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, has long been recognized as one of the largest crime laboratory systems in the world. 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) 2014, the ISP laboratory system received a total of 89,920 cases and completed analysis on 91,878 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 was 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. In 2015, ISP laboratories will undergo a reaccreditation assessment under the International Organization for Standardization (ISO) criteria in order to maintain current accreditation status. 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 425 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 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, finding a suspect’s blood left at the crime scene may be 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.
As noted in previous years, the number of FB and DNA cases received in the ISP laboratories represents only a small fraction (6% each) of the total number of cases received annually for all forensic disciplines within the ISP forensic laboratory system. The following table compares FY13 and FY14 FB/DNA case submission figures. In FY10, prior to the passage of the Sexual Assault Evidence Submission Act (PA 96-1011), which became effective September 1, 2010, FB case submissions totaled 5,167 and DNA case submissions totaled 5,240. Since that time, ISP has experienced a sharp increase in FB and DNA case submissions. In FY14, after all of the previously-unsubmitted sexual assault cases associated with the Act had been received by ISP, both FB and DNA submissions have decreased but are still higher than before the effective date of the Act.

### FB/DNA Case Submissions

<table>
<thead>
<tr>
<th>Cases Submitted</th>
<th>FY2013</th>
<th>FY2014</th>
<th>% Difference from FY13</th>
<th>% of Total FY14 Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forensic Biology</td>
<td>5,927</td>
<td>5,387</td>
<td>-9%</td>
<td>6%</td>
</tr>
<tr>
<td>DNA</td>
<td>5,941</td>
<td>5,473</td>
<td>-8%</td>
<td>6%</td>
</tr>
</tbody>
</table>

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). The ISP had not received notification from any agency under this particular statute.

### SEXUAL ASSAULT EVIDENCE SUBMISSION ACT (PA 96-1011) SUMMARY OF FINAL REPORT

On December 16, 2013, the ISP issued a press release announcing that forensic analysis of the sexual assault cases submitted under “Section 20” of the Sexual Assault Evidence Submission Act (PA 96-1011) had been completed ahead of schedule. Both the original 2011 ISP plan to analyze the “Section 20” cases and the 2013 final report of that initiative can be found on the ISP website at [http://www.isp.state.il.us](http://www.isp.state.il.us). Below is a summary of the final report.

On July 6, 2010, Governor Quinn signed into law the Sexual Assault Evidence Submission Act (PA 96-1011), which became effective September 1, 2010. The Act mandated several changes regarding how law enforcement agencies address the submission of sexual assault (SA) evidence to forensic laboratories for analysis. The Illinois State Police (ISP) operates seven such forensic science laboratories statewide and serves a vast majority of Illinois’ state, county and local law enforcement agencies. Two other publicly funded forensic laboratories, the DuPage County Forensic Science Center and Northeastern Illinois Regional Crime Laboratory, serve a smaller number of agencies within DuPage County and the northeastern corner of the state, respectively. All these forensic laboratories were affected by the Act, however, this report only includes information about the SA cases submitted to the ISP laboratories and how the ISP addressed them.
As of November 13, 2013, the ISP had completed the “Section 20” sexual assault case initiative which resulted from Section 20 of the Sexual Assault Evidence Submission Act in 2010. A total of 4,138 cases, dating back to 1978, were identified by Illinois law enforcement agencies as not having been previously submitted for forensic analysis. As of November 30, 2013, of the 986 law enforcement agency offices required to submit an inventory list to the ISP, 943 (96 percent) were in compliance. At the ISP’s direction, the most probative evidence in each case (as determined by the law enforcement agency based on the case circumstances) was submitted to the ISP laboratory system for analysis. After initial review by laboratory personnel, 96 cases were canceled for administrative reasons; some of these may be resubmitted by agencies if/when the issue is resolved. The remaining 4,042 cases were analyzed; 3,513 (87%) by an outsourcing vendor laboratory and 529 (13%) by the ISP laboratories. Upon completion of analysis, a report was sent to the submitting agency with the analytical results. If applicable, CODIS hit information was also provided. Based on the results of the analysis and the CODIS search, the agency must determine whether additional investigation is necessary and/or whether to submit any additional evidence for analysis. The ISP is committed to continuing to work with any law enforcement agency in the analysis of additional evidence in these “Section 20” cases, should the agency deem additional analysis to be warranted. Please note that any subsequent submission of evidence from these completed “Section 20” cases (or any newly discovered old cases) will be handled under standard ISP protocols and will no longer be tracked as “Section 20”. Although this massive initiative took three years to complete and required the ISP to redirect significant resources from current cases, this effort was successful in eliminating the backlog of sexual assault cases in the agencies’ custody. By doing so, perhaps some measure of closure or potential new leads are brought to these investigations.

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. As noted in the ISP plan, the new “Section 10” cases are incorporated into the analytical schedule of the ISP laboratories in accordance with current practice. These cases become part of the normal caseload and are not being tracked separately. The original “Section 20” portion of the ISP plan is summarized below; each component is followed by a final summary in bold.

**Section 20 Impact**

**Original Plan Summary:** Based on inventory information provided by the agencies using the ISP laboratories, approximately 4,000 “Section 20” cases were expected to be submitted to the 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 were identified and/or non-applicable cases were 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 backlog reports as of January 2011.

**Final Summary:**
- Cases reported to be submitted to ISP by agencies = 4,138
- Cases received in ISP laboratories (upon request by ISP) = 4,138
- Cases completed = 4,138
- Cases pending (in-progress or unstarted) = 0
- Cases remaining to be submitted from agencies = 0
CODIS hits made in completed cases = 969*
  
  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.
  
  * This number was updated as of June 30, 2014. Although analysis of the “Section 20” cases has been completed, hits in CODIS to “Section 20” cases may continue to occur as new individuals are added to the database. Any future CODIS hits to “Section 20” cases will not be tracked separately as “Section 20” hits, but will be counted with all other CODIS hits.

Analytical Approach/Timeline

Original Plan Summary: For the older “Section 20” cases, outsourcing would 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 Fiscal Year (FY) 2011 and was projected to be completed by the end of Calendar Year (CY) 2014. The ISP original outsourcing schedule assumed sufficient funding would be sustained and the outsourcing vendor would maintain the ability to meet the ISP’s established high-quality expectations. Continuous monitoring of those quality expectations would be conducted by the ISP. Should insufficient funding, unsatisfactory quality, or any other factor have adversely affected this outsourcing schedule, the ISP back-up plan was to incorporate “Section 20” SA cases into the in-house analytical schedule amongst current cases, prioritized to ensure the statute of limitations deadlines were met. In the event all “Section 20” SA cases had to be analyzed in-house, not only would years be added to the analytical timeline for completion of these cases, but this would also negatively impact the timeline for completion of all types of new/current cases in the Forensic Biology (FB)/DNA section.

Final Summary:
Outsourcing “Section 20” cases to the contractual vendor laboratory, Orchid Cellmark, began in March 2011 and was completed in November 2013. By the completion of this project, a total of 3,513 original (i.e., newly submitted) “Section 20” cases had been shipped to the vendor laboratory for analysis. The vendor laboratory met all quality assurance requirements throughout the course of this project. The ISP was able to secure sufficient funding for all appropriate “Section 20” cases to be analyzed by the outsourcing vendor. Another 529 “Section 20” cases had to be analyzed “in-house” at an ISP laboratory; these could not be outsourced due to the nature of the evidence involved or other case circumstances. Of the 4,138 total “Section 20” cases submitted to the laboratories, 96 were cancelled for various reasons (e.g., further investigation determined a crime did not occur, lack of required victim authorization to release evidence, etc.). The “Section 20” project was completed by the ISP on November 13, 2013, more than a year ahead of schedule.

Resources Needed (Headcount and Funding)

Original Plan Summary – Headcount: Based on the observed increase in CY 2010 SA case submissions (originally projected at 840 additional SA cases annually), the ISP required five additional headcount to hire more forensic scientists to address the permanent increase in new SA submissions (“Section 10” cases), and to assist with the “Section 20” cases requiring in-house analysis. These positions would be permanent and in addition to refilling any 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, should have been filled immediately. The extensive training program for FB/DNA requires
approximately 18 months to complete, so these new hires would not have had an immediate impact on the SA caseload but would have eventually increased the ISP’s analytical capacity.

**Final Summary - Headcount:**
In November 2011, the ISP hired and began training eight forensic scientists using only headcount which was available through attrition; the five additional headcount requested in the original plan had not been received. By the end of 2012, seven of these forensic scientists had completed their FB training (one resigned) and are currently working FB cases. 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. The overall FB/DNA case backlogs increased during the “Section 20” project since significant personnel and outsourcing resources had to be refocused on that initiative.

**Original plan summary - Headcount Funding:** As stated in the February 2011 plan, the ISP required additional General Revenue funding for the five new forensic scientists described above. Assuming a July 1, 2011, hire date, the FY 2012 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.

**Final Summary – Headcount Funding:**
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 hiring date in mid FY 2015, the associated first-year funding for these positions would now be projected at approximately $490,003.

**Original Plan Summary - Other Funding:** Based on the measured analytical timeline, the ISP had projected all other costs associated with addressing the impact of this new Act (outsourcing costs were estimated at more than $2.6M for “Section 20” cases) would 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 planned to continue 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. The ISP had 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 the ISP laboratories. The ISP had 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 was expected to continue throughout the course of the “Section 20” backlog reduction program.

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

Final Summary – Other Funding: The original outsourcing cost estimate of $2.6M was based on the conservative projection that about half of the cases would require the more costly DNA analysis (beyond the initial biological screening analysis). As it turned out, about 75-80 percent of the outsourced cases also required DNA analysis. The total cost to outsource the “Section 20” cases was over $3.3M. These funds came from General Revenue appropriations and grant funding sources.

FORENSIC BIOLOGY AND DNA CASE BACKLOGS

Through ongoing evaluation and implementation of various technology and efficiency measures, the FB/DNA section continues to seek ways to enhance services while reducing backlogs and improving turnaround times of FB/DNA 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 FY14 are shown in the following charts. Prior to the effective date of PA 96-1011 in 2010, the backlog of FB cases had been declining and reached 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 early FY11, ISP experienced a 68 percent increase in FB case submissions. As noted previously in this report, FY14 FB case submissions were 9 percent less than in FY13; this positive turn reflects the fact that all of the “Section 20” cases had been submitted by the end of FY13 and ISP had completed its plan to address those cases early in FY 14. No FB cases were outsourced in FY14; all were analyzed in-house (within ISP laboratories). At the end of FY14, the total FB backlog was 1,279 cases; these cases were in-progress or pending in-house analysis at the ISP laboratories.
As FB cases are analyzed in-house, the general 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. As noted in the table below, during FY14, the ISP analyzed nearly 5,650 DNA cases through outsourcing and within the laboratory system. This is significantly higher than the FY13 figure of 4,790 cases. Overall, the ISP saw a 10 percent decrease in the DNA backlog compared to FY13. This decrease, a direct result of the completion of PA 96-1011, was anticipated and ISP continues to address this issue while recognizing that it will take time and additional resources to continue significantly reducing this DNA backlog. In FY15, as resources allow, ISP anticipates outsourcing DNA cases in an effort to further assist in reducing the overall DNA case backlog. However, 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 all outsourcing initiatives are 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.

<table>
<thead>
<tr>
<th></th>
<th>Forensic Biology</th>
<th>DNA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FY13</td>
<td>FY14</td>
</tr>
<tr>
<td>Total pending cases as of June 30 of previous fiscal year (both &gt; and ≤ 30 days)</td>
<td>2,715</td>
<td>1,584</td>
</tr>
<tr>
<td>Cases received in the labs**</td>
<td>5,927</td>
<td>5,387</td>
</tr>
<tr>
<td>Cases worked in the labs (in-house)</td>
<td>(5,637)</td>
<td>(5,261)</td>
</tr>
<tr>
<td>Cases outsourced with grant funding***</td>
<td>(826)</td>
<td>0</td>
</tr>
<tr>
<td>Cases outsourced with state funding***</td>
<td>(595)</td>
<td>0</td>
</tr>
<tr>
<td>Total number of pending cases &lt;30 days</td>
<td>486</td>
<td>431</td>
</tr>
<tr>
<td>Total number of backlog* cases at ISP (in-house)</td>
<td>1,098</td>
<td>1,279</td>
</tr>
<tr>
<td>Total number of backlog* cases at vendor laboratory (outsourced but not yet completed)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>TOTAL BACKLOG* CASES (in-house and outsourced)</td>
<td>1,098</td>
<td>1,279</td>
</tr>
</tbody>
</table>

* “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 FY14, a total of 13 DNA “Section 20” sexual assault cases were completed by the outsourcing laboratory.

Funding

NOTE: With one exception, funding figures included in this section of the report are estimates from February 2014 budget projections since FY14 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 FY14, the ISP expended a total of $21.7 million in state funds on the DNA program, including both casework and offender samples. This figure is 0.5% lower than the $21.8 million expended in FY13. Included in this FY14 total is $3.0 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.

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 FY14, 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 continuation 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 FY14, the ISP spent $2.0 million in federal DNA grant funds, which was less than was spent in FY 13 ($3.5 million). The table below lists estimated FY14 grant expenditures. Additional grant funding is currently being pursued.

**FY14 FB/DNA Grant Expenditures**

<table>
<thead>
<tr>
<th>Grant</th>
<th>Funds Expended</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Institute of Justice (NIJ) 2011 DNA Forensic Casework Backlog Reduction</td>
<td>$21,584</td>
</tr>
<tr>
<td>NIJ 2012 DNA Forensic Casework Backlog Reduction</td>
<td>$1,792,607</td>
</tr>
<tr>
<td>NIJ 2013 DNA Forensic Casework Backlog Reduction</td>
<td>$240,000</td>
</tr>
</tbody>
</table>

Of the total funding expended for FB/DNA analysis in FY14, $10,561 was spent for the “Section 20” sexual assault case outsourcing initiative. This money was from the DNA fee funds.

Commodity 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 previous fiscal years 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 FY14; 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**

As of June 30, 2014, ISP employed a total of 71 fully-trained forensic scientists working on FB/DNA cases or performing case-related assignments. This figure is down from the FY13 staffing level of 76 trained scientists, due to the net loss of five experienced FB/DNA scientists during FY14. The current staffing 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 FB/DNA 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. The ISP is currently in the process of hiring five new FB/DNA scientists to refill those positions lost in FY14.
The anticipated hire date is fall 2014. 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.

ISP’s FB/DNA forensic scientists are well-qualified and highly-trained, but the process of hiring and training them takes significant time; thus, the impact of any new hires is not immediate. ISP is not allowed to refill forensic science vacancies as they occur; and once approval is given, the hiring process generally takes 6-9 months. Full training of a FB/DNA forensic scientist in both FB and DNA techniques takes approximately 18 months. Thus, it takes approximately two years from when a FB/DNA scientist vacancy occurs until it is filled by a fully-trained new scientist.

Any progress ISP makes in reducing backlogs can be immediately impacted when any forensic scientist vacancy occurs in the laboratories. This is a direct result of ISP’s inability to promptly backfill positions. More significantly, without timely refilling of non-scientific laboratory support and forensic 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. A review of staffing levels from 2008 through 2012 shows through normal attrition the ISP loses an average of 10 (3.3% of total) experienced forensic scientists each year. Managerial and support staff attrition, however, has averaged 5.8% annually. Because those particular vacancies have not been refilled as readily as the scientist vacancies, the ISP laboratory system has experienced a net loss of 43 managerial and support staff employees just since 2008. Since forensic scientists must be reassigned to perform the critical duties of these vacant managerial/support positions, the result is fewer cases are analyzed, leading to higher backlogs. As of the end of FY14, the total forensic case backlog was 13,365 cases. This demonstrates how the inability to immediately fill any vacant forensic position - including managers and support staff - has a negative effect on backlog reduction efforts. 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 FY14, ISP received 34,360 new offender samples, submitting 33,901 of those samples to CODIS by the end of June 2014. 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, greater than 90 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 seven 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 FY14, 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 in the first year over prior submission rates as agencies became aware of their responsibility to collect newly eligible offenders. After the initial impact of the law, submissions were projected to decrease from 6,000 to 2,000 additional offender samples being submitted per year. However, agency awareness and compliance with the new elements of the law has been low. Recent efforts to increase awareness and compliance are expected to substantially increase submissions to levels previously projected. While the projected 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 previous low levels.

As of June 30, 2014, there were several vacancies in the DNA Indexing Unit which occurred through normal attrition. Once refilled, staffing and funding for the CODIS program will be 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 FY14, there were 1,735 CODIS hits, as shown on the following chart. This figure has increased over past years due to additional unknown DNA case 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, 2014, there were totals of 495,799 offender profiles and 35,326 crime scene profiles in the Illinois DNA database. There were also cumulative totals of 16,623 CODIS hits, with 14,502 offender-to-case hits and 2,219 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 investigators to pursue. There have been 2,042 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 2014 (last data available), Illinois ranks third in the nation, behind only California and Florida, in the number of investigations aided by CODIS (17,632), according to FBI statistics.

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.