

State of North Carolina

FORENSIC SCIENCE ADVISORY BOARD

Raleigh, North Carolina

11 February, 2016

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Subject: State Crime Laboratory Report

The North Carolina Forensic Science Advisory Board, created by the General Assembly in 2011, reports tremendous progress by the State Crime Laboratory over the past 48 months. The Board has also observed an urgent need for additional Laboratory resources.

Notable accomplishments by the Laboratory include, but are not limited to, the following:

- ISO/IEC 17025 accreditation, the highest international recognition accorded
 to forensic laboratories, by the ANSI/ASQI National Accreditation Board
 (ANAB) accrediting body and has sustained this accreditation along with
 meeting FBI Quality Assurance Standards for DNA testing laboratories.
- **Individual independent certification** of all eligible scientists in their respective disciplines; achievement of 100% analyst certification is extremely rare.
- Implementation of Lean Six Sigma, a private industry efficiency methodology, increasing the productivity of existing staff and reducing overall caseload inventory by over 50% and turnaround time to a Laboratory average of less than a year, with some disciplines down to a 60-day turnaround. Toxicology continues to be their biggest challenge; however, internal staffing and outsourcing has cut the total pending toxicology cases in half.
- Integration of the Laboratory information management and the criminal justice system computer databases, achieving more efficient client-side management of Laboratory submissions and court scheduling, and improving the transparency and efficiency of Laboratory-client interaction.

These achievements indicate efficient and effective use of available resources and demonstrate significant, measurable progress in a remarkably short time frame.

The Board is deeply concerned that the **Laboratory lacks critical resources** necessary to serve North Carolina taxpayers and the criminal justice system at the highest operational level. Unfunded mandates from the 2011 Forensic Science Act, the allocation of 39 additional positions without commensurate increases in equipment and supply budgets, and a woefully underfunded equipment replacement program, have placed the Laboratory at unnecessary risk.

This board is directed by Chapter 114, Article 9 to, "...review and make recommendations...for sustaining existing program and improving upon them where possible..."

The 2011 Forensic Science Act mandated the State Crime Laboratory to complete accreditation, obtain forensic scientist certification, create an Ombudsman position and establish this Board. These unfunded mandates have placed a tremendous strain on Laboratory operations.

Continuing external education in the disciplines in which analysis is performed is critical for the professional development of forensic scientists and a requirement for continued certification. The Board, comprised of Forensic Scientists and Academia, recognize the importance of attending forensic science conferences and seminars as well as formal post-graduate education. In order to sustain existing programs, as well as implement new scientific technology, forensic scientists must be afforded this opportunity.

The equipment inventory in the State Crime Laboratory exceeds \$13.5 million. To remain a state of the art facility, scientific equipment and instruments should be replaced every five years based on industry standards. The State Crime Lab has been replacing instruments on a 10 year or more cycle based on fiscal resources. There are currently instruments that are older than 12 years. Thirty-nine additional positions have been added and most have completed training, or will complete their training in the coming year. Efficiencies gained by implementing Lean Six Sigma methodologies such as batching and robotics have resulted in increased throughput of case work, in some instances by several hundred percent. This increase in production has accelerated the use of equipment and instruments to the point that waiting ten years for replacement is too long. This increased production has created a corresponding increase in supply consumption, forcing the State Crime Lab to reallocate training and equipment funding to purchase supplies.

Therefore, the **Board unanimously supports and strongly recommends** that the General Assembly approve and implement the following:

- 2011 Forensic Science Act Mandates. The 2011 Forensic Sciences Act required the SCL to absorb recurring costs associated with scientist certification, facility accreditation, full time ombudsman (Attorney III) and operating support for the Forensic Science Advisory Board. The Board recommends that recurring funds of \$400,000 be appropriated to the Lab for mandates from the 2011 Forensic Science Act.
- Scientific Supplies. For 2016-17, \$350,000 additional recurring scientific supply funding is recommended to address increased supply needs.
- Scientific Equipment. The SCL has a \$13.5 million inventory of scientific equipment and a
 replacement budget of \$64,680. To support an industry standard replacement schedule of 5
 years, the SCL would require a recurring \$2.7M equipment budget.
- **Permanent Funding Stream.** A method to ensure long term funding might be to allocate 1/10 of 1 cent of the state alcohol tax to the State Crime Laboratory to ensure a steady funding stream.

The Board thanks the North Carolina General Assembly for the opportunity to be of service and for its careful consideration of the recommendations herein.

Respectfully submitted on behalf of the Board,

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Kermit B. Channell, II

Chair, North Carolina Forensic Science Advisory Board

cc: Roy Cooper, North Carolina Attorney General

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