CHALLENGE: DEVELOP AND INTEGRATE INNOVATIVE TECHNOLOGIES AND TOOLS INTO DHS OPERATIONAL MISSION SPACE

The Department of Homeland Security (DHS) Science and Technology Directorate (S&T) established the Forensics and Criminal Investigations Program to assist DHS and other law enforcement partners with research and development of tools and technologies than can be applied across multiple mission and application areas for federal, state, and local law enforcement. It is imperative for DHS and other law enforcement partners to have the necessary investigative tools to automatically recognize, collect, ingest, process, analyze, and share digital information to disrupt and dismantle criminal activity quickly and to safeguard our citizens and the nation from threats.

DESIGNING A PROGRAM TO MEET THIS CHALLENGE

The goal of the program is to enhance law enforcement's capabilities through research and development; the performance of technology gap analysis; road map solutions; development and testing of prototypes; development of training tools; and the integration of innovative forensics and criminal investigative technologies and tools into the operational environment to combat financial crimes, child exploitation, transnational criminal activity, cyber, illicit narcotics, and other related crimes. As a result of these efforts, DHS and its law enforcement partners' ability to ingest large amounts of data, conduct both traditional and digital forensics, analyze and share digital information and respond to new and emerging threats will be enhanced.

PROGRAM IMPACT

This program will enhance the technical investigative capabilities of DHS and other law enforcement partners to use data and intelligence to quickly identify, disrupt, dismantle, and solve crimes. It will provide the law enforcement community with the necessary investigative tools and training to automatically recognize, collect, ingest, process, analyze, and share digital information. Also, the use of modeling and simulation, tools, and techniques will allow for a more robust assimilation of tools into the operational environment.

The program's current focus areas are:

- Digital forensics and exploitation
- Law enforcement analytics
- Identity investigations
- Lawful collections
- Adaptive capabilities
- Traditional forensics

PROGRAM MILESTONES

Planned activities for this program include:

- Develop advanced analytic tools
- Develop a framework outlining technology gaps and a roadmap for research requirements
- Enhance data extraction tools
- Develop modeling and simulation tools

PARTNERS AND PERFORMERS

Partners include:

- DHS Immigration and Customs Enforcement, the Office of Intelligence and Analysis, U.S. Secret Service, and other DHS Components
- State and local law enforcement

Performers include:

- Industry
- Academia