EVALUATION OF THE IMPACT OF THREE FEDERAL PROGRAMS FOR DNA ENHANCEMENT IN U.S. FORENSIC LABORATORIES

Dawne Vernon, and Dennis J. Reeder
National Institute of Standards & Technology, Gaithersburg, MD

In the 1990s, the Department of Justice launched a number of programs aimed at improving the crime-solving capabilities of the nation's crime laboratories. Specifically, these programs are intended to improve the quality and availability of DNA analysis service in the national forensic infrastructure, to integrate information systems used by forensic laboratories to identify criminal offenders more efficiently, and to improve multi-jurisdictional efforts in controlling crime.

Three programs have focused on improving DNA analysis capabilities:

- the Edward Byrne Memorial State and Local Law Enforcement Assistance Program (1990)
- the DNA Lab Improvement Program (1996), and
- the State Identification Systems Formula Grant Program (1997).

These federal programs for DNA enhancement were intended to accelerate progress in the following areas:

- identifying criminal suspects
- minimizing miscarriages of justice
- restraining the escalation of crime
- expanding advanced forensic capabilities nationwide, especially bringing new forensic capabilities to
- smaller local and regional crime laboratories
- increasing national standardization in the analysis of biological evidence.

The National Institute of Standards & Technology (NIST, Dept. of Commerce) and the National Institute of Justice (NIJ, Dept of Justice), through an inter-agency agreement with NIST's Office of Law Enforcement Standards, are engaged in an effort to assess the impact of these programs. The scope of this project will be outlined, and evidence will be presented concerning the various impacts seen because of program funding.

While these efforts are only in their initial stage, preliminary evidence indicates that the federal programs are realizing expected results. These programs are predicted to accelerate the adoption of advanced DNA analysis capabilities and the investigative functions that the technologies support. Preliminary findings show that anticipated outcomes are already occurring, both in terms of supporting criminal investigations and also in promoting tangible improvements to the national crime-solving infrastructure – expanding use of the national DNA databases (CODIS), and significantly accelerating the adoption of effective and standardized technologies across the nation.