Technology Update

Using Leverage to Aid Corrections

By David G. Boyd

or most of the National Institute of Justice's (NIJ's) technology program's history, initiatives relating to corrections-specific technologies have dealt almost exclusively with the development of standards for correctional equipment: jail locks, flame-proof mattresses, etc. A little more than three years ago, though, NIJ took steps through its Office of Science and Technology (OS&T) to fully integrate corrections into its overall technology program and thus, make corrections a full partner in the development and acquisition of affordable and effective technologies.

Putting Corrections Into The Technology Equation

To emphasize NIJ's commitment to the integration of the corrections community into the OS&T program, the word "corrections" was added to the name of its nationwide system of centers and offices that assist with providing technology information, expertise, research and development, and commercialization support - the National Law Enforcement and Corrections Technology Center (NLECTC). The change was not in name only. The composition of the NLECTC Advisory Council, which helps identify the technology needs and priorities of the criminal justice community, was changed to include a corrections component. This advisory body now is known as the Law Enforcement and **Corrections Technology Advisory** Council (LECTAC). Additionally, correctional experts, including a former warden, a researcher from the National Institute of Corrections and two former correctional officers, were added to OS&T staff to help provide balance to the larger program. Several high-priority corrections-related projects also were undertaken to balance the OS&T technology portfolio.

But, because funding for the criminal justice community in general is limited, OS&T decided early on that it was essential to leverage the correctional research and technology development efforts with research by communities with similar needs, such as the U.S. departments of Defense and Energy, and especially the federal laboratory system. By drawing on the major investments of time and money already made by these agencies, OS&T was able to kick-start several important projects, including the development of less-than-lethal technologies, surveillance and training systems, bomb disablement devices and contraband detection devices. These projects, in which relatively small monetary investments by NIJ leveraged very large, multibillion-dollar Defense and Energy department investments, quickly produced many successes for the law enforcement community.

Gaining Leverage

However, because Congress does not provide funding specifically for technology development for corrections (or for courts or prosecutors, for that matter), only a limited part of the OS&T budget can be used for corrections-specific projects, even though these projects may be just as important as those developed for other areas of the criminal justice system. For this reason, OS&T has greatly extended its leveraging strategy by identifying common needs among the several communities for which OS&T has funds: counterterrorism. school safety and forensic sciences, for example. Conversely, technologies considered primarily for correctional use may have applications in other fields. In fact, one of OS&T's earliest correctional technology projects provided the foundation for a major forensic sciences technology program.

At the urging of the corrections community, OS&T studied the use of telemedicine technologies in prisons. The initial evaluations were conducted in the Federal Bureau of Prisons (BOP) system and intended to assess the effectiveness of telemedicine technology as a medical delivery system and to identify any cost savings. The assessment showed the potential for significant savings in several areas and resulted in a major report, wider implementation of telemedicine technologies in the BOP and adoption by several state systems. A new examination of telemedicine technologies is now under way, this time in jail settings.

Interestingly, as the telemedicine study progressed, it became obvious that these same technologies could have promise in forensic applications. This realization led to a project with the New York State Crime Laboratory in Albany, in which what was learned in the prison telemedicine project was combined with technologies developed by the National Aeronautics and Space Administration (NASA) relating to space exploration. The result was an experimental set of technologies that will allow investigators at a crime scene to call on the analytical capabilities and expertise of forensic experts anywhere in the United States.

LECTAC's correctional subcommittee also identified a need for a device that would permit a correctional officer to transmit an emergency call for assistance, including information on his or her location so that help could quickly be sent to the right location. At that time, OS&T had an ongoing program to develop a personal alarm device for corrections. Unfortunately, funding for the project was limited. However, Congress had provided \$15 million for school safety and because school teachers also had expressed a need for a personal alarm monitor that would do in a school building essentially what correctional officers were looking for in a correctional setting, the marriage of the two needs was clear.

In this case, OS&T combined the requirements of the two communities in order to satisfy a similar need. The information gained from the development of the personal alarm device for corrections personnel will be applied to OS&T efforts to develop a similar device for school personnel. Technology demonstrations will be conducted in both school and prison settings.

Peering Into the Future

Other projects currently being developed promise to be just as useful in multiple criminal justice settings as

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well. Devices under development for explosive detection also will be adaptable for use in contraband detection. (The technical principles underpinning many of these explosive-detection systems make it possible, with very little modification, to alter them into drug detection systems.) This will allow investments in explosive-detection technologies for use in public buildings, courthouses and other facilities to be adapted to the detection of drugs in a wide range of facilities, including prisons. Likewise, guidelines published by OS&T for crime scene management and evidence handling also should be useful in a correctional setting, while less-than-lethal devices. surveillance equipment, enhanced robots and biometric tools can be applied in all criminal justice and public safety settings.

Taking advantage of leveraging opportunities, however, requires us to rethink how we approach the analysis and identification of technology needs in different constituencies. It requires that the individual constituencies of the criminal justice community move away from each discipline trying to develop its own unique solutions to what often are similar problems and toward an approach in which all freely share information and focus on opportunities for cooperation and collaboration.

LECTAC, which now is a joint community of nearly all criminal justice constituencies, offers an effective forum for such an effort. But this advisory group cannot do it alone. Each discipline must reach out to identify opportunities to adapt and to leverage what others already have accomplished. The American Correctional Association (ACA) is meeting this challenge by joining with OS&T in the creation of both an ACA technology committee and the development of an extensive set of workshops that are offered during the association's biannual conferences.

Having enough time, money and personnel always will be a hurdle. But if we can find ways to work smarter by working together in partnership, we can have highly effective and affordable technologies that will serve the entire criminal justice community.

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