Daily Operations and Challenges of the Illinois State Police Forensic Science Center at Chicago

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Overview of the Forensic Sciences Command

- The Forensic Science Center at Chicago (FSC-C) is part of the Illinois State Police, Forensic Sciences Command. The Forensic Sciences Command consists of a statewide system of 8 operational laboratories, a research and development laboratory, and a statewide training program with a total staff of 494.

- By Illinois statute, the laboratory system is mandated to provide forensic services to law enforcement agencies in all 102 counties in the State of Illinois (population 12.7 million).

- Although the laboratory system is part of the Illinois State Police, 98% of the casework done is for the 1200 other local and county police agencies in the State of Illinois.

- Laboratory system goal is to achieve a 30 day turn-around-time or less in all forensic disciplines.

Overview of the Forensic Science Center at Chicago

- The largest of the 8 operational laboratories; providing services to the City of Chicago and surrounding collar counties (total population 9.0 million).

- The FSC-C opened its doors in 1996 after the Chicago Police Department (CPD) ceased providing services to the City. CPD alone has over 13,000 officers and 1500 detectives.

- The FSC-C provides services in Drug Chemistry, Latent Prints, Trace Chemistry, Firearms, Microscopy, Biology and DNA on-site. Toxicology analysis and Document examinations are provided at one of the regional laboratories.

- Total staff 216.

Daily Operations – Quality Assurance

- The laboratory system has a strong commitment to quality assurance and has been ASCLD/LAB accredited since 1982 and ISO accredited since 2005.
- The laboratory undergoes a yearly Internal Inspection conducted by on-site staff and a yearly Command Inspection conducted by ISP personnel external to the laboratory.
- The quality assurance program includes both peer and supervisory review of casework. Additionally, a discipline specific Quality Assurance Review Coordinator reviews case files from each scientist on a yearly basis.
- All scientists are subject to yearly proficiency testing and random reanalysis of casework.
- All quality assurance issues are reviewed and monitored by the Statewide Director of Quality Assurance.

Daily Operations – Evidence Receiving

- The FSC-C receives 62,000 cases/year. This results in an average submission rate of 250 cases per day.
- Evidence can be shipped from one state laboratory to another to manage the statewide backlog.
- Individual law enforcement agencies vary widely on their background and experience in collecting evidence so the quality of evidence submitted can vary greatly. This lack of training creates challenges for the forensic scientists and increases the workload.
- Evidence submission may or may not be automated. Our largest user, the Chicago Police Department, submits case data electronically, while most smaller agencies do not. Lack of automation increases the time the laboratory spends on logging in evidence.

Daily Operations – Evidence Receiving

- The FSC-C employs evidence technicians to receive evidence, however not all labs in the system have that resource which increases the workload for the forensic scientists.

- Every piece of evidence must have both the location and custody history tracked. To accomplish this, the FSC-C uses a computerized LIMS system which is also used to generate reports on analytical findings.

- The LIMS system is electronically linked to our largest user agency, the Chicago Police Department, and to the Cook County State's Attorney's Office. This electronic link allows both agencies direct access to laboratory reports.

Laboratory Budget Challenges

- The laboratory budget has been cut by 21.6% between Fiscal Year 2002 and Fiscal Year 2006.
- Significant budget cuts have impacted continuing education and training of technical staff.
- Purchase of new small equipment and replacement of existing equipment has been impacted.

	FSC-C Total Budget*	Travel/Training Funds	Equipment Funds
FY02	$2.36 million	$54,025	$95,379
FY06	$1.85 million	$3,290	$10,000
% Change	(21.6%)	(93.5%)	(89.5%)

* Personnel costs not included

Backlog Challenges

- Decreasing headcount.
- Increasing case submissions resulting in increasing backlog.

	Scientific Headcount	Cases Received	Cases Worked	Backlog
FY02	329	110,415	107,377	7,394
FY06	294	121,870	115,314	14,502
% Change	(10.6%)	10.4%	7.4%	96.1%

Training of New Forensic Scientists

- Challenge is to retain scientific staff and properly train new staff.

- The Illinois State Police utilizes a formal training program with both an academic and practical portion.

- ISP training programs vary in length (examples):

  Chemistry – 9 months
  Biology/DNA – 18 months
  Firearms and Latent Prints – 24 months
  Documents – 3 years

Training of New Forensic Scientists

- Scientific staff cannot be quickly replaced. Even when we are able to quickly hire a new forensic scientist, the new hire will not contribute to backlog reduction for months or years. Additionally, not all individuals are able to successfully complete the training program.

- Currently, training new scientists often requires that existing staff be removed from casework to provide the technical training, further impacting the backlog.

- In the past the ISP has used management level positions (Training Coordinators) to conduct training however, pay compression has made filling these positions very difficult.

Staffing Challenges

- Insufficient scientific and management headcount for workload.
- 7% turnover rate in technical staff per year.
- Despite rising caseload, headcount has decreased. "Doing more with less" risks scientist/manager burnout.

	Scientific Headcount	Management Headcount
FY02	329	69
FY06	294	58
% Change	(10.6%)	(15.9%)

Management Challenges

- First line of Quality Control, monitor casework through case file reviews and quality assurance checks. Fewer supervisory headcount means more work per supervisor.
- In the last five years, the ISP has seen a significant loss of experience at the senior level management and senior scientist positions (loss of intellectual property).
- Pay compression – forensic scientists are covered by a union contract. By July of 2007, more than 50% of the laboratory management team will be making less than the senior scientists they supervise.
- Pay compression has significantly impacted the ability to fill management level positions.

User Agency Challenges

- Increased reliance for quick lab results (Rush Requests) by law enforcement.
- Prosecutors have increased reliance on laboratory to provide results prior to approving charges and have increased requests for additional work on the back end of a case (DNA “Grid” work) prior to trial.
- Police agency requests for testing are increasing (example: DNA on guns).
- Challenge to balance requests for analysis of “older” and “cold” cases with new cases (Backlog Projects).
- Challenge to work with agencies to maximize resources by prioritizing evidence to be analyzed (Evidence Triage).

Additional Challenges

- Challenge to stay current with latest technology and methods and the lack of travel funds for on-going training is a detriment to the laboratory system.
- Facility issues; overcrowding, changing technology, and increasing submissions require space for new staff, new instrumentation, records storage, evidence storage etc.
- Legal challenges: increasing discovery requests, laboratory needing legal representation, OJT for legal issues.
- Media/CSI Effect; inaccurate representation of laboratory work.

Goal: 30 day TAT or less in all disciplines

To achieve this goal and provide services on a timely basis in all disciplines some of the challenges are clear:

- Additional staff – scientists, managers, support staff
- Improved mechanisms to retain staff (salaries, benefits etc.)
- Initial and On-going Training (user agency, scientists, managers)
- Equipment
- Facilities
- Research, New Methods and Technology to improve efficiency (robotics).

Thank you.