** Adjusted data from the Computer Aided Lab Management System (CALMS) raw figures.

*** Table reflects outsourced cases completed during the specified fiscal year as reflected in CALMS. In FY12, a total of 1,594 FB "Section 20" sexual assault cases were shipped to the outsourcing laboratory with some still pending analysis as of June 30.

Funding

With one exception, funding figures included in this section of the report are estimates from March 2012 budget projections since FY12 accounting records were not yet closed as of the date of this report. The exception is the figure reported for outsourcing costs; this is the actual figure. During FY12, the ISP expended a total of \$19.5 million of state funds on the DNA program, including both casework and offender samples. This figure is 21 percent higher than the \$16.1 million expended in FY11. Included in this FY12 total is \$3.4 million from the State Offender DNA Identification System Fund. This figure is equal to the amount spent from that fund in FY09 but is significantly higher than the \$1.9 million spent in FY11 when there was a significant reduction in the spending authority.

As it has for many years, the ISP continues to aggressively pursue federal grant dollars to supplement state funding to aid in addressing the DNA backlog and to build in-house capacity. In FY12, this practice helped the ISP minimize the increased expenditure of state funds while still addressing the FB and DNA backlogs through the use of overtime, the purchase of additional commodities and equipment, and the implementation of the outsourcing program. In this way, the ISP was able to ensure more cases were analyzed than could have been worked using state funds alone. In FY12, the ISP spent nearly \$3.0 million in federal DNA grant funds, 20 percent more than in FY11 (\$2.5 million). The table below lists estimated FY12 grant expenditures. Additional grant funding is currently being pursued.

FY12 FB/DNA Grant Expenditures

Grant	Funds Expended
National Institute of Justice (NIJ) 2010 DNA Forensic Casework Backlog Reduction	\$2,310,300
NIJ 2011 DNA Forensic Casework Backlog Reduction	\$350,000
FY09 Violence Against Women Act (VAWA) American Recovery and Reinvestment Act (ARRA) Illinois Statewide Rape Kit Relief Program	\$243,400
2007 VAWA Illinois Statewide Rape Kit Relief Program	\$94,000

Of the total funding expended for FB/DNA analysis in FY12, \$1.6 million was spent for the "Section 20" sexual assault case outsourcing initiative. These funds were from the FY12 portion of the FY09 VAWA ARRA grant and the 2007 VAWA grant (as noted above), as well as \$1.2 million in state funds.

The commodities and equipment costs for DNA analysis are very high. If significant cuts to the budget are mandated, there will be insufficient funds to purchase necessary DNA supplies, resulting in unworked criminal cases and an increase in the backlog. In FY10 and FY11, several vendors threatened to stop providing services and goods to the ISP due to lengthy delays in receiving their payments from the Comptroller. One critical DNA product and services vendor did put the ISP on a credit hold until the payment delay was addressed, leading to delays in ordering essential DNA processing chemicals. Fortunately, this situation did not occur in FY12; however, should this occur again in the future, any additional stoppages will result in a further increase in the DNA backlog. As in past fiscal years, one hindrance to the timely

purchase of forensic equipment and commodities continues to be the lengthy and complex state procurement process. As additional steps continue to be added to the procurement process, this exacerbates the delays in obtaining necessary supplies and equipment. The expensive DNA commodities have a short expiration date; therefore, large quantities cannot be maintained in the laboratories but need to be ordered as necessary. Any delays in the procurement approval process can have immediate impact to laboratory operations, causing laboratories to run out of critical supplies, stopping analysis, and causing an increase in the backlog or even missed court dates.

Personnel

On June 30, 2012, the ISP laboratories employed a total of 72 fully-trained forensic scientists working on FB/DNA cases or performing case-related assignments. This figure is down from the FY11 staffing level of 77 trained scientists, due to the loss of five experienced FB/DNA scientists during FY12. The current level is insufficient to address the current number of cases being submitted by law enforcement agencies, especially as a result of PA 96-1011. In FY10, prior to the effective date of the PA 96-1011, a staffing level of 81 scientists, supported by evidence technicians, technical DNA managers, clerical and maintenance personnel, was sufficient to not only address new case submissions but also to continue the positive progress made in reducing the backlogs in FB and DNA. However, the double impact of higher case submissions resulting from PA 96-1011 and the loss of experienced FB/DNA scientists since that time has been a significant factor in the rise of the FB and DNA backlogs.

ISP forensic scientists performing FB and/or DNA analyses are well-qualified and highly-trained. Full training of a FB/DNA forensic scientist in both FB and DNA techniques takes approximately 18 months. To backfill vacancies in the FB/DNA section which resulted from normal attrition, the ISP began the process of hiring eight forensic scientists in October 2010. These scientists were hired in November 2011, with an anticipated FY13 training completion date. As noted elsewhere in this report, as PA 96-1011 became law and the impact on case submissions was projected, ISP included in its submitted plan a request for five additional headcount and funding to hire FB/DNA scientists to address the anticipated impact. These additional resources are still needed to address the permanent increase in "Section 10" case submissions and to reduce the backlog of all types of FB/DNA cases.

The inability for ISP to promptly fill forensic scientist vacancies as they occur has a direct negative impact on any backlog reduction progress made up to the time a vacancy occurs. More significantly, without timely refilling of non-scientific support and supervisory positions, fully-trained forensic scientists have to perform critical evidence technician, managerial, and clerical duties rather than analyzing cases. This specific situation resulted in Recommendation #5 in the Office of the Auditor General (OAG) report released in March 2009. Specifically, the OAG stated on page 38, **"Failure to maintain the necessary staffing levels results in cases remaining unsolved and serial criminals could remain free to commit additional crimes. The ISP's inability to fill lost forensic positions has resulted in staff performing work outside of their official duties, which increases the backlog of forensic cases submitted to the labs."**

As noted in previous reports, this situation continues to occur in FB/DNA, as well as in all the different forensic disciplines in the ISP laboratory system. On average, the ISP loses 20 forensic scientists each year due to attrition. The ISP had made great progress in reducing the total forensic case backlog (for all forensic disciplines) from a high of over 14,000 cases in FY08 to just fewer than 6,600 cases at the end of FY10. In FY11, the ISP completed the lengthy hiring process to fill a total of 17 forensic scientist vacancies, but by that time, the total forensic case

backlog had risen to 9,604 cases. Because of the time it takes to properly train a forensic scientist, the backlog continues to grow as the new hires are being trained. As of the end of FY12, the total forensic case backlog was 13,449 cases. This demonstrates how the inability to immediately fill any vacant forensic position can have a negative effect on backlog reduction efforts. In FY12, furlough days - both mandatory and voluntary – continued to further impact laboratory operations and the backlog in all disciplines. Late in FY11 and throughout FY12, the ISP laboratory system was able to minimize voluntary furlough day impacts on sections struggling with backlog concerns through the implementation of mitigating measures. Generally speaking, high backlogs equate to an increased risk to public safety as criminals remain unidentified and able to commit additional crimes and innocent individuals remain incarcerated as they await forensic results which could clear them.

OFFENDER DATABASE SAMPLE BACKLOG

The CODIS is a DNA database program administered by the FBI and implemented by the ISP at the state level. The offender portion of this system contains DNA profiles of individuals convicted of felonies, as well as a few other eligible offenses in accordance with Illinois statutes. All samples collected from eligible offenders from across the state are submitted to the DNA Indexing Unit of the Springfield Forensic Science Laboratory. That unit is responsible for analyzing and uploading to the CODIS database all such submitted DNA samples for the entire state.

During FY12, ISP received 35,813 new offender samples, submitting 29,589 of those samples to CODIS by the end of June 2012. The remaining samples were either in-process of analysis or were not uploaded for various reasons (e.g., were duplicates, were ineligible, etc.). Of all the new samples received which were eligible for CODIS upload, 99.62 percent of them were uploaded into CODIS within 30 days. By continuing to process these offender samples in such a timely manner, information and leads resulting from any CODIS hits can be quickly conveyed to investigators, helping to solve crimes and exonerate innocent individuals.

With offender samples, a backlog will occur when the number of offender samples submitted exceeds the laboratory's capacity to upload them into CODIS within 30 days of when they are ready for analysis. For the past five fiscal years, the ISP has maintained a zero backlog in offender samples. In March 2006, the CODIS backlog was more than 7,800 samples; since FY07 when that backlog was eliminated, the ISP has been able to keep up with sample submissions and has improved internal turnaround times for verifications and notifications of CODIS hits. At the end of FY12, the CODIS sample backlog remains at zero. This is a testament to the value of sufficient staffing levels and the DNA Indexing Unit's extensive use of highly efficient technologies, such as robotics, to maximize in-house analytical capacity.

On January 1, 2012, PA 97-383 became effective. This law closed several loopholes in previous legislation by requiring a DNA sample from all registered sex offenders, regardless of conviction date. The law also added three reasons for collection of DNA; a court order with no other restrictions, sex offenders from other states that are not required to be supervised by parole or probation, and limited "indictees" for First Degree Murder, Home Invasion, Predatory Criminal Sexual Assault, Aggravated Criminal Sexual Assault, and Criminal Sexual Assault. ISP anticipated 6,000 additional offender samples would be submitted over prior submission rates during the first year of implementation as newly eligible offenders would be collected. The impact was projected to decrease to 2,000 additional offender samples being submitted per year after that. However, agency awareness and compliance with the new elements of the law

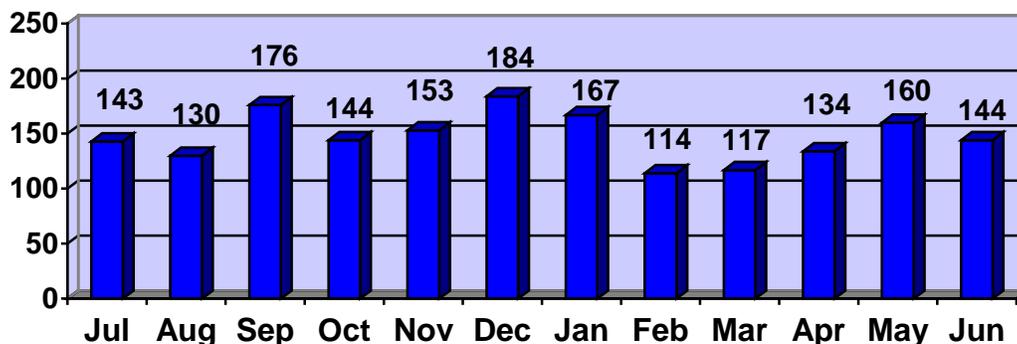
has been low; recent efforts have been made to increase awareness and compliance is expected to substantially improve and result in an increase in sample submission. While the anticipated increase may result in a temporary backlog of CODIS samples at the DNA Indexing Unit, ISP anticipates existing staffing levels will be sufficient to address this increase and quickly return any backlog to current low levels.

Current staffing and funding for the CODIS program are sufficient to address current needs. However, in the event of an inability to backfill vacancies, significant budgetary cuts, equipment problems, and/or additional immediate changes to offender statutes (such as a law which would require all felony arrestees to submit a DNA sample for CODIS), this could change. Any one such action will result in the development of a backlog which will require additional time and resources to address.

In FY12, there were 1,766 CODIS hits, as shown on the following chart. This figure has increased over past years due to the additional DNA profiles being uploaded into CODIS as a result of the "Section 20" outsourcing effort. The significance of any of the CODIS hits, however, is not known and cannot be determined by the ISP; it is determined by the law enforcement agency after additional investigation is conducted.

On June 30, 2012, there were a total of 431,583 offender profiles and 38,690 crime scene profiles in the DNA database. There were also a cumulative total of 13,230 CODIS hits, with 11,367 offender-to-case hits and 1,863 case-to-case hits detected. In an offender-to-case hit, a convicted offender's known DNA profile is associated with an unknown DNA profile from a case; this information can provide investigators with the identity of the possible perpetrator. In a case-to-case hit, unknown DNA profiles from two or more cases are associated, thereby linking cases and providing additional leads for the investigators to pursue. There have been 1,721 national associations, which are CODIS hits of DNA profiles from Illinois to DNA profiles from other states. All 50 states, plus the FBI and US Army laboratories, participate in CODIS. Through May 2012 (last data available), Illinois ranks third in the nation, behind only California and Florida, in the number of investigations aided by CODIS (14,250), according to FBI statistics.

FY12 Monthly CODIS Hits



NOTE REGARDING STATISTICS PROVIDED IN THIS REPORT:

All reasonable efforts have been made to ensure the accuracy of the data. However, there are inherent limitations present with the existing search methods of the ISP's CALMS database. The data attached herein is as accurate as possible, given the limitations of the current system.

With both Forensic Biology and DNA casework, as well as with offender database samples, the reported backlog is just a snapshot of the workload at a given point in time. Legislation, crime rates, new technology, and available resources all impact this statistic.



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