

*The National Institute of Justice (NIJ) Corrections Technology Program promotes technology development and evaluation through solicitation efforts and through the Corrections Technology Center of Excellence (CoE), which is managed by University of Denver. Learn more at <http://www.justnet.org>.*

*The goal of NIJ's Corrections Technology Program is to improve correctional operations of state, local, tribal and federal agencies by improving:*

- *The safety of the public, staff, offenders and visitors within correctional agencies.*
- *Safety and efficacy in community corrections through enhanced offender reentry.*
- *The allocation of resources within correctional agencies to reduce costs, enhance staff management and reduce injuries to staff, offenders and visitors.*
- *Collaboration between state, local, tribal and federal correctional agencies and other criminal justice agencies through the integration of technology information.*

## What Are the Current NIJ Corrections Technology Program Projects?

- **Research Program on Non-Toxic Drug Detection and Identification Aerosol Technology** Mistral Security, Inc. (MSI) conducted an evaluation of its drug detection and identification system, which consists of four types of aerosol sprays and three types of test papers for marijuana, cocaine, heroin and methamphetamine. Used in different combinations, the sprays and test papers can detect trace quantities of four important categories of drugs. This pilot study within residential community corrections conducted by an independent third-party evaluator determined if use of a non-toxic, aerosol/ampoule drug detection and identification system affected operations and improved interdiction and containment of drugs. Download the final report from this project, completed in 2013, at <https://www.ncjrs.gov/pdffiles1/nij/grants/240599.pdf>.
- **Correctional Operational Trend Analysis System (COTAS)**. The Florida Department of Corrections (FL DOC) is developing software to create a correctional crime mapping and information management system. COTAS would be used to identify trends, patterns and areas of concerns within specific individual institutions and



statewide. The creation of a data warehouse, development of data indicators and predictors, and internal beta testing have been completed. The Florida Department of Corrections (FL DOC) developed software to create a correctional crime mapping and information management system. COTAS can be used to identify trends, patterns and areas of concerns within specific individual institutions and statewide. You can download the final report for this project, completed in September 2013, from <https://www.ncjrs.gov/pdffiles1/nij/grants/247030.pdf>.

■ **GeoShadow: Evaluating the Effectiveness of ODOC's Location-based Offender Monitoring System.** Oklahoma University will evaluate the Oklahoma Department of Corrections' (ODOC) current use of its global positioning systems (GPS) monitoring system and develop a geographic information system (GIS) toolkit for spatiotemporal analysis of movement patterns of individual GPS participants and group behaviors. Further development will expand on algorithms and functions the university has developed, as well as create additional tools to improve automated ease of use.

■ **Standards and Testing Program for Offender Tracking Technologies.** This program includes establishment of a Special Technical Committee (STC) to develop a standard and related documents relative to offender tracking technologies, review the major requirements for electronic supervision technologies, consult with leading manufacturers in the electronic supervision industry to determine the "state of the art" technology, develop minimum performance criteria and establish standard test protocols, which are validated by an independent test laboratory. All this is done with the expertise of practitioners, scientists, researchers, subject-matter experts, test laboratory representatives and representatives knowledgeable in standards development.

■ **Corrections Resource Center (formerly EMRC).** Further development of the former Electronic Monitoring Resource Center (EMRC) is planned, including the creation and management of a Corrections Technology Resource Center, a password-protected Web forum that makes information available on current and emerging technologies, vendor contact data and practitioner information.

■ **Corrections Technology Guidebooks.** This project includes development of user guides outlining correctional technologies, how they can be applied in an institutional corrections setting, implementation issues, the costs of establishing this capability and what benefits can be achieved. The Corrections Technology Center of Excellence has recently published the first effort, the *Greening Corrections Technology Guidebook*, and a second on cell phone forensics in a correctional setting is in development. This guidebook provides correctional administrators with a brief, yet comprehensive and informative, view of



sustainability-oriented green technologies. It reviews green technology's evolving role in correctional institutions and presents issues to consider when acquiring and implementing these technologies to reduce costs and increase the efficiency of resource use. From its release in November 2011 through May 2014, this document was downloaded 7,338 times.

■ **Field Search Software.** The NLECTC System manages the distribution of Field Search software. Field Search is a free tool designed specifically for non-technical criminal justice personnel. Field Search allows officers to quickly and efficiently scan a target computer to gather evidence such as Internet histories, images, multimedia files and results from text searches. Officers can then decide which evidence is of greatest value and can easily populate a report detailing their findings. The Field Search suite includes tools to examine Windows® as well as Macintosh® computers.

■ **Development and Implementation of PMIS for a Jail Environment.** The Performance Management Information System (PMIS) used by law enforcement agencies is being adapted to corrections environments. This study presents

an opportunity to field test a PMIS for corrections staff, and determine whether PMIS can predict suspensions and terminations among corrections staff and the extent to which the same set of minor incidents predict later serious problems in both law enforcement and corrections setting. PMIS could provide correctional administrators an early warning system to identify staff misconduct that potentially could affect the safe environment of the agency.

■ **Federal Partners Cell Phone Working Group Support.**

The Corrections CoE is facilitating continued collaboration between NIJ, the Federal Bureau of Prisons (BOP), the Federal Communications Commission (FCC), the National Telecommunications and Information Administration (NTIA), the NLECTC System and other designated agencies to further explore, understand and identify solutions in solving the problem of contraband cell phone use in corrections. This working group was established from the GAO Study titled, “Bureau of Prisons: Improved Evaluations and Increased Coordination Could Improve Cell Phone Detection.” In support of NIJ and the Federal Cell Phone Working Group, the CX CoE has coordinated a series of webinars on the issue of contraband cell phones in correctional facilities. Through June 2014, three webinars have taken place and are available for viewing on JUST-LINK, a forum exclusively for public sector criminal justice professionals. Members can sign in at <http://justlink.ipbhost.com>: scroll down to the Corrections forum to find Contraband Cell Phones, then click on the webinars on the right-hand side of the page to access them. If you are not a JUST-LINK member, you can join by sending name, rank/title, agency and mailing address, phone, and email to [justlink@justnet.org](mailto:justlink@justnet.org)

■ **Evaluation of Hand-Held Cell Phone Detectors.** Inmate use of smuggled cell phones is a high priority issue. Most of the countermeasures available to agencies are too expensive to be widely deployed. A number of vendors are heavily marketing hand-held cell phone detectors as a relatively inexpensive means of detecting cell phones. The Corrections CoE will conduct an operational evaluation that will provide objective, performance-based data that can be shared with the entire corrections community, and provide agencies with better information and save on the resources needed to conduct internal research and trials.

■ **IEPD Development for Offender Tracking Location**

**Data.** During the process of developing the OTS standard, NIJ’s Special Technical Committee identified the need for standardized protocols for Information Exchange Package Documentation (IEPD). Currently there are no protocols in place and challenges exist in that vendors use different terms for the data elements that they collect. The impact of the creation of an IEPD will be demonstrated in two major ways: 1. Agencies will have better access to and control of offender tracking data on demand. They will be better able to incorporate and use the data held by previous vendors as they begin operations with a new vendor. 2. An IEPD lays the groundwork for crime scene correlation on a national level.

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