



**NIJ**



Annual Report

NATIONAL INSTITUTE OF JUSTICE

To the President, the Attorney General, and the Congress:

It is my honor to transmit the National Institute of Justice's annual report on research, development, and evaluation for fiscal year 2006, pursuant to Title I of the Omnibus Crime Control and Safe Streets Act of 1968 and Title II of the Homeland Security Act of 2002.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "David W. Hagy". The signature is written in a cursive style with a large initial "D" and "H".

David W. Hagy  
Acting Principal Deputy Director, National Institute of Justice

'06



Annual Report

NATIONAL INSTITUTE OF JUSTICE

**U.S. Department of Justice  
Office of Justice Programs**

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## Highlights of the Year

Crime control today is a collaborative process grounded in innovative scientific research and community policing. The National Institute of Justice's (NIJ) crime and justice research evolves to meet the needs of the modern world, providing sophisticated technologies and an international perspective.

Increasing globalization and the widespread use of electronic media for communication and information exchange pose novel challenges for crime investigators. After 9/11, for example, law enforcement had to adjust and respond to the critical role of homeland security while continuing to prevent and control crime at the local level. Where electronic crimes such as cyberstalking and identity theft were rare 10 years ago, these have become prevalent and hard to target, aided by the ease of international communication and travel. Training for law enforcement now requires instruction in special investigative techniques—such as DNA analysis and computer forensics—for officers to solve and prosecute cases effectively.

NIJ provides objective, independent, evidence-based knowledge and tools to meet the challenges that crime and justice professionals face, particularly at the State and local levels. Research and development projects support the fieldwork of public safety professionals by advancing technology so that officers can make arrests without harming suspects or bystanders or endangering their own lives. Research is turned into practice that helps victims from diverse populations and communities. NIJ's partnerships with public agencies and private corporations leverage ideas and resources for use in law enforcement. Evaluations ensure return on investment and guide professionals in designing better programs. Results are published on NIJ's Web site, educating policy-makers, law enforcement officers, forensic experts, scientists, electronic crime investigators, victim advocates, and criminal justice researchers.

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### About the National Institute of Justice

*The National Institute of Justice (NIJ) is dedicated to researching, developing, and evaluating crime control and justice issues. NIJ creates resources for State and local criminal justice agencies that are relevant, timely, and cost-effective. Within the U.S. Department of Justice, NIJ is a component of the Office of Justice Programs.*

*In fiscal year 2006, NIJ made 514 awards for research, development, and evaluation, with an active award portfolio value of just over \$1.1 billion (see appendix A).*

*NIJ's initiatives identify best practices; develop performance standards and conduct compliance testing for law enforcement equipment; advance law enforcement technology; improve uses of DNA and forensic evidence; increase understanding about human trafficking; and help victims of rape, assault, and domestic violence.*

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### Challenges

Crime rates are dynamic, complex, and vary by locality. Criminologists work to understand the issues that contribute to changes that may become trends.<sup>1</sup> Studies suggest that social and economic conditions, incarceration rates, and law enforcement practices such as “hot spots” policing and officer accountability may have played a role in the trends observed in the 1990s and the early 21st century.

To find the best solutions for crime control, the Nation needs NIJ to perform empirical research that combines programmatic strategies, managerial accountability, and evaluative data to understand the dynamics of crime and shape technological progress.

<sup>1</sup> See, for example, “Mining the Crime Drop of the 1990s for Social Clues,” with A. Blumstein, J. Lauritsen, R. Rosenfeld, and F. Zimring, on National Public Radio’s *Talk of the Nation Science Friday*, February 16, 2007, at [www.npr.org/templates/story/story.php?storyId=7453416](http://www.npr.org/templates/story/story.php?storyId=7453416).



“I think that the need for empirical research on short-run change in crime at the national and local levels should be among the very highest priorities of the research community.”

—Richard Rosenfeld, Ph.D., criminologist at the University of Missouri-St. Louis

Prominent results of NIJ’s efforts are discussed in more detail in the following chapters. The highlights are presented here.

### **Faster, More Efficient Response to Crime**

Technological developments are increasing communication and speeding response to crime. Several NIJ-sponsored initiatives include:

- A public-private partnership between Cisco Systems, Inc., the Danville, Virginia, Police Department, and NIJ evaluated a device that lets officers communicate instantly across State lines. The success of this initial endeavor has encouraged NIJ to launch additional partnerships involving state-of-the-art communications equipment and technologies.
- The forensic examination of electronic devices like computers, cell phones, and personal digital assistants (PDAs) has emerged as a prominent and unique field of crime investigation. In 2006, NIJ completed work on several products that enhance officers’ ability to seize, extract, and store digital evidence with ease. Responding to electronic crime using digital forensics will remain a high priority at NIJ in the coming years.
- Officers have begun to use DNA analysis to investigate property crimes. An NIJ-funded study will assess how DNA can be used to solve high-volume serious crime and will identify cost-effective practices for collecting, analyzing, and using DNA evidence. Early reports indicate that DNA has helped catch burglars with extensive criminal histories. Final results of the study are expected in 2008.<sup>2</sup>
- Training programs on [www.dna.gov](http://www.dna.gov), which NIJ manages, provide court and law enforcement officers with comprehensive information on how to collect forensic DNA and use DNA evidence when prosecuting a case.

### **Improved Safety and National Security**

In 2006, NIJ continued its longstanding efforts to support law enforcement and crime and justice professionals—increasing officers’ safety during pursuit and arrest, helping investigators combat terrorism and prosecute international criminals, and keeping the Nation safe from terrorist attacks.

<sup>2</sup> DNA Expansion Demonstration Program, NIJ award no. 2005-ASP-TR-015, and IAA award no(s). 2005-DN-R-095, 2005-DN-R-096, 2005-DN-R-097, 2005-DN-R-098, and 2005-DN-R-099.

- Following a rigorous evaluation, the Institute implemented new interim requirements for evaluating the performance of body armor, ensuring that manufacturers provide armor with stronger fibers that maintain their ability to stop bullets during the company's warranty period. NIJ implemented these interim requirements in 2006, certifying more than 700 models. A revised standard will be published in 2007.
- In 2006, NIJ launched a groundbreaking study to examine deaths associated with conducted-energy devices (CEDs) (also known as electromuscular disruption devices and sometimes called stun guns). The study covers the physical and psychological effects of CEDs, such as excited delirium.
- NIJ awarded several grants in fiscal year (FY) 2006 to enhance research on international terrorism. One prominent study helps courts prosecute terrorists efficiently, analyzing defense and prosecutorial strategies.<sup>3</sup> Another examines how Islamic militants acquire skills and practices and compares extremist networks in Spain and the United Kingdom.<sup>4</sup>
- NIJ began laying the groundwork to examine research strategies and frameworks needed to improve policing in a post-9/11 world.

### Meeting the Needs of Victims

Research about victims and victimization in 2006 addresses the needs of diverse and international populations.

- Deaf victims and victims with limited English proficiency who experience abuse often have difficulty reporting crimes to law enforcement. NIJ provided recommendations for police training to overcome communication boundaries.
- The Prison Rape Elimination Act of 2003 (PREA) provides standards to reduce sexual assaults in prisons. NIJ issued three final reports in 2006 that directly address PREA. They discuss ways prisons can identify and counter sexual violence, systems for prisoners to report rape without social consequence, and psychological motivations behind sexual encounters in prison.
- Since 1998, NIJ has contributed knowledge to the issue of human trafficking. Research funded in 2006 will provide a comprehensive portrait of the illicit industry by which Chinese women are trafficked to other Asian

<sup>3</sup> *Organizational Learning and Islamic Extremism*, NIJ award no. 2006-IJ-CX-2007.

<sup>4</sup> *Prosecution of Terrorism Cases*, NIJ award no. 2006-IJ-CX-0026.

countries for sex work.<sup>5</sup> Additional projects examine the effect of antitrafficking legislation on successful prosecution.<sup>6</sup>

- In late 2006, NIJ considered options for building a national database of missing persons—a database that will match records of missing persons in one database with records of unidentified dead in another.

### Seeking Excellence

In 2006, NIJ asked the National Academy of Sciences to perform an evaluation of NIJ's goals and operations. The evaluation will be similar to the one the Academies conducted in 1976, which prompted several revisions in NIJ's policies and program areas. The results of the new evaluation are expected to expand and sharpen NIJ's capacity to respond to crime and improve the criminal justice system.

<sup>5</sup> *Case Study of Human Trafficking: The Transnational Movement of Chinese Women for Sex Work*, NIJ award no. 2006-IJ-CX-0008.

<sup>6</sup> *Prosecuting Human Trafficking Cases: Lessons Learned and Best Practices from the U.S. and Abroad*, NIJ award no. 2006-IJ-CX-0010.





## Enhancing Policing Through Science

NIJ's science efforts focus on providing criminal justice practitioners with improved tools and technologies to combat all types of crime.

### Examining Less-Lethal Alternatives

New less-lethal devices expand the range at which weapons and projectiles are effective; allow officers to make a quick, harmless arrest; and advance technological standards. NIJ collaborates with the U.S. Departments of Defense, State, Energy, and Homeland Security to carry out joint projects and convert military technology for use in law enforcement.

NIJ's less-lethal portfolio suggests model policies for introducing and using less-lethal weaponry to increase its effectiveness and to reduce the possibility of injury from its use. Despite their name, less-lethal devices can be lethal when used improperly. To counter the improper use of these technologies, NIJ sponsors officer trainings, advises law enforcement, and helps agencies network with one another. For example, NIJ has collaborated with the International Association of Chiefs of Police to publish a guidance document for the use of conducted-energy devices (CEDs), which are designed to shock and incapacitate subjects without killing them.<sup>1,2</sup>

**Evaluating CEDs.** In response to reports that CED technologies may have resulted in deaths, NIJ commissioned a study called "In-Custody Deaths Due to Use of Conducted Energy Devices."<sup>3</sup>

NIJ's deputy director for science and technology and the president of the National Association of Medical Examiners cochair a steering group that will assign a panel to review the details of a number of deaths in which the use of a CED could not be ruled out as a possible cause. The panel will review autopsy reports of victims and incident data from police reports. Results are expected in 2008.

<sup>1</sup> Cronin, J.M., and J.A. Ederheimer, "Conducted Energy Devices: Development of Standards for Consistency and Guidance," Office of Community Oriented Policing Services and Police Executive Research Forum, November 2006, available at [www.ojp.usdoj.gov/BJA/pdf/CED\\_Standards.pdf](http://www.ojp.usdoj.gov/BJA/pdf/CED_Standards.pdf).

<sup>2</sup> The most widely used CED is manufactured by Taser International.

<sup>3</sup> See NIJ Study: "In-Custody Deaths Due to Use of Conducted Energy Devices," National Institute of Justice, available at [www.ojp.usdoj.gov/nij/topics/technology/less-lethal/conducted-energy-devices.htm](http://www.ojp.usdoj.gov/nij/topics/technology/less-lethal/conducted-energy-devices.htm).

NIJ has made significant investments in less-lethal devices that use directed energy as an alternative to blunt trauma devices. These directed-energy devices deter individuals who attempt to commit illegal acts without causing them permanent harm.

NIJ-funded independent studies examine the physiological effects of CEDs. One such study assesses what happens when suspects who have been shocked with a CED experience “excited delirium,” an undefined physiological state that occurs when a person’s sympathetic nervous system is overexcited, possibly accompanied by a number of changes to the person’s blood chemistry.<sup>4</sup> Some research proposes that the cause of death in shocked victims might be excited delirium rather than direct physical damage from the device itself.<sup>5</sup>

**Examining blunt trauma devices.** Blunt trauma less-lethal devices—i.e., kinetic-energy devices, like police batons, rubber bullets, or bean bags—are intended to dissuade people from taking illegal actions. Although these devices are much safer than firearms, people hit with blunt trauma devices experience a range of injuries. Depending on where they strike, such devices can cause minor bruising or more serious injuries, including broken bones, damage to internal organs, eye damage, and even death. In FY 2006, NIJ funded the Less-Lethal Monitoring Program to examine the harm these devices cause. Through this program, which operates in 11 cities, a doctor attends to the person hit with a less-lethal device onsite and at the hospital and reports medical data and status throughout the treatment process.<sup>6</sup> Results of the study are expected in late 2007.

**Directed-energy devices.** NIJ has made significant investments in less-lethal devices that use directed energy, emitting electromagnetic radiation in the form of radio or heat waves, as an alternative to blunt trauma devices. These directed-energy devices deter individuals who attempt to commit illegal acts without causing them permanent harm; instead they cause severe, yet transient, discomfort. One such less-lethal weapon technology was derived from a U.S. Department of Defense initiative called the Active Denial System and will be modified for use in law enforcement. The technology emits electromagnetic radiation (radiofrequency waves) penetrating less than 1/64 of an inch into a person’s skin, exciting a person’s nerve endings and quickly creating an intolerable level of discomfort. The sensation is similar to the feeling of sticking one’s hand in an oven heated to 400 degrees Fahrenheit. Symptoms dissipate immediately when subjects move away from the energy path, and they experience no lasting health problems even if their eyes are exposed. NIJ’s research is developing a working prototype of the device that an officer can carry.<sup>7</sup>

<sup>4</sup> *Injuries Produced by Law Enforcement’s Use of Less-Lethal Weapons*, NIJ award no. 2006–DE–BX–K002.

<sup>5</sup> For a recently published study on excited delirium by Wake Forest researchers, see: Bozeman, W.P., and J.E. Winslow, “Medical Aspects of Less-Lethal Weapons,” *The Internet Journal of Rescue and Disaster Medicine*, 5 (1) (2005).

<sup>6</sup> *Injuries Produced by Law Enforcement’s Use of Less-Lethal Weapons: A Multicenter Trial*, NIJ award no. 2004–IJ–CX–K047

<sup>7</sup> *Solid-State Active Denial System Demonstration Program*, NIJ award no. 2004–IJ–CX–K035.

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### **Workshop Develops Policing Research Agenda**

*What direction should NIJ's policing research take? Some 40 knowledgeable and experienced law enforcement professionals and academic leaders came together in 2006 to answer this question. The group identified several pressing topics, including:*

- *Finding the best techniques for recruiting and retaining officers.*
- *Understanding the internal dynamics of police organizations and the impact of technology on policing.*
- *Identifying effective training for entry-level police officers and leadership training for first-line supervisors.*
- *Understanding how best to use CompStat concepts.<sup>8</sup>*

*The group emphasized the need for a large-scale, multiyear research initiative to produce baseline data over time as a starting point for developing policing performance measures. These data could also be a platform for studies to assess the impact of policing practices and techniques and test innovative strategies.*

*Some important questions that emerged from the discussion include:*

- *What steps need to be taken to develop performance measurement systems that assess the quality and effectiveness of agency- and individual-level policing?*
- *How, in what format, and to whom can research findings be disseminated so that the information is usable and, in the end, used by practitioners?*
- *How can more information be extracted from research to guide police officials on which strategies to pursue and how to implement them?*

*Proceedings from the policing workshop are available at [www.ojp.usdoj.gov/nij/events/policing-research-workshop](http://www.ojp.usdoj.gov/nij/events/policing-research-workshop).*

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<sup>8</sup> CompStat is an innovative approach to reducing crime, first implemented by the New York City Police Department. Using a series of weekly strategy meetings and reports, it asks local police chiefs to develop tactics to target illegal activity, making them accountable for crime in their jurisdiction.

Ballistic-resistant body armor has saved more than 3,000 lives since the first models were tested in the field in 1975.

NIJ and the U.S. Department of Defense have also created a prototype of a device that emits energy on the visible and infrared spectrum, called a Personnel Halting and Stimulation Response (PHaSR).

Like the Active Denial System, the PHaSR causes discomfort by targeting a person's nerve endings. In the next 2 years, researchers will develop a range finder that will tune the PHaSR's optical energy to the appropriate power needed to achieve the desired deterrent effect.<sup>9</sup>

### Body Armor Initiative

Ballistic-resistant body armor has saved more than 3,000 lives since the first models were tested in the field in 1975. In 2003, an officer in Forest Hills, Pennsylvania, sustained severe injuries when the body armor he was wearing failed to prevent penetration by a bullet it was designed to defeat. In response to the armor's failure, NIJ initiated a review to determine why the bullet was able to penetrate the armor.

Later that year, U.S. Attorney General John Ashcroft announced the U.S. Department of Justice's Body Armor Safety Initiative, directing NIJ to examine new and used Zylon<sup>®</sup>-based armor and to determine whether the certification process for ballistic-resistant armor required modification.

The examination showed that the Zylon<sup>®</sup> fibers comprising the body armor models of interest degrade over time when exposed to both moisture and light. In the Forest Hills incident, the fibers in the failed armor were 30 percent weaker than the fibers in a new armor vest. Additionally, 60 of 103 used armors containing Zylon<sup>®</sup> allowed at least 1 penetration during a 6-shot ballistic test. As a result, NIJ implemented the NIJ 2005 Interim Requirements for Bullet-Resistant Body Armor. These required ballistic-resistant body armor models to maintain their performance over the company's declared warranty period.<sup>10</sup>

To date, more than 700 models have been found in compliance with these interim requirements.

<sup>9</sup> The Air Force Research Laboratory at Kirtland Air Force Base in Albuquerque, New Mexico, was awarded \$300,000 to improve on the infrared laser less-lethal device, in particular to reduce the size and weight of the first prototype that was produced in 2006. The project period is from July 24, 2006, to July 24, 2007.

<sup>10</sup> Tompkins, D. "Body Armor Safety Initiative: To Protect and Serve... Better," *NIJ Journal* 254 (July 2006): 2-6.



NIJ is currently in the process of revising the existing ballistic-resistant body armor standard and compliance testing program to help ensure the ongoing performance of armor as it ages.<sup>11</sup>

### Sharing Information Electronically

Imagine an officer pulls a car over for speeding. The car's driver has an outstanding warrant in another State, but the ticketing officer has no access to this information. The driver departs with a simple traffic ticket. Recent NIJ-funded technological developments enhance the ability of officers to share information from databases in different jurisdictions so they can (1) obtain accurate and complete information about suspects, and (2) improve critical incident management. The Global Justice XML Data Model was developed for such information exchanges.

XML (eXtensible Markup Language) is a data formatting standard that enables disparate information systems or databases to communicate across agencies and jurisdictions. Because of the Global Justice XML initiative, led by the U.S. Department of Justice's Office of Justice Programs, justice-affiliated organizations are taking steps to ensure their existing data-sharing and exchange software is compliant with the Global Justice XML Data Model. This data can be easily shared and exchanged with the growing number of agencies using XML.

NIJ leads the research and development effort underlying this initiative, contributing more than \$1 million in research, development, and technical assistance to the effort in 2006. NIJ delivers information technology that allows subscribers to NLETS (the international justice and public safety information sharing network) to share interstate driver's license data and helps law enforcement agencies exchange information through networks like the Automated Regional Justice Information System. NIJ also researches methods to raise the quality of the data being exchanged within these systems.<sup>12</sup>

Collaboration with the National Law Enforcement and Corrections Technology Center (NLECTC) has helped NIJ develop model Global Justice XML specifications called Information Exchange Package Documents. These serve as

<sup>11</sup> See *Body Armor Standards and Testing*, National Institute of Justice, available at [www.ojp.usdoj.gov/nij/topics/protection/body\\_armor.htm](http://www.ojp.usdoj.gov/nij/topics/protection/body_armor.htm).

<sup>12</sup> More information about NLETS and the Automated Regional Justice Information System can be found at [www.ojp.usdoj.gov/nij/topics/information-led-policing/welcome.html](http://www.ojp.usdoj.gov/nij/topics/information-led-policing/welcome.html) and [www.nlets.org](http://www.nlets.org).

The partnership has successfully evaluated one solution for Danville's interoperability challenges, and jurisdictions around the country will benefit from NIJ's assessment and recommendations for repeating the effort.

guidelines for information exchanges that meet specific business needs and have been widely adopted, acting as starting points for other Global Justice XML efforts.

**Reading license plates.** Automatic license plate reader (ALPR) systems scan license plates of cars driving past a certain point on a road or from a moving patrol vehicle, often reading plates in multiple lanes of traffic. They can identify stolen vehicles, stolen license plates, or vehicles with outstanding warrants, matching plates against FBI, State, or local databases that have been downloaded into the reader's processor. Field testing in a multijurisdictional task force in Maryland recovered 8 stolen cars, found 12 stolen plates, and made 3 arrests in a single shift.<sup>13</sup> The Long Beach, California, Police Department has four patrol cars outfitted with ALPR. The department has scanned 3.3 million plates in 15 months, identified 1,992 lost or stolen plates, recovered 490 stolen vehicles, and arrested 92 suspects.<sup>14</sup> Future research will develop standards for sharing database information; explore data-mining strategies for information-led policing; and evaluate policies, performance, and new plate-reading algorithms.

**Public-private partnerships.** The police departments in Danville, Virginia, and its neighboring counties had no way to communicate with police officers in surrounding States or counties. A major thoroughfare took suspects across county and State borders. The police could only use a cell phone to call a dispatcher, who would call a dispatcher in the neighboring county, who would call a patrol car. The system was inefficient, often resulting in missed opportunities for arrest.

When Cisco Systems, Inc., announced its Voice over Internet Protocol (VoIP) system, which would allow officers in different jurisdictions to communicate in "real time" from their patrol cars, NIJ's communications technology program, CommTech, offered to evaluate the product for the Danville Police Department. CommTech, via NLECTC, is partnering with the Danville Police Department as an honest broker and third-party evaluator.<sup>15</sup>

Within the partnership, Cisco provides the Danville Police Department with a VoIP system, giving the department advanced technology it might not otherwise be able to afford and allowing NIJ to independently evaluate the technology.

<sup>13</sup>NLECTC, "No License to Steal," *TechBeat*, Spring 2006, available at [www.justnet.org/techbeat/spring2006/NoLicenseToSteal.pdf](http://www.justnet.org/techbeat/spring2006/NoLicenseToSteal.pdf).

<sup>14</sup>Christopher Morgan, Long Beach Police Department, Detective Sergeant and ALPR Administrator, presentation at NIJ's Applied Technology Conference, April 3–5, 2007.

<sup>15</sup>The CommTech program through the NLECTC system is delivering specialized technology assistance in cutting-edge technologies.

NIJ's evaluation allows public safety agencies to understand the product's strengths and weaknesses. The partnership has successfully evaluated one solution for Danville's interoperability challenges, and jurisdictions around the country will benefit from NIJ's assessment and recommendations for repeating the effort.

The Danville pilot partnership has grown to include surrounding counties, the Commonwealth of Virginia, and the State of North Carolina.

NIJ has plans to form additional public-private partnerships to assess additional state-of-the-art technologies that may advance communications, sensor surveillance, and information-sharing for law enforcement.<sup>16</sup>

<sup>16</sup>For more information, see *Communications Technologies (CommTech)*, National Institute of Justice, available at [www.ojp.usdoj.gov/nij/topics/technology/communication/welcome.htm](http://www.ojp.usdoj.gov/nij/topics/technology/communication/welcome.htm).





## Forensic Sciences: DNA and Beyond

From the crime scene to the courtroom, forensic science plays a vital role in the criminal justice system. NIJ's investigative and forensic sciences program is dedicated to solving crime, protecting the innocent, and identifying missing persons. NIJ develops tools, technologies, products, and services that help forensic laboratories reduce their case backlogs and strengthen their capacity and capabilities.

In 2006, NIJ's forensic science portfolio included projects that advance science and technology in the following areas: <sup>1,2</sup>

- Anthropology.
- Controlled substances.
- Crime scene investigation.
- DNA.
- Entomology.
- Explosives detection.
- Fingerprints.
- Firearms and toolmarks.
- Impression evidence, such as shoe and tire prints.
- Pathology.
- Toxicology.
- Trace evidence, such as fibers, glass, and paint.

In addition to research and development efforts, NIJ initiated several evaluation studies to assess the impact of forensic science in identifying suspects—whether it influences a suspect's decision to confess, and whether jurors are more likely to convict suspects in cases where DNA evidence is presented. NIJ is also evaluating how controlled substances evidence affects prosecution, suspect confessions, and juror decisions.

<sup>1</sup> NIJ-supported research in 2006 also developed two fast-capture fingerprint prototypes and provided guidance to top-level policymakers on other biometric technologies. See the "Biometrics" chapter for further information.

<sup>2</sup> For information on digital evidence and electronic forensics, see the chapter "Solving Digital and Electronic Crime."

NIJ's DNA research is some of the most visible and exciting. In 2006, NIJ provided funding under the President's DNA Initiative to ensure that forensic DNA reaches its full potential to solve crimes, protect the innocent, and identify missing persons.

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### **NIJ's DNA Vision**

*Through NIJ's "DNA vision," DNA will become a routine investigative tool that will enable law enforcement to focus its resources on the guilty early in an investigation and eliminate the innocent before charges are filed. NIJ will accomplish this by providing resources to State and local forensic laboratories to eliminate the current—and growing—backlog of untested evidence, to perform DNA testing in cases in which a person may have been wrongly convicted, and to identify missing persons. All the while, NIJ is committed to creating a Federal "exit strategy" to keep State and local partners on top of developments in DNA and forensics.*

*Significant work remains. NIJ continues to seek novel ways to improve scientists' ability to obtain DNA profiles from biological material, especially when that material is damaged or limited in quantity, by supporting a host of innovative research projects in human genetics, molecular biology, and biotechnology. In 2006, research at Ohio University and the National Institute of Standards and Technology led to a product that can generate a DNA profile from aged, degraded, or damaged samples. Known as "mini-STR," this cutting-edge DNA technology is now commercially available for identifying severely degraded human remains—often encountered in missing persons cases or mass disasters.<sup>3</sup>*

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### **DNA: The Ultimate Tool**

Although NIJ funding supports a wide range of forensic disciplines, NIJ's DNA research is some of the most visible and exciting. In 2006, the Institute provided more than \$107 million in funding under the President's DNA Initiative, a 5-year plan to ensure that forensic DNA reaches its full potential to solve crimes, protect the innocent, and identify missing persons. Information on all of NIJ's work through the President's DNA Initiative is available at [www.dna.gov](http://www.dna.gov). In 2006, this NIJ-managed Web site was named a finalist for the Federal Web Managers Best Practice award.

<sup>3</sup> STR stands for short tandem repeat. STRs are short sequences of DNA repeated throughout a person's genome. They are often used in forensics to identify criminals or mass disaster victims.

### Moving Research and Development to the Field

**Backlog reduction.** NIJ continued to provide funding to State and local DNA laboratories in 2006 to reduce the backlog of untested DNA evidence that overwhelms the Nation's crime laboratories. In 2003, officials estimated a backlog of 350,000 rape and homicide cases. To date, NIJ has provided more than \$100 million to perform DNA analysis on samples in more than 60,000 cases, including approximately \$4 million allocated to postconviction DNA testing. In addition, more than \$100 million has been provided to enhance the capacities and capabilities of State and local laboratories.<sup>4</sup> As an example of the impact of NIJ's efforts in this area, during 2006, a DNA match led to the arrest of a Missouri man accused of raping a 15-year-old girl in 1997.<sup>5</sup>

**Paul Coverdell Forensic Science Improvement Grants Program.** NIJ also provided more than \$18 million in assistance to State and local crime laboratories and medical examiners in 2006 under the Paul Coverdell Forensic Science Improvement Grants Program.<sup>6</sup> NIJ remains committed to improving the infrastructure of crime laboratories and ensuring that all forensic evidence can be analyzed in an effective, reliable, and timely manner.

**GPA program.** NIJ initiated the Grant Progress Assessment (GPA) program in 2005 to monitor the accountability of funding under the President's DNA Initiative.<sup>7</sup> In 2006, NIJ completed site visits to every State and local DNA grantee. These site visits verified that the objectives of the laboratory capacity-building and DNA backlog reduction programs are being met. NIJ also began a similar grant progress assessment for every Coverdell grantee. The GPA program will enable NIJ to strengthen its grants management and to identify model programs and promising innovations that can be shared with crime laboratories around the country.

**NEST project.** The NIJ Expert System Testbed (NEST) project, an evaluation of software that automates the assessment of DNA data and facilitates the entry of DNA profiles into the Combined DNA Index System (CODIS), the national DNA database, progressed tremendously in 2006.<sup>8</sup> This project will increase a laboratory's capacity to perform DNA analysis, thereby increasing the crime-solving potential of the national DNA database.

<sup>4</sup> "Forensic Casework DNA Backlog Reduction Program Formula Grants," *NIJ Awards in FY 2006*, National Institute of Justice, available at [www.ojp.usdoj.gov/nij/awards/2006\\_topic.htm#forensic-casework](http://www.ojp.usdoj.gov/nij/awards/2006_topic.htm#forensic-casework).

<sup>5</sup> Columbia Daily Tribune staff, "DNA Leads to Arrest in 1997 Rape: 15-year-old Girl Assaulted in Her Bedroom," *Columbia Daily Tribune*, (November 8, 2006) available at [www.columbiatribune.com/2006/Nov/20061108News001.asp](http://www.columbiatribune.com/2006/Nov/20061108News001.asp).

<sup>6</sup> "Paul Coverdell Forensic Science Improvement Grants," *NIJ Awards in FY 2006*, National Institute of Justice, available at [www.ojp.usdoj.gov/nij/awards/2006\\_topic.htm#paul-coverdell](http://www.ojp.usdoj.gov/nij/awards/2006_topic.htm#paul-coverdell).

<sup>7</sup> For more information, see *Grant Progress Assessments*, National Forensic Science Technology Center, available at [www.nfstc.org/programs/assessments/gpa\\_dna.htm](http://www.nfstc.org/programs/assessments/gpa_dna.htm).

<sup>8</sup> For more information, see *NIJ Expert Systems Testbed Project*, National Institute of Justice, available at [www.dna.gov/lab\\_services/expert\\_systems](http://www.dna.gov/lab_services/expert_systems).

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### **Solving Cold Cases**

*In 1984, the decomposed remains of a person were found in a shallow grave near Deer Creek, Montana. The “Debbie Deer Creek” case was unsolved until the NIJ-supported efforts of the Center for Human Identification at the University of North Texas used mini-STR technology to positively identify Marci Bachmann, a young woman who had been missing for 22 years.*

*“In some of the most heartbreaking and horrendous cases, we used to have to accept that some DNA samples simply could not be tested,” said Dr. Arthur Eisenberg, director of the Center. Eisenberg said that with the commercial availability of this new technology in 2006, more human remains will be identified (the most recent estimate of the number of unidentified human remains in the country exceeds 40,000) and more crimes will be solved.*

*The Center for Human Identification provides DNA testing of unidentified human remains and family reference samples. NIJ supports the Center’s use of mini-STR technology and the development of better extraction procedures for obtaining nuclear and mitochondrial DNA (mtDNA). This work may play a critical role in advancing the Nation’s ability to solve crimes, administer justice fairly, and identify remains.<sup>9</sup>*

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### **Training and Technology Transfer to the Field**

To ensure that the results of its research and development reach as many criminal justice professionals as possible, NIJ hosts conferences, creates training tools, and publishes information on new technologies and practices. In 2006, NIJ’s work developing cutting-edge tools and providing innovative forensic research reached:

- **Crime laboratory personnel** through “DNA academies” and technology transfer workshops.

<sup>9</sup> For more information, see Ritter, N., “Missing Persons and Unidentified Remains: The Nation’s Silent Mass Disaster,” *NIJ Journal* 256 (January 2007): 2–7.



To ensure that the results of its research and development reach as many criminal justice professionals as possible, NIJ hosts conferences, creates training tools, and publishes information on new technologies and practices.

- **Investigators, top-level policymakers, victim advocates, and families** through four regional conferences that focused on solving missing persons and unsolved cold cases.
- **Judges, prosecutors, and defense attorneys** through *Principles of DNA for Officers of the Court*, online training on how DNA evidence is used from the crime scene to the laboratory, and from the courtroom to postconviction testing.<sup>10</sup>

On the fifth anniversary of the 9/11 terrorist attacks, NIJ published a report that highlighted the use of new DNA technologies to identify severely fragmented and degraded human remains. NIJ widely disseminated *Lessons Learned From 9/11: DNA Identification in Mass Fatality Incidents* in print, electronic, and CD-ROM formats.<sup>11</sup> The response—nationally and internationally—has been enormous. In 2007, the report was given the first place Blue Pencil Award for Technical and Statistical Reports by the National Association of Government Communicators.

**Targeting drug manufacturers.** State and local law enforcement partners face challenges when targeting the continuously changing methods of methamphetamine manufacture. These changes make it very difficult for police to know what to look for and how to test for this illicit drug. To meet the challenge, NIJ supports the Washington State Patrol's work on identifying characteristics of emerging methamphetamine substances and manufacturing methods. NIJ also sponsors the Forensic Resource Network's training of law enforcement personnel.

### Where to Go From Here: Needs Assessment

In 2006, Congress asked NIJ to assess the needs of the forensic science community. To fulfill this request, NIJ asked the National Academy of Sciences (NAS) to analyze gaps in forensic science training, equipment, space, and research. NIJ will continue to monitor NAS progress in assessing how to:

- Maximize forensic science technologies and techniques.
- Identify potential scientific advancements to assist law enforcement.
- Disseminate best practices for collecting and analyzing forensic evidence.
- Examine the role of the forensic science community in homeland security.
- Increase the number of forensic scientists and medical examiners.

<sup>10</sup>This training has been so successful that after an initial printing of 18,000 CD-ROMs in February 2006, NIJ printed 10,000 more in November.

<sup>11</sup>Kinship and Data Analysis Panel, *Lessons Learned From 9/11: DNA Identification in Mass Fatality Incidents*, September 2006, NCJ 214781.



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## Solving Digital and Electronic Crime

Computer forensics is a major part of today's crime scene investigations. Suspects make calls on their cell phones, record dates in their electronic calendars, describe their exploits in e-mail or in online blogs, and meet potential victims on social networking sites (e.g., MySpace). Police officers must know how to collect forensic evidence properly and obtain electronic information quickly. For example, turning off a suspect's BlackBerry® may alter evidence the device contains. NIJ's electronic crime portfolio advances and maximizes the criminal justice system's use of these evolving new media.

### Recognizing and Seizing Digital Evidence

First responders must know how to recognize and seize digital evidence at a crime scene. Potential evidence may include hardware, software, storage media, wireless networking routers, CDs, thumb drives, and cell phones or personal digital assistants (PDAs). These devices can carry vital information about victims and offenders that can aid in prosecutions and missing persons cases.

NIJ's Electronic Crime Partnership Initiative (ECPI) has created a training program called *Digital Evidence Recognition for First Responders*. The program will help law enforcement officers understand the crimes in which electronically stored data might be valuable evidence. Officers will learn to recognize digital evidence and to properly seize, handle, transport, secure, and store computers and digital media without damaging the integrity of the evidence.

**Mobile device forensics.** An NIJ-funded grant is developing the Forensic Card Reader, a tool that allows law enforcement officers to extract data from the memory chip(s) of cell phones. The extracted information includes the user's phone book, call logs, image files, text messages, and deleted data. A device used in conjunction with the reader, called a Cell Phone Analyzer, takes the chip's data and translates it into a printed report that officers can use in investigations.

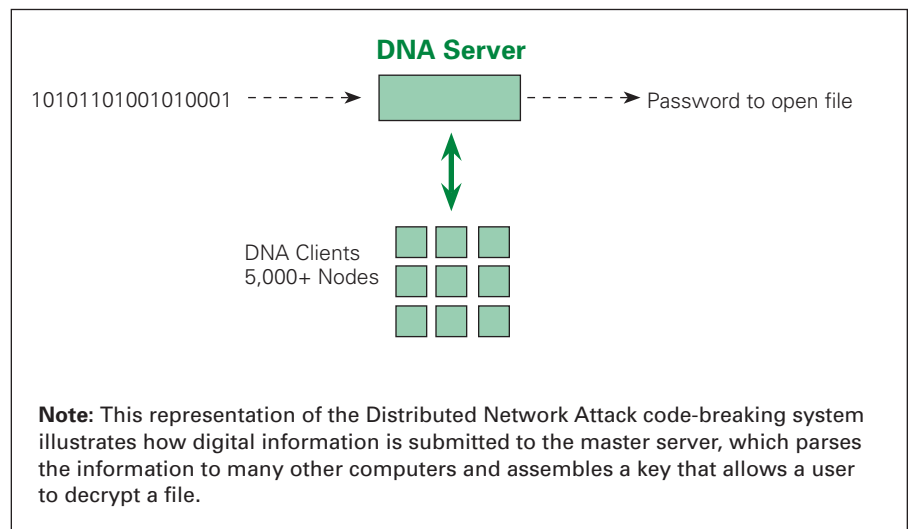
Personal electronic devices can carry vital information about victims and offenders that can aid in prosecutions and missing persons cases.

### Large-Scale Code Breaking

Sometimes law enforcement officers encounter encrypted files that they cannot open. An NIJ-funded project, the Distributed Network Attack (DNA) for Large-Scale Code Breaking, creates an online solution to this problem.

When investigating officers need to open an encrypted file—in other words, need to break a code or identify the encryption key—they use a password recovery tool to gather the first 60 bytes of digital information from the encrypted file. They then electronically submit this digital information to the DNA server. Once the DNA master computer has received the investigator's submission, it parses the information to many computers on the DNA network, each of which works to assemble a small portion of the encryption key. The DNA master computer assembles all of the pieces of the encryption key and sends the results back to the investigating officers. The investigating officers then download the encryption key and enter it into the password recovery tool, enabling them to decrypt the contents of the suspect file.<sup>1</sup>

### Distributed Network Attack Code-Breaking System Process



<sup>1</sup> *Distributed Network Technology for Large-Scale Code Breaking (The DNA Project)*, NIJ award no. 2005-DE-BX-K034.

### Computer Forensics Tool Testing Project

NIJ collaborates with the National Institute for Standards and Technology (NIST) through a program called the Computer Forensics Tool Testing (CFTT) project. CFTT tests the digital evidence acquisition and analysis tools that investigators use to determine whether tools work as they should.<sup>2</sup>

In FY 2006, the project tested a number of write block devices, which preserve the integrity of digital evidence when officers remove data from an electronic device. Thirteen test results were published in 2006 and are available through the NIJ and NIST Web sites.<sup>3</sup>

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### Experts Guide NIJ's E-Crime Efforts

*The NIJ-funded Electronic Crime Partnership Initiative (ECPI) finds technology solutions for State and local law enforcement by building and sustaining partnerships with criminal justice, industry, and academia. ECPI's multidisciplinary team helps law enforcement officers solve computer crimes. For example, ECPI cosponsored a "Bag-'n'-Tag" course to teach officers how to recognize, seize, and handle digital evidence at a crime scene. In 2006, ECPI continued to explore solutions to eliminate one of the major impediments to a cybercrime prosecution: the time it takes for an Internet service provider (ISP) to respond to a subpoena. Currently, ISPs can take several weeks to produce records, but with the creation of secure, limited-access servers around the country, ISPs could respond more quickly to subpoenas and increase the number of successful prosecutions.<sup>4</sup>*

<sup>2</sup> Learn more at NIST's site: [www.cftt.nist.gov](http://www.cftt.nist.gov).

<sup>3</sup> See "Write Block Devices," *Computer Forensic Tool Testing*, National Institute of Justice, available at [www.ojp.usdoj.gov/nij/topics/ecrime/cftt.htm#writeblock](http://www.ojp.usdoj.gov/nij/topics/ecrime/cftt.htm#writeblock).

<sup>4</sup> For more information, see NIJ's Web site on ECPI at [www.ojp.usdoj.gov/nij/topics/ecrime/ecpi.htm](http://www.ojp.usdoj.gov/nij/topics/ecrime/ecpi.htm).





## Advancing Biometric Identification

Biometrics is the automated use of biological and physical characteristics to recognize a person's identity. Faster and more accurate identification enhances officer safety, detects criminals, secures facilities and information systems from unauthorized access, makes borders more secure, and prevents identity theft.

### Setting the National Agenda on Biometrics

The Executive Office of the President of the United States organized the National Science and Technology Council's Subcommittee on Biometrics to shape national efforts and coordinate Federal agencies with an interest in biometrics. The subcommittee is dedicated to finding the best ways to achieve real-time identification and tracking and to increase personal, corporate, and government security.

The biometrics subcommittee, cochaired by an NIJ senior program manager, is a collaborative team of 13 government organizations that creates White House-level policies on the development and use of biometrics. In 2006, the subcommittee produced 14 documents that educate program managers, law enforcement, and the general criminal justice audience on the latest advances in biometric technology.<sup>1</sup> Producing these documents laid the groundwork for the subcommittee's future projects. Upcoming initiatives involve investing in projects that advance biometric technologies; protect privacy; and strengthen interagency, international, and public-sector partnerships.

The subcommittee will also facilitate an informed debate on biometrics and privacy. The debate is expected to spur discussion about the ethics involved in using these technologies and how they can be most effective.<sup>2</sup>

<sup>1</sup> The documents include a biometrics glossary; an FAQ; guides to biometric technologies; and a report on methods used in face, hand, fingerprint, and speaker recognition. They are available at [www.biometrics.gov](http://www.biometrics.gov).

<sup>2</sup> See Blackburn, D., "Taking Today's Biometrics to Meet Tomorrow's Needs: Meeting the Challenge Together," PowerPoint Presentation, NSTC Subcommittee on Biometrics, September 2006, available at [www.biometrics.gov/NSTC/BCC2006.pdf](http://www.biometrics.gov/NSTC/BCC2006.pdf).

“If successful, the fingerprint initiative will leave a valuable legacy for law enforcement.”

—James B. Comey, Former Deputy Attorney General

### Fast-Capture Initiative

Standard fingerprinting techniques require an officer to grasp an individual’s hand and roll each of his fingers across a fingerprint card or live-capture scanner. The technique takes several minutes, requires a trained technician, and does not capture an imprint of the side of the hand or the palm—parts of the hand investigators often collect prints from at crime scenes.

NIJ-funded scientists and engineers are working on new tools and techniques that will capture the equivalent of 10 rolled fingerprints in less than 15 seconds and both palm prints in less than 1 minute. NIJ’s fast-capture initiative will improve fingerprint image quality, decrease the time it takes to capture fingerprints, and develop products that are affordable and can be manufactured in the near future.

NIJ collaborates with several agencies on the fingerprint initiative—the Defense Advanced Research Projects Agency, the Federal Bureau of Investigation, the U.S. Department of Homeland Security, and the Justice Management Division. Between 2005 and 2007, this initiative will give more than \$8.3 million to fund four projects at universities and corporations across the Nation.<sup>3</sup>

Three unique technological approaches are being used to find a fast-capture fingerprinting technology:

- Two projects use high-resolution camera imaging to capture fingerprints. One such model, created by Carnegie Mellon University, constructs a three-dimensional visual model of the entire hand using 10 micro-cameras positioned at different angles to image the hand.<sup>4</sup>
- A project by TBS North America, Inc., uses a three-camera system that captures the print as it scans under the fingers. The system captures detailed finger ridge and valley characteristics using novel image-processing algorithms.<sup>5</sup>
- A project by Cross Match Technologies, Inc., uses a two-dimensional silicon contact sensor array on a polymer plastic foil to capture an equivalent rolled fingerprint. The polymer conforms to the shape of the finger on contact. A 64 x 64-pixel model has been developed and tested.<sup>6</sup>

These projects produced two single-finger prototypes in 2006, which experts at NIJ and the National Institute of Standards and Technology reviewed and approved for further development. Future prototypes will capture all fingers or the entire hand; final prototypes are anticipated in 2007 and 2008.

<sup>3</sup> Miles, C., *Sensors and Surveillance (SSU) Program Plan*, PowerPoint presentation, National Institute of Justice, January 2007.

<sup>4</sup> *Handshot ID: A Fast 3-D Imaging System for Capturing Fingerprints, Palm Prints, and Hand Geometry*, NIJ award no. 2005-IJ-CX-K060.

<sup>5</sup> *Fast Capture Technology to Capture Up to 10 Roll-Equivalent Fingerprints Within 15 Seconds*, NIJ award no. 2005-IJ-CX-K071.

<sup>6</sup> *Fast Capture Fingerprint and Palm Print Technology*, NIJ award no. 2005-IJ-CS-K067.



### Mobile Biometrics

In 1999, NIJ funded the development of the Integrated Biometric Identification System (IBIS), a device that allowed patrol officers to capture facial images and fingerprints and checked them against the local identification system. The device was large, weighed 5 pounds, cost \$6,000, and returned search results in 2 to 3 minutes.

In 2006, technological advances led to the introduction of the BlueCheck™ device, which is smaller than a cell phone, weighs 3 ounces, costs \$1,500, and returns a fingerprint search in less than 1 minute. The device uses Bluetooth® technology to send fingerprint data to the computer in the officer's patrol car. The San Joaquin County, California, Sheriff's Department began testing the device in 2006. Within a week, they arrested more than 12 parolees with outstanding warrants.<sup>7</sup>

The Pinellas County Sheriff's Office in Florida has been using digital cameras to take facial mugshots of suspects in the field. Over the past 2 years, deputies in Pinellas County have used these cameras to correctly identify 295 people who lied about their identity. There are currently 50 Pinellas County Sheriff's Office patrol cars equipped with mobile facial recognition technology.<sup>8</sup>

NIJ has provided funds for a number of police departments across the country to buy and test these products. Their success has inspired a number of companies to begin manufacturing and selling similar mobile fingerprinting devices.

### Facial Identification

Facial recognition technologies hold the potential to increase security and officer safety by identifying suspects. These recognition systems use advanced, multidimensional imaging techniques to piece together facial images. In 2006, an NIJ-funded project at Sonic Foundry, Inc., produced a prototype of facial recognition and audio analysis software.<sup>9</sup>

Other facial recognition systems funded in 2006 continue to advance the technologies involved in suspect identification. A grant at the New Jersey Institute of Technology is developing a system that uses an advanced algorithm to identify faces.<sup>10</sup> This algorithm has shown success in solving other complex

<sup>7</sup> Television news reports describing the BlueCheck™ device in San Joaquin County, California, can be found at [www.news10.net/display\\_story.aspx?storyid=24024](http://www.news10.net/display_story.aspx?storyid=24024), and [cbs13.com/local/local\\_story\\_031192349.html](http://cbs13.com/local/local_story_031192349.html).

<sup>8</sup> "Mobile Facial Recognition Technology Used To Identify Wanted Suspect Who Flew From Deputies After Suspicious Incident," Press Release, Pinellas County Sheriff's Office, August 23, 2006, available at [pcsoweb.com/News%20Releases/Releaseltem.aspx?id=1018](http://pcsoweb.com/News%20Releases/Releaseltem.aspx?id=1018).

<sup>9</sup> *Advanced Media Analysis Project*, NIJ award no. 2003-IJ-CX-K001.

<sup>10</sup> *Facial and Iris-Based Biometric System*, NIJ award no. 2006-IJ-CX-K033.

pattern-recognition problems. Another grant, awarded to GE Global Research Corporation, will create a prototype of a program that extracts facial images from surveillance video. The images are rotated in three dimensions as necessary and combined to produce a recognizable image.<sup>11</sup>

### Iris Recognition

Each person has a unique iris that can be used for individual identification. Iris-recognition systems take a picture of an individual's eyes and scan a computer system for a match. The picture acts as a personal ID that can grant access to office buildings, accounts, or other limited-access entities.

One of NIJ's biometric projects involved piloting a program to use iris recognition to guarantee children's safety. Following successful pilot testing in the New Egypt, New Jersey, school system in 2003, a second round of iris-recognition prototype systems was installed in the Freehold Borough, New Jersey, school district in FY 2006.<sup>12</sup> This system improved on the New Egypt system by adding automatically printed badges and "tailgating" technology, a way to make sure someone cannot hold a door open for others to enter. Researchers also improved the locations of the iris systems to increase their accuracy.

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### Setting Standards for Face and Iris Recognition Technology

*In partnership with the National Institute of Standards and Technology, NIJ sponsored two "technology potlucks" in 2006. Thirty domestic and international organizations came together to evaluate and test state-of-the-art face- and iris-recognition technologies at the "Face Recognition Vendor Test" and "Iris Challenge Evaluation." The vendors brought their refined algorithms or software programs to help scientists determine which algorithms were most effective at matching faces or irises.<sup>13</sup>*

*Learn more about the Face Recognition Vendor Test at [face.nist.gov/frvt/frvt2006/frvt2006.htm](http://face.nist.gov/frvt/frvt2006/frvt2006.htm) and the Iris Challenge Evaluation at [iris.nist.gov/ice](http://iris.nist.gov/ice).*

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<sup>11</sup> *Active 3-D Face Capture*, NIJ award no. 2006-IJ-CX-K045.

<sup>12</sup> Cohn, J.P., "Keeping an Eye on School Security: The Iris Recognition Project in New Jersey Schools," *NIJ Journal* 254 (July 2006): 12-15.

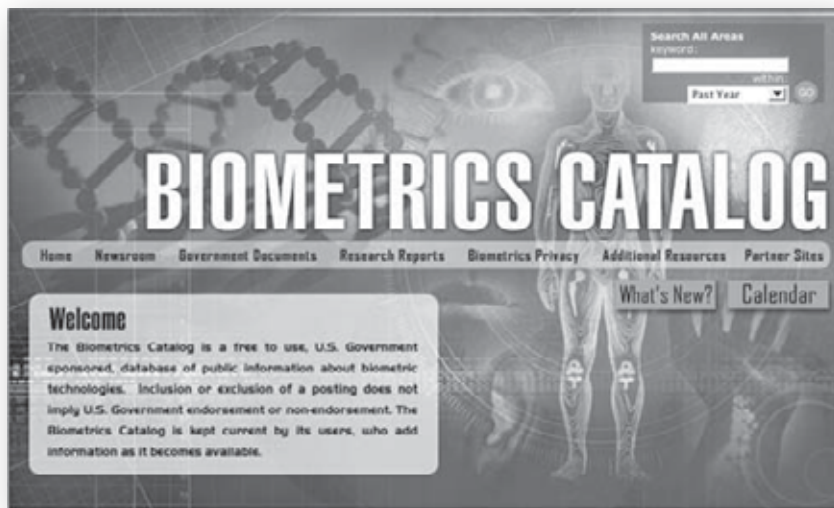
<sup>13</sup> An algorithm is a step-by-step computational procedure for solving a problem in a finite number of steps.

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### **Biometrics Online**

*NIJ cosponsors some of the top Web sites for biometrics information. Biometrics.gov (www.biometrics.gov) is the central source of information on biometrics-related activities of the Federal Government. Two sister sites—www.biometricscatalog.org and www.biometrics.org—provide a repository of biometrics-related public information and opportunities for discussion.*

*These sites encourage greater collaboration and information sharing in the field of biometrics research, providing current, free information to the crime and justice community and the general public.*







## Victims and Victimization

NIJ's Violence Against Women and Family Violence research program works to respond effectively to the needs of women and families who face abuse and victimization and to expand the criminal justice system's capacity to respond to an increasingly diverse population.

In FY 2006, NIJ expanded this research program's focus on violence against women with diverse language skills, physical abilities, resources, and cultural backgrounds. Although communities face challenges when responding to physical or sexual abuse, the linguistic or cultural barriers faced by certain communities may further hamper the criminal justice system's response to such crimes.

NIJ awarded \$5.2 million to study violence and victimization in FY 2006; much of the funding was made possible by the Violence Against Women Act of 2005. NIJ managed 17 active grants during that time related to domestic violence, sexual violence, and elder abuse.<sup>1</sup>

In creating initiatives to target violence against women, NIJ collaborates with the U.S. Department of Justice's Office on Violence Against Women and Office for Victims of Crime. These partnerships flourished in 2006, as did those with the U.S. Departments of Defense, Education, and Health and Human Services. Joint activities maximize Federal efforts to share ideas, disseminate findings, and identify ways to address domestic violence, sexual assault, teen dating violence, and stalking.

### Domestic Violence

Statistics show that 22.1 percent of women experience intimate partner violence, in comparison with 7.4 percent of men in their lifetime.<sup>2</sup> NIJ's domestic violence portfolio focuses on understanding the extent of violence against women and family members, identifying the causes and correlates of violence, and evaluating interventions. Research in 2006 has taken steps to improve judges' ability to meet the needs of battered immigrant women and to find innovative ways to monitor and modify batterer behavior.<sup>3</sup>

<sup>1</sup> For complete information about NIJ's violence against women portfolio, see the compendium of grants at [www.ojp.usdoj.gov/nij/vawprog/vaw\\_portfolio.pdf](http://www.ojp.usdoj.gov/nij/vawprog/vaw_portfolio.pdf).

<sup>2</sup> Tjaden, P., and N. Thoennes, *Full Report of the Prevalence, Incidence, and Consequences of Violence Against Women: Findings From the National Violence Against Women Survey*, November 2000, NCJ 183781; and Tjaden, P., and N. Thoennes, *Extent, Nature, and Consequences of Rape Victimization: Findings From the National Violence Against Women Survey*, January 2006, NCJ 210346.

<sup>3</sup> For example, a grant awarded to the BOTECH Analysis Corporation is examining the use of polygraph technology to monitor probation violations among high-risk batterers in the community: *Use of Polygraphs to Combat Violence Against Women*, NIJ award no. 2005-WG-BX-0010.

As a way of meeting the needs of those who have been abused or neglected, NIJ sponsors workshops that bring together practitioners from the field, subject-matter experts, and policymakers to learn from one another and help shape the agency's research agenda.

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### **Gathering Input From the Field**

*As a way of meeting the needs of those who have been abused or neglected, NIJ sponsors workshops that bring together practitioners from the field, subject-matter experts, and policymakers to learn from one another and help shape the agency's research agenda.*

*In 2006, NIJ sponsored two of these workshops. A workshop held in August on violence against women was designed to coordinate Federal efforts in the field. Federal professionals discussed strategies for disseminating information, improving methodology and study design, creating effective support systems, and initiating research where subject-matter experts still have questions.*

*Another workshop, in June, highlighted the importance of combating teen dating violence, bringing together 17 field experts to craft and enrich future research and discuss current programs to address the problem. The extent of teen victimization is difficult to estimate because adolescents are often unwilling to report violence. In a recent Centers for Disease Control and Prevention study, about 9 percent of high school students reported that violence occurred in their relationships.<sup>4</sup> Recent initiatives, since the passing of the Violence Against Women Act of 2005, have strengthened efforts and strategies to target this type of abuse.*

*Proceedings from these workshops are available at [www.ojp.usdoj.gov/nij/vawprog/conferences.html](http://www.ojp.usdoj.gov/nij/vawprog/conferences.html).*

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<sup>4</sup> Centers for Disease Control and Prevention, "Physical Dating Violence Among High School Students—United States," *Morbidity and Mortality Weekly Report* 55 (19) (2003): 529–552.

<sup>5</sup> Uekert, B.K., T. Peters, W. Romberger, M. Abraham, and S. Keilitz, *Servicing Limited English Proficient (LEP) Battered Women: A National Survey of the Courts Capacity to Provide Protection Orders*, October 2006, NCJ 216072.

**Victims who speak limited English.** NIJ-funded researchers investigated judges' ability to meet the needs of battered women with limited English proficiency.<sup>5</sup> The findings suggest that judges perceive they are meeting victims' needs, but the victims often do not feel their needs are met. Many courts provided an interpreter only at the final stage of a protection order, and smaller courts often could not find qualified interpreters. The study's

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### **Does Juvenile Delinquency Lead to Adult Criminal Behavior?**

*Research has shown a connection between juvenile delinquency in boys and later adult crime. Similar research on juvenile delinquent girls—a growing segment of the juvenile justice population—has not been conducted. In 2006, NIJ funded a study that will examine whether female juvenile delinquents become adult criminals, and whether men and women who were incarcerated as juveniles are more likely to abuse or neglect their children. The study will follow a sample of 1,000 formerly incarcerated juvenile delinquents from the date of their release to their 28th birthdays.<sup>6</sup>*

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recommendations include providing forms in multiple languages, improving outreach, and advancing language and interpretation services.

**Victims from other countries.** An NIJ grant awarded to the University of Minnesota will examine the victimization and legal problems experienced by battered women who were charged with international child abduction under the Hague Convention after they fled to the United States to escape abusive partners.<sup>7</sup>

### **Sexual Violence**

The National Violence Against Women Survey, sponsored by NIJ and the Centers for Disease Control and Prevention (CDC), estimates that more than 300,000 women and 93,000 men are raped each year.<sup>8</sup> To improve the criminal justice system's response to sexual assault and rape, NIJ's sexual violence portfolio has researched the nature and prevalence of these crimes and the efficacy of interventions. NIJ evaluates the multisystem response to sexual violence and the use of forensic approaches to sexual assault cases. The research program also emphasizes the importance of examining sexual violence as it occurs in diverse communities.

**Victims in the deaf community.** Research has shown that women who have been sexually assaulted are unlikely to report their victimization to the police.

<sup>6</sup> *Long-Term Consequences of Delinquency: Child Maltreatment and Crime in Early Adulthood*, NIJ award no. 2006-IJ-CX-0014

<sup>7</sup> *Justice System Response to Intimate Partner Violence*, NIJ award no. 2006-WG-BX-0006.

<sup>8</sup> Tjaden and Thoennes, 2006.

Women who are deaf or hard of hearing often have particular difficulty reporting sexual assault to law enforcement officials and receiving services. An NIJ-funded study examined how service providers and law enforcement can identify and meet the needs of women in the deaf community who have been sexually assaulted.<sup>9</sup> Findings show deaf women's experiences reporting encounters to the police were often frustrating because police frequently refused to write notes to communicate and had limited knowledge of sign language. Police stations were often inadequately equipped to respond to deaf sexual assault victims, lacking such services as around-the-clock sign language interpreters. The study suggests that police and service providers need additional education and training programs.

**Victims who are revictimized.** An NIJ-funded study examined the sexual assault histories of women and how these histories may have led to their incarceration or affected their current mental and physical health. The Kansas-based study gathered data about women living in a rural community, women receiving social services, and women being incarcerated. It examined whether past victimization could influence women's propensity to violence.<sup>10</sup> Of the 423 women in the study, 85 percent reported being sexually assaulted, with the highest percentage in the prison community. More than 90 percent of the women had experienced intimate partner violence. Experiencing physical and sexual abuse as a child had a negative impact on a woman's physical and mental health as an adult. Rape in adulthood had a negative impact on women's physical and mental health, but intimate partner violence in adulthood did not appear to affect women's well-being. The authors suggest that early intervention and social services for assault victims can prevent criminal behavior in adulthood.

## Elder Abuse

The best available estimates state that between 1 and 2 million Americans over the age of 65 have been "injured, exploited, or otherwise mistreated by someone on whom they depended for care or protection."<sup>11</sup> Elderly people who are physically abused or neglected often have few support structures for reporting the abuse, and the criminal justice system does not often prosecute the abusers. NIJ supports the development of new measurements of elder

<sup>9</sup> Obinna, J., S. Krueger, C. Osterbaan, J.M. Sadusky, and W. DeVore, *Understanding the Needs of Victims of Sexual Assault in the Deaf Community*, February 2006, NCJ 212867.

<sup>10</sup> Postmus, J.L., and M. Severson. *Violence and Victimization: Exploring Women's Histories of Survival*, November 2005, NCJ 214440.

<sup>11</sup> Bonnie, R.J., and R.B. Wallace, eds., *Elder Mistreatment: Abuse, Neglect, and Exploitation in an Aging America*, Washington, DC: National Academies Press, 2002.



abuse and neglect, gathering more accurate incidence and prevalence data to inform policy and practice. In addition, NIJ-funded research strives to develop forensic markers of elder abuse to detect this underreported crime. One FY 2006 study at the University of California examines pressure ulcers in the elderly and will determine when an ulcer is a sign that that person has been abused.<sup>12</sup>

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### **Preventing Child and Family Violence**

*Innovative prevention programs target violent behavior at its roots, before it starts. Several NIJ evaluations funded in FY 2006 examine the effectiveness of a number of programs that strive to prevent violent behavior in children or families:*

- **Violence prevention.** *SAFEChildren, in Illinois, targets children starting the first grade who come from high-risk, inner-city communities and tries to shape their behavior to avoid later delinquency and school failure.*<sup>13</sup>
  - **“Tribes” learning communities.** *This intervention in Washington State, aimed at elementary school students, trains teachers to create a supportive learning environment that fosters benevolent relationships and behaviors.*<sup>14</sup>
  - **Healthy Families New York.** *This program is intended to prevent child abuse by providing home treatment services to families where children are at risk of maltreatment. An NIJ evaluation will test how well the program prevents child abuse and neglect, changes parenting behavior, and reduces a child’s propensity to delinquency.*<sup>15</sup>
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<sup>12</sup> *Multisite Study to Characterize Pressure Ulcers in Long-Term Care Under Best Practices*, NIJ award no. 2006-IJ-CX-0029.

<sup>13</sup> *Evaluation of SAFEChildren, A Family-Focused Prevention Program*, University of Illinois, NIJ Award No. 2006-JP-FX-0062.

<sup>14</sup> *Outcome Evaluations of Tribes Learning Communities*, NIJ award no. 2006-JF-FX-0059.

<sup>15</sup> *Randomized Trial of Healthy Families New York: Does It Prevent Child Maltreatment?* NIJ award no. 2006-MU-MY-0002





## Corrections: Improving Programs and Practices

More than 7 million people—3.2 percent of all American adults—were incarcerated or on parole in 2005.<sup>1</sup> NIJ's corrections portfolio funds research, development, and evaluation initiatives to make prisons safer for both inmates and corrections officers, to assess alternate sentencing, and to evaluate prison reentry initiatives.

### Making Prisons Safer

In 2005, approximately 6,241 prisoners, or 2.8 per 1,000, reported that they had experienced sexual violence while incarcerated. The highest number of allegations involved staff-initiated sexual misconduct against inmates, closely followed by inmate-against-inmate nonconsensual sexual acts.<sup>2</sup> Although this rate was an increase from 2004, the reported incidence of sexual assault in prisons is low—a recent meta-analysis suggested that only 1.91 percent of prisoners reported sexual victimization over a lifetime of incarceration.<sup>3</sup>

In a study that examined inmates' perceptions of prison sex and sexual violence, 33.5 percent of male and 28.2 percent of female prisoners reported they were aware of a fellow inmate who had been raped by a staff member.<sup>4</sup> The same study, however, also found that 28 percent of men and 32 percent of women inmates felt that the policies and procedures of the prison they lived in could protect them from rape. NIJ's research in 2006 focused on understanding the prison culture that surrounds sexual violence and finding pathways to eliminate sexual violence and penalize offenders.

Congress passed the Prison Rape Elimination Act (PREA) in 2003 to create standards to reduce sexual violence in prisons, provide accurate information about the violence that occurs in corrections facilities, and increase prison accountability for inmate safety.

<sup>1</sup> *Corrections Statistics*, Bureau of Justice Statistics, available at [www.ojp.usdoj.gov/bjs/correct.htm](http://www.ojp.usdoj.gov/bjs/correct.htm).

<sup>2</sup> *Corrections Officials Reported More Than 6,200 Sexual Violations in the Nation's Prisons and Jails During 2005*, Bureau of Justice Statistics, available at [www.ojp.usdoj.gov/bjs/pub/press/svrca05pr.htm](http://www.ojp.usdoj.gov/bjs/pub/press/svrca05pr.htm).

<sup>3</sup> Gaes, G.G., and A.L. Goldberg, *Prison Rape: A Critical Review of the Literature*, March 2004, NCJ 213365.

<sup>4</sup> Fleisher, M.S., and J.L. Krienert, *The Culture of Prison Sexual Violence*, 2006, NCJ 216515.

Since then, NIJ has awarded eight grants to researchers investigating sexual violence in prisons. Three studies were completed in 2006 and issued final reports.

**1. Sexual violence in Texas prisons.** Texas prisons report the highest number of sexual assaults in the Nation, almost four times the national average. An NIJ-funded study assessed how the environment of the Texas prison system contributes to the high assault rate, how Texas's Safe Prison program functions to decrease assaults, and what aspects of the Texas program could be incorporated into other State models.<sup>5</sup>

The study's findings suggest that prisoners in Texas report incidents at relatively low rates. Allegations are often difficult to substantiate, mostly because prisoners delay reporting incidents, making it difficult for officers to find witnesses or physical evidence. Assailants were profiled as older than the victims, more likely to be black or Hispanic, often involved in gang activity, and more likely to be involved in other criminal offenses. The report suggests ways prisons can profile victims and assailants, and recommends increased staff efforts to monitor and prevent assaults.

**2. The social structure behind violence.** A series of anonymous interviews examined inmate perceptions of prison sexual violence and how the prison community responds to incidents. Inmates described a self-policing prison system with protective social arrangements that kept many inmates safe from harm. They thought sexual violence did not occur frequently and suggested that only a victim's interpretation of an aggressive encounter could determine if it was rape. Some inmates used sex to repay debts, had sex with officers to receive contraband, or became involved in consensual homosexual encounters.

Researchers suggested that prison staff should focus on increasing inmate supervision and finding better ways to resolve inmate concerns. Prisons need to revise their systems for examining reported incidents so that investigations support victims' needs and do not isolate them from their community.<sup>6</sup>

**3. Policies to counter sexual violence.** An NIJ-funded study surveyed State corrections leaders on the policies and programs they were using to address sexual violence. Researchers identified working practices and visited State sites that had promising approaches to reducing sexual violence.

<sup>5</sup> Austin, J., T. Fabelo, A. Gunter, and K. McGinnis, *Sexual Violence in the Texas Prison System*, 2006, NCJ 215774.

<sup>6</sup> Fleisher, M.S., and J.L. Krienert, *The Culture of Prison Sexual Violence*, 2006, NCJ 216515.

Through PIECP, prisoners work for private companies, earning the prevailing wage and acquiring skills they can use to secure employment postrelease. They gain work experience, support their families, save money for the future, and offset the cost of their incarceration, reimbursing the State.

Their findings suggest that prevention programs might include inmate and officer education, successful prosecution of offenders, better investigation and documentation of incidents, cooperation with outside experts and community groups, and further involvement with PREA. Prisons should focus on providing programs that support a victim's decision to report sexual offenses.<sup>7</sup>

### Employment in Prison

Prisoners working under the supervision of corrections staff for a modest sum have been a mainstay of corrections for more than 150 years. A recent prison work program, the Prison Industry Enhancement Certification Program (PIECP) allows local corrections facilities to partner with private companies, providing inmates with jobs such as glove manufacturing, papaya packing, boat building, and car refurbishing. In 2006, NIJ reported findings from an evaluation of this program. Through PIECP, prisoners work for private companies, earning the prevailing wage and acquiring skills they can use to secure employment after their release. They gain work experience, support their families, save money for the future, and offset the cost of their incarceration, reimbursing the State.

The evaluation revealed that PIECP participants obtained employment more quickly after release and maintained it longer than those who worked in the traditional correctional industries programs and those who were involved in nonwork activities or were idle while imprisoned. For example, 55 percent of PIECP workers obtained employment within 3 months of release, compared to 40 percent of inmates in the other study groups. PIECP program participants also had lower rates of rearrest, conviction, and incarceration than participants in other prison work programs.

NIJ's evaluation also revealed that the wages earned by PIECP participants benefited taxpayers. A significant portion of PIECP participants' wages go directly to the State to cover the cost of prisoner room and board.<sup>8</sup>

### Providing Postrelease Services

Making the transition from prison to society can be difficult for many people who are incarcerated—they must find employment and housing and often have to support their children. The Serious and Violent Offender Reentry

<sup>7</sup> Zweig, J.M., R.L. Naser, J. Blackmore, and M. Schaffer, *Addressing Sexual Violence in Prisons: A National Snapshot of Approaches and Highlights of Innovative Strategies*, 2007, NCJ 216586.

<sup>8</sup> For more information on NIJ's evaluation of the Prison Industry Enhancement Certification Program, see Smith C., J. Bechtel, A. Patrick, R.R. Smith, and L. Wilson-Gentry, *Correctional Industries Preparing Inmates for Reentry: Recidivism and Postrelease Employment*, May 2006, NCJ 214608; and Moses, M.C., and C. Smith, "Factories Behind Fences: Do Prison 'Real Work' Programs Work?" *NIJ Journal* 257 (June 2007): 32–35.

Initiative (SVORI) provides prisoners with postrelease services, helping them reenter the public community. In 2003, NIJ began a multisite evaluation of SVORI to assess the extent to which the program helps prisoners access appropriate, comprehensive, integrated services; improves prisoners' employment possibilities, health, and personal well-being; and reduces future criminal activity.

The SVORI evaluation ([www.svori-evaluation.org](http://www.svori-evaluation.org)) measures program success by examining a number of individual outcomes, such as employment, family stability, mental health, and substance abuse. Preliminary findings from 2006 indicate:

- Participants have moderately more success gaining employment and housing and meeting other measurements of success than nonparticipants.
- Participants are more likely to receive postrelease services than nonparticipants, but the overall level of service provision is low.
- Most programs have enrolled fewer people than they originally projected.
- Most programs will continue providing some services for inmates even after their funding has ended.<sup>9</sup>

### Assessing Sentencing and Probation Policies

Recent policies in some States offer drug users alternatives to time in prison. NIJ awarded a grant in 2006 to the Vera Institute of Justice to evaluate the impact of Kansas Senate Bill 123, which provides drug abuse treatment instead of prison time to nonviolent drug possession offenders. The bill took effect in November 2003. The evaluation will measure how this program affects future drug use, recidivism, and other behaviors, comparing offenders sentenced in this manner to those sentenced to time in prison and standard probation.<sup>10</sup> Another 2006 evaluation assesses how probation officers' caseload size and use of evidence-based practices affect recidivism rates for medium- and high-risk probationers.<sup>11</sup>

<sup>9</sup> RTI International and Urban Institute, *Roundtable Discussion: Policy Implications of Findings from the Multi-Site Evaluation of SVORI*, International Association of Reentry Consortium, March 20, 2007.

<sup>10</sup> *Alternate Sentencing Policies for Drug Offenders: Evaluating the Effectiveness of Kansas Senate Bill 123*, NIJ award no. 2006-IJ-CX-0032.

<sup>11</sup> *Multijurisdictional Study of Reduced Caseload and Related Supervision Strategies in Managing Offenders on Probation*, NIJ award no. 2006-IJ-CX-0011.

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### **NIJ Research Published in Corrections Today**

NIJ collaborates with the American Correctional Association (ACA) to disseminate corrections-related research to the field. NIJ's column in each issue of ACA's professional membership magazine, *Corrections Today*, covers a range of topics. In 2006, the columns included:

<i>February</i>	<i>NIJ's Response to the Prison Rape Elimination Act</i>
<i>April</i>	<i>No More Cell Phones</i>
<i>June</i>	<i>Duress Systems in Correctional Facilities</i>
<i>August</i>	<i>Brief Mental Health Screening for Corrections Intake</i>
<i>October</i>	<i>Correlating Incarcerated Mothers, Foster Care, and Mother-Child Reunification</i>
<i>December</i>	<i>No Shortcuts to Successful Reentry: The Failings of Project Greenlight</i>

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## Getting the Word Out

NIJ disseminates information through a variety of outlets, helping taxpayers receive the maximum benefits of research, development, and evaluation. Communicating information on research findings and technological advancements depends on a multipronged approach to communications. Print and electronic publications and NIJ's respected conferences and training workshops lead NIJ's innovative communications strategy. Collaboration with outside communications resources, such as Harvard University, results in dual hosting of Web chats and the creation of interactive Web- and CD-based training tools.

### Internet Outreach

Whether findings are published in a written report, on a CD, or another device, all of NIJ's work is available on the Web. NIJ's site, [www.ojp.usdoj.gov/nij](http://www.ojp.usdoj.gov/nij), offers easy access to NIJ-sponsored research reports, descriptions of NIJ programs, information about grant awards, and agency announcements. In FY 2006, NIJ issued 39 solicitations and made 514 awards. The Institute posted 96 final grant reports to the Web and published 65 documents and CD-ROMs.

Nearly 1.5 million people visited NIJ's Web site in 2006, an increase of more than 20 percent from 2005. All NIJ products are posted on its Web site in a format accessible to people with disabilities. NIJ continues to enhance the site's capabilities, updating search techniques and expanding subject matter. A redesigned Web site will launch in 2007.

**www.dna.gov.** To provide the general public with the most current information on DNA and biological forensics, NIJ manages [www.dna.gov](http://www.dna.gov), the official Web site of the President's DNA Initiative. The site features updates on groundbreaking DNA research, how that research applies to criminal justice, and how DNA and forensics researchers can obtain grants in biological forensics.

In FY 2006, [www.dna.gov](http://www.dna.gov) published online training designed for key criminal justice practitioners, including *Principles of Forensic DNA for Officers of the*

“The training courses fulfilled a requirement for one of our General Orders on the proper collection of DNA evidence. [. . .] The interactive programming alleviated the monotony associated with other simpler read and test online courses. It was very beneficial in fulfilling our needs.”

—Lt. Phil LaBenda, Administrative Division, Clayton, Missouri, Police Department

*Court*, to assist judges, prosecutors, and defense lawyers in using DNA evidence. The site also hosts beginning and advanced training courses for first responders, investigators, and evidence technicians, called *What Every Law Enforcement Officer Should Know About DNA Evidence*.<sup>1</sup> These courses have met with outstanding success; several new courses are being developed.

**www.ncjrs.gov.** NIJ cosponsors the National Criminal Justice Reference Service (NCJRS). NCJRS provides the largest criminal justice database in the world, publishing some of the foremost reports and information products available for crime and justice practitioners.<sup>2</sup>

**www.ncstl.org.** NIJ funds the National Clearinghouse for Science, Technology, and the Law (NCSTL), which offers an extensive database of scientific and legal publications. NCSTL helps NIJ develop training programs for lawyers and provides input to a number of NIJ’s technical working groups and advisory committees.

### Leading Through Conferences

NIJ hosts conferences that explore relevant and timely issues in criminal justice and technology research, often working collaboratively with other agencies. Key events in 2006 included:

**The NIJ Conference.** NIJ’s annual conference brings together the Nation’s top criminal justice practitioners, researchers, and policymakers to present research findings and advance justice administration. In 2006, more than 1,000 people attended the conference’s 70 panels and workshops in Washington, DC.<sup>3</sup>

**NIJ Operations Research Symposium.** Operations research uses analytical methods, including modeling and simulation, to help managers make better decisions. NIJ challenged participants to solve relevant law enforcement problems; the winning solutions were presented at the meeting and served as the foundation for a lively discussion.

**Science, Technology, and the Law Conference.** A 2006 conference focused on the ever-evolving intersection of science, technology, and the law. Topics included driving-under-the-influence standards, identity theft, forensic psychology, methamphetamines, fingerprints, and biogeographic ancestry.

<sup>1</sup> See [www.dna.gov/training](http://www.dna.gov/training).

<sup>2</sup> NCJRS has a toll-free number to answer questions that require an advanced knowledge of criminal justice topics: 1-800-851-3420.

<sup>3</sup> More information about the conference is available at [www.ojp.usdoj.gov/nij/events/nij\\_conference/welcome.html](http://www.ojp.usdoj.gov/nij/events/nij_conference/welcome.html).

**Critical Incident Preparedness Conference.** On September 6–8, 2006, the 8th Annual Technologies for Critical Incident Preparedness Conference and Exposition brought together more than 150 agencies and vendors to share technological advancements that aid responders in mass disasters and pandemic outbreaks. International and domestic experts explored a wide range of topics, such as preparing for epidemics, protecting the Nation's borders, responding to natural and terrorist disasters, creating technologies that advance police interoperability, and securing the Nation's transportation infrastructure.

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### **Partners in Dissemination**

*NIJ's partnerships and collaborations with other public agencies, universities, and professional organizations help extend its outreach.*

#### **National Law Enforcement and Corrections Technology Center (NLECTC).**

*Specializing in electronic crime, rural law enforcement, distributing surplus property, and officer training, NLECTC's five regional centers deliver NIJ's research and technology to practitioners in the field. Police and corrections professionals use these facilities to get the tools and expertise they need to perform their jobs safely and efficiently. NLECTC's Web site, [www.justnet.org](http://www.justnet.org), holds an extensive virtual library of criminal justice research.*

**Forensic Resource Network.** *The Forensic Resource Network is a collaborative hub of activity for crime laboratories, providing quality assurance for products, training forensic scientists, and disseminating information.*

*Members include:*

- *National Forensic Science and Technology Center.*
  - *Marshall University Forensic Science Center.*
  - *National Center for Forensic Science.*
  - *West Virginia University—Forensic Identification Program.*
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# 06

## Appendix A

### Financial Data

Exhibit A-1: NIJ's Research and Development Portfolio,  
Awards Made FY 1996–2006

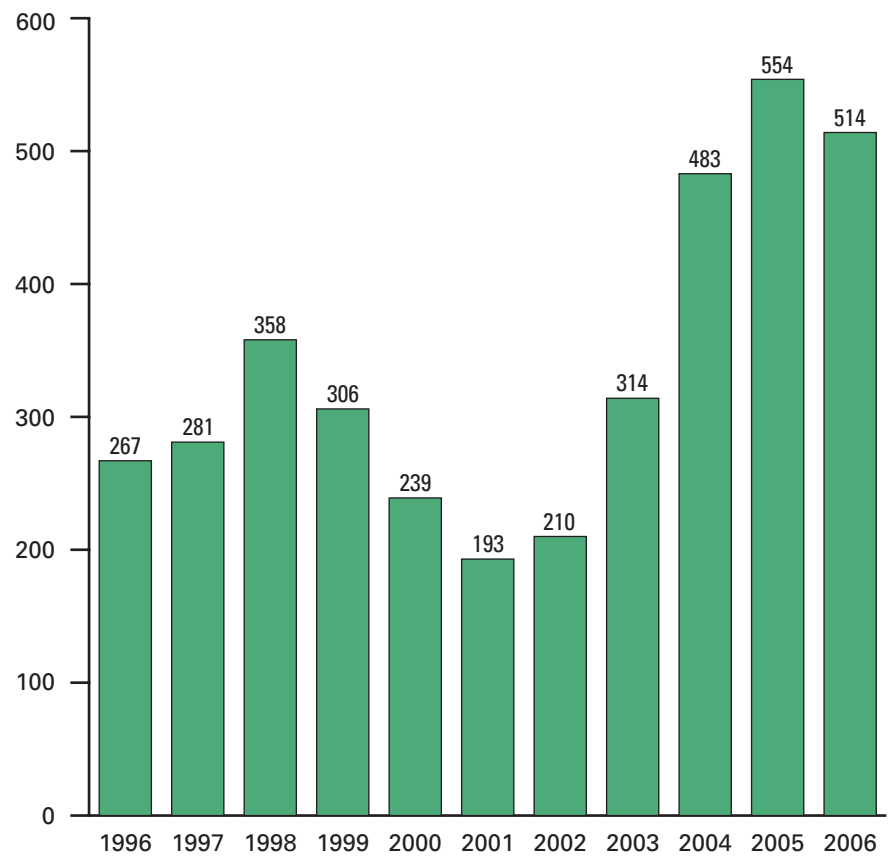


Exhibit A-2: Value of Active Awards, in Millions, FY 1996–2006

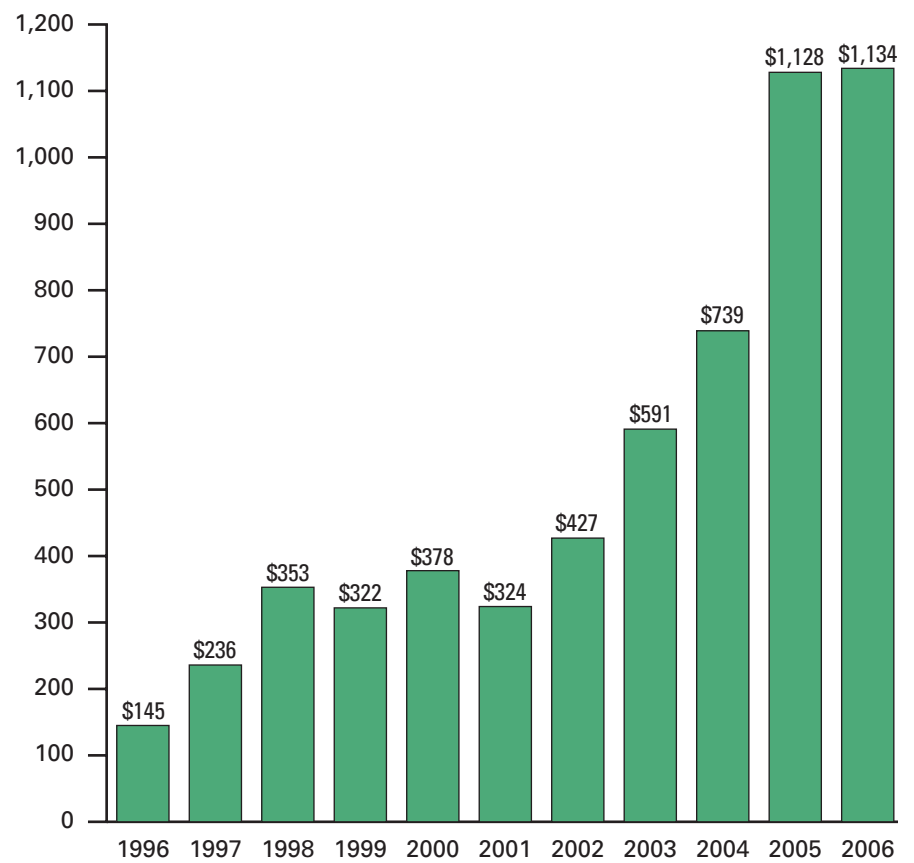
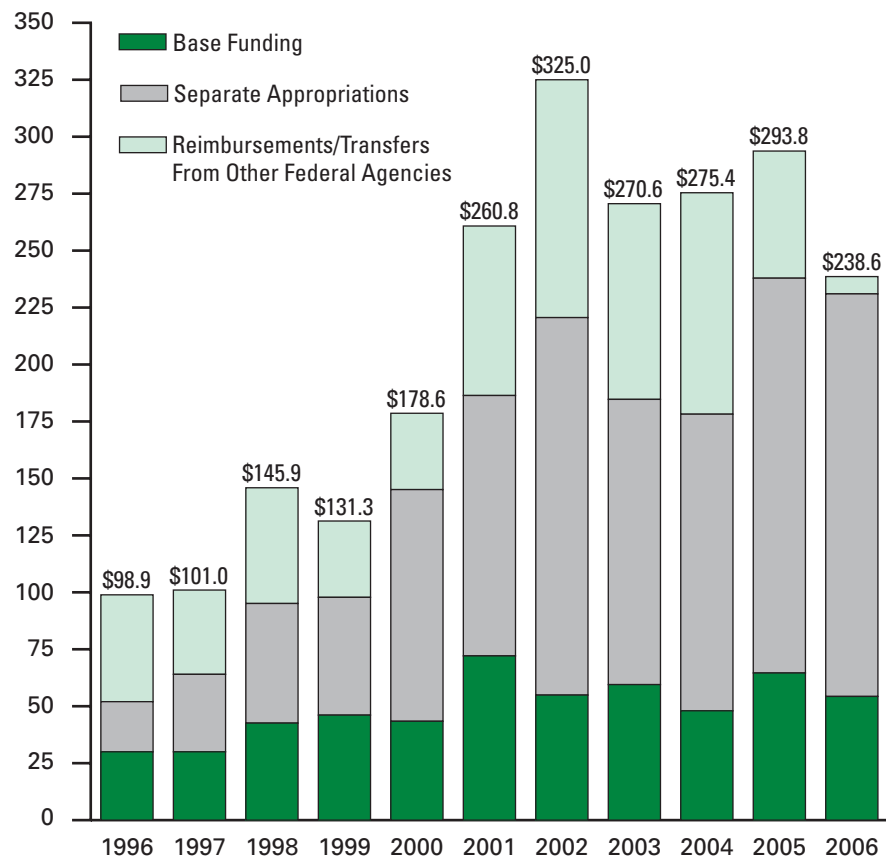


Exhibit A-3: Sources of NIJ Funds, in Millions, FY 1996–2006



**Exhibit A-4: Allocation of NIJ Funds as a Percentage of Total Funding,\*  
FY 2006**

<b>Social Science</b>	Research Evaluation	12% 2%
<b>Science and Technology</b>	Capacity Enhancement** Research and Development Technology Assistance Standards	39% 20% 12% 3%
<b>Program Support</b>		4%
<b>Dissemination</b>		4%
<b>Other</b>		4%

\*Total funding of \$238.6 million includes NIJ base appropriation of \$54.3 million plus separate appropriations and funds transfers.

\*\*Grants to improve and enhance crime laboratories.



### Exhibit A-5: DNA Funding, FY 2006

The funding request under the President's DNA Initiative was \$107.1 million. Actual funding breakdowns for each purpose area are shown below.

<b>DNA Capacity Enhancement</b>	\$42,466,626
<b>DNA Casework Backlog Reduction</b>	20,580,766
<b>Convicted Offender DNA Backlog Reduction</b>	16,010,111
<b>Training for the Criminal Justice Community</b>	4,003,430
<b>Identifying Missing Persons</b>	2,135,163
<b>Research and Development</b>	13,063,695
<b>Earmarks*</b>	8,885,052
<b>Post-Rescission Total</b>	<b>\$107,144,843</b>

\*Program carves out approximately \$3,948,912 for the post-conviction testing grant program and approximately \$4,936,140 for OLES for forensic science lab equipment standards and testing.

## Appendix B

NIJ Awards in FY 2006 (includes first-time awards and supplements to previous awards)

### Solicitation titles

- Biometrics Technologies
- Communications Technologies
- Congressional Directed Awards
- Convicted Offender DNA Backlog Reduction Program (In-House Analysis and Data Review)
- Corrections Technologies
- Crime and Justice Research
- Data Resources Program: Funding for Analysis of Existing Data
- Discretionary Awards
- Electronic Crime Research and Development
- Evaluation of OJJDP's Commercial Sexual Exploitation of Children Demonstration Program in Atlanta/Fulton County
- Evaluation of Public Safety Interventions
- Evaluation of Technology
- Forensic Casework DNA Backlog Reduction Program
- Forensic DNA Capacity Enhancement Program
- Forensic DNA Research and Development
- Forensic Toxicology Research and Development
- Forensics Science Research Targeting Forensic Engineering, Forensic Pathology, Forensic Odontology, Trace Evidence, Controlled Substances, and Questioned Documents
- Graduate Research Fellowship
- Information-Led Policing Research, Technology Development, and Testing and Evaluation
- Justice System Response to Intimate Partner Violence and Stalking
- Less-Lethal Technologies
- Modeling and Simulation Research and Development: Software for Improved Operations, Operational Modeling, Speech-to-Text Recognition, and Training Technologies
- Officer Safety Equipment
- Outcome Evaluations of Violence Prevention Programs
- Paul Coverdell Forensic Science Improvement Grant Program
- Process and Outcome Evaluation of G.R.E.A.T.
- Research and Development on Crime Scene Tools, Techniques, and Technologies
- Research and Development on Impression Evidence
- Research and Evaluation in Community Corrections: A Multijurisdictional Study of Reduced Caseload and Related Case Supervision Strategies in Managing Medium- and High-Risk Offenders
- Research and Evaluation on the Abuse, Neglect, and Exploitation of Elderly Individuals, Older Women, and Residents of Residential Care Facilities
- Research on Sexual Violence and Violent Behavior in Corrections
- School Safety Technologies
- Sensors and Surveillance Technologies
- Sexual Violence from Adolescence to Late Adulthood: Research, Evaluation, and the Criminal Justice Response
- Social Science Research on Terrorism
- Social Science Research on the Role and Impact of Forensic Evidence on the Criminal Justice Process
- Study of Administration of Justice in Indian Country
- Transnational Crime
- W.E.B. Dubois Fellowship

### Awards by solicitation

#### Biometrics Technologies

**Active 3-D Face Capture**  
General Electric Company  
\$499,699  
2006-IJ-CX-K045

**Face Recognition From Video**  
University of Notre Dame  
\$362,476  
2006-IJ-CX-K041

**Facial and Iris-Based Biometric System**  
New Jersey Institute of Technology  
\$191,281  
2006-IJ-CX-K033

**Use of HDTV for In-Vehicle Cameras: Surveillance and Biometrics**  
Purdue University  
\$201,852  
2006-IJ-CX-K125

#### Communications Technologies

**Agile, Multi-Antenna Capable SDR Platform for Advanced Public Safety Communications**  
University of California  
\$249,984  
2006-IJ-CX-K044

**Evaluating IEEE 802.16 Broadband Wireless as a Communications Infrastructure for Public Safety Activities**  
Clemson University  
\$150,000  
2006-IJ-CX-K035

**Software-Defined Emergency Radio**  
University of Texas-Dallas  
\$199,907  
2006-IJ-CX-K043

**Software-Defined Radio Technologies for Justice and Public Safety Communications**  
University of Notre Dame  
\$200,000  
2006-IJ-CX-K034

### Congressional Directed Awards

#### Advanced Law Enforcement Response Technology Systems

West Virginia High Technology Consortium  
Foundation  
\$4,442,526  
2006-LT-BX-K002

#### Advanced Technologies for Law Enforcement

University of New Hampshire  
\$2,961,684  
2006-IJ-CX-K022

#### Center for Criminal Justice Technology Systems Integration Projects

Mitretek Systems, Inc.  
\$1,954,985  
2006-DD-BX-K015

#### Forensic Science Training and Technical Assistance

National Forensic Science Technology Center  
\$4,951,379  
2006-MU-BX-K002

#### Maximizing the Capabilities of the Forensic Science Community

National Academy of Sciences  
\$1,480,842  
2006-DN-BX-0001

#### Nontoxic Drug Detection and Identification Aerosol Technology

Mistral Security, Inc.  
\$740,421  
2006-LT-BX-K001

#### Partnership for Uniting DNA and Fingerprint Identifications

University of Connecticut  
\$172,765  
2006-DD-BX-K002

### Convicted Offender DNA Backlog Reduction Program

(In-House Analysis and Data Review)

Alabama Department of Forensic Sciences  
\$396,000  
2006-DN-BX-K234

Alaska Department of Public Safety  
\$87,500  
2006-DN-BX-K235

California Department of Justice  
\$756,297  
2006-DN-BX-K239

Georgia Bureau of Investigation  
\$294,000  
2006-DN-BX-K248

Illinois State Police  
\$16,175  
2006-DN-BX-K240

Kansas Bureau of Investigation  
\$248,238  
2006-DN-BX-K237

Kentucky State Police  
\$73,381  
2006-DN-BX-K236

Missouri State Highway Patrol  
\$254,471  
2006-DN-BX-K241

New Jersey Department of Law and Public Safety  
\$615,829  
2006-DN-BX-K242

New York State Police  
\$825,000  
2006-DN-BX-K246

North Dakota Office of the Attorney General  
\$52,500  
2006-DN-BX-K233

Oklahoma State Bureau of Investigation  
\$22,471  
2006-DN-BX-K247

Pennsylvania State Police  
\$953,203  
2006-DN-BX-K243

Texas Department of Public Safety  
\$1,517,288  
2006-DN-BX-K244

Vermont Department of Public Safety  
\$76,843  
2006-DN-BX-K245

Washington State Patrol  
\$480,412  
2006-DN-BX-K238

### Corrections Technologies

#### Cross-Functional Systemic Trend Mapping in Corrections

Florida Department of Corrections  
\$500,000  
2006-IJ-CX-K007

### Crime and Justice Research

#### Alcohol Availability, Distribution Policies, and Their Relationship to Crime and Alcohol-Related Injury

Urban Institute  
\$105,989  
2006-IJ-CX-0012

#### Alternative Sentencing Policies for Drug Offenders: Evaluating the Effectiveness of Kansas Senate Bill 123

Vera Institute of Justice, Inc.  
\$273,897  
2006-IJ-CX-0032

#### Crime and Justice Research

Arizona State University  
\$78,933  
2006-IJ-CX-0016

#### Crime and Justice Research

Colorado, State of  
\$299,978  
2006-IJ-CX-0015

#### Day Reporting Centers for Parolees in New Jersey: Evaluation of Efficacy

New Jersey State Parole Board  
\$218,965  
2006-IJ-CX-0036

**Do Best Practice Interviews With Child Abuse Victims Influence Case Outcomes?**

Brooklyn College  
\$176,229  
2006-IJ-CX-0019

**Evaluation of the Processing of Habeas Corpus Cases in U.S. District Courts**

Vanderbilt University  
\$257,747  
2006-IJ-CX-0020

**Long-Term Consequences of Delinquency: Child Maltreatment and Crime in Early Adulthood**

New York Office of Children and Family Services  
\$290,386  
2006-IJ-CX-0014

**Megan's Law: An Empirical Analysis**

New Jersey Department of Corrections  
\$38,252  
2006-IJ-CX-0018

**Multicity Assessment of Juvenile Delinquency in the United States: Expansion of the International Self-Report Delinquency Study**

Northeastern University  
\$252,698  
2006-IJ-CX-0045

**Polyvictimization History Among Girls Adjudicated Delinquent**

University of South Carolina  
\$297,888  
2006-WG-BX-0011

**Simultaneous Effects of Individual, Program, and Neighborhood Attributes on Juvenile Recidivism Using GIS and Spatial Data Mining**

Temple University  
\$316,712  
2006-IJ-CX-0022

**Data Resources Program: Funding for Analysis of Existing Data**

**Effects of Incarceration on the Safety and Well-Being of Families and Inmates Using the Crime Victimization Survey**

City University of New York  
\$34,997  
2006-IJ-CX-0007

**Effects of Prosecution on Violence Between Intimate Partners**

Joint Centers for Justice Studies  
\$34,425  
2006-IJ-CX-0005

**Discretionary Awards**

**Application of Proteinases for DNA Isolation of Bone Specimens**

Indiana University  
\$15,696  
2006-DN-BX-K010

**Border Counties Criminal Justice Cost Study**

United States-Mexico Border Counties Foundation  
\$148,084  
2006-DD-BX-0004

**Border Research and Technology Center Support**

Sheriffs Association of Texas  
\$1,375,497  
2006-IJ-CX-K016

**Breakable Cartridge Cyanocrylate Fingerprint Development System**

Mountain State University  
\$82,820  
2006-DN-BX-K037

**Cell Phone Detector**

South Carolina Research Authority  
\$200,000  
2006-DE-BX-K007

**Center for Quality Policing**

Rand Corporation  
\$493,614  
2006-DD-BX-0025

**Cyber Justice Gateway**

Erin Kenneally  
\$300,000  
2006-DE-BX-K001

**E-Crime Investigative Technologies**

Florida State University  
\$299,940  
2006-DN-BX-K007

**Electronic Control Weapons and Unexpected Deaths-in-Custody**

International Association of Chiefs of Police  
\$257,638  
2006-IJ-CX-K046

**Event Dynamics and the Role of Third Parties in Youth Violence**

Ohio State University  
\$259,756  
2006-IJ-CX-0004

**GLOBAL Personnel**

Space and Naval Warfare Systems Center  
\$325,000  
2006-IA-A6-6220

**Governors' Criminal Justice Policy Advisors Project**

National Governors Association  
\$250,000  
2006-IJ-CX-0039

**IACP Research Advisory Committee**

International Association of Chiefs of Police  
\$125,000  
2006-IJ-CX-0031

**In-Car Video Technical Support**

Institute for Forensic Imaging Foundation, Inc.  
\$74,640  
2006-IJ-CX-K003

**Internet Forensics Toolkit for Law Enforcement**

University of California-San Diego  
\$40,000  
2006-IJ-CX-K036

**Interoperability of AFIS Systems for Latent Print Searches**

International Association for Identification  
\$179,943  
2006-DN-BX-K249

**Jihad, Crime, and the Internet**

University of Illinois  
\$275,802  
2006-IJ-CX-0038

**Louisiana Hurricane DNA Identification Effort**

Louisiana State Police  
\$1,000,000  
2006-IJ-CX-K001

**Mobile Phone Forensics Software and Hardware Development and Training**

Margaret Jeitner  
\$205,000  
2006-DN-BX-K020

**Offender Supervision With Electronic Technology**

Bureau of Justice Assistance  
\$50,000  
2006-IA-A6-6227

**Probability of a Match in Bite Marks**

Institute for Forensic Imaging  
\$96,903  
2006-DN-BX-K252

**Recognition of Noncooperative Individuals Using 3-D Face Biometrics**

University of Southern California  
\$498,000  
2006-DE-BX-K006

**South Carolina Information Exchange: Orangeburg County Project**

South Carolina Research Authority  
\$148,084  
2006-LT-BX-K004

**Technology Transfer of Forensic Document Analysis System**

CedarTech, Inc.  
\$153,289  
2006-DN-BX-K025

**Electronic Crime Research and Development**

**Automated Human Image Detection and Authentication**

University of Rhode Island  
\$199,957  
2006-DN-BX-K023

**Automated Steganography Detection and Breaking for Law Enforcement**

University of Rhode Island  
\$399,836  
2006-DN-BX-K022

**File Hound: A Law Enforcement Investigative Tool**

Purdue University  
\$197,589  
2006-DN-BX-K250

**File Marshall: Automatic Analysis of Peer-to-Peer Usage**

Odyssey Research Associates, Inc.  
\$370,121  
2006-DN-BX-K013

**FREEAK: Forensic Rapid Evidence Extraction and Analysis Kit for Immediate Personal Digital Technology Forensics**

Purdue University  
\$237,540  
2006-IJ-CX-K020

**Evaluation of OJJDP's Commercial Sexual Exploitation of Children Demonstration Program in Atlanta/Fulton County**

**Evaluation of OJJDP's Commercial Sexual Exploitation of Children Demonstration Project**

Georgia State University  
\$451,864  
2006-JE-FX-0006

**Evaluation of Public Safety Interventions**

**Eliminating Street Drug Markets: A Process and Outcome Evaluation**

University of North Carolina-Greensboro  
\$283,001  
2006-IJ-CX-0034

**Evaluation of Gang Hot-Spots Policing in Chicago**

Chicago Police Department  
\$250,000  
2006-IJ-CX-0023

**Evaluation of One Vision, One Life**

Rand Corporation  
\$249,116  
2006-IJ-CX-0030

**Evaluation of Target's Safe City Initiative: An Action-Research Crime Prevention Partnership**

Urban Institute  
\$246,597  
2006-IJ-CX-0021

**Evaluation of Technology**

**Evaluation of Less-Lethal Technologies on Police Use-of-Force Outcomes**

Police Executive Research Forum  
\$406,734  
2006-IJ-CX-0028

**Forensic Casework DNA Backlog Reduction Program**

Alabama Department of Forensic Sciences  
\$357,181  
2006-DN-BX-K038

Alameda County  
\$103,485  
2006-DN-BX-K093

Alaska Department of Public Safety  
\$106,474  
2006-DN-BX-K033

Albuquerque Police Department  
\$107,923  
2006-DN-BX-K061

Allegheny County \$67,444 2006-DN-BX-K039	District of Columbia Metropolitan Police Department \$75,158 2006-DN-BX-K099	Kansas Bureau of Investigation \$151,580 2006-DN-BX-K104
Arizona Criminal Justice Commission \$244,503 2006-DN-BX-K040	Erie County \$77,978 2006-DN-BX-K094	Kansas City Board of Police Commissioners \$135,697 2006-DN-BX-K057
Arizona Department of Public Safety \$168,868 2006-DN-BX-K041	Florida Department of Law Enforcement \$947,192 2006-DN-BX-K087	Kentucky State Police \$263,695 2006-DN-BX-K097
Arkansas State Crime Laboratory \$73,128 2006-DN-BX-K042	Fresno County Sheriff's Department \$90,000 2006-DN-BX-K109	Kern County \$90,407 2006-DN-BX-K095
Austin, City of \$60,730 2006-DN-BX-K062	Georgia Bureau of Investigation \$536,845 2006-DN-BX-K110	Los Angeles, City of \$498,570 2006-DN-BX-K065
Baltimore Police Department \$97,713 2006-DN-BX-K063	Harris County \$508,498 2006-DN-BX-K111	Los Angeles County Sheriff's Department \$180,000 2006-DN-BX-K102
Boston, City of \$84,522 2006-DN-BX-K064	Hennepin County Sheriff's Office \$41,810 2006-DN-BX-K112	Louisiana State Police \$391,897 2006-DN-BX-K103
Broward County Sheriff's Office \$101,862 2006-DN-BX-K058	Illinois State Police \$850,000 2006-DN-BX-K083	Mansfield, City of \$70,000 2006-DN-BX-K066
Connecticut Department of Public Safety \$145,843 2006-DN-BX-K086	Indiana State Police \$307,146 2006-DN-BX-K107	Maryland State Police \$72,975 2006-DN-BX-K101
Contra Costa County \$94,890 2006-DN-BX-K092	Indianapolis-Marion County Forensic Services Agency \$72,046 2006-DN-BX-K108	Massachusetts State Police \$267,342 2006-DN-BX-K100
Cuyahoga County Coroner's Office \$75,000 2006-DN-BX-K091	Instituto de Ciencias Forenses de Puerto Rico \$177,517 2006-DN-BX-K105	Miami-Dade County Police Department \$200,323 2006-DN-BX-K052
Dallas County \$210,910 2006-DN-BX-K084	Johnson County Criminalistics Laboratory \$67,656 2006-DN-BX-K106	Michigan State Police \$1,096,775 2006-DN-BX-K044
Denver, City and County of \$58,725 2006-DN-BX-K059		Minnesota Bureau of Criminal Apprehension \$293,234 2006-DN-BX-K043

Mississippi Department of Public Safety \$248,381 2006-DN-BX-K098	North Carolina Department of Crime Control and Public Safety \$513,761 2006-DN-BX-K076	San Diego County \$148,193 2006-DN-BX-K069
Missouri State Highway Patrol \$82,516 2006-DN-BX-K051	North Dakota Office of the Attorney General \$30,063 2006-DN-BX-K077	San Diego Police Department \$140,374 2006-DN-BX-K121
Monroe County \$60,194 2006-DN-BX-K050	Northern Illinois Police \$43,311 2006-DN-BX-K075	San Francisco, City and County of \$104,231 2006-DN-BX-K060
Montana Department of Justice \$54,221 2006-DN-BX-K085	Oakland, City of \$84,874 2006-DN-BX-K122	San Mateo County \$41,757 2006-DN-BX-K047
Montgomery County \$50,000 2006-DN-BX-K049	Ohio Office of the Attorney General \$728,911 2006-DN-BX-K119	Santa Clara County \$98,123 2006-DN-BX-K088
Montgomery County Police Department \$45,775 2006-DN-BX-K048	Oklahoma State Bureau of Investigation \$38,219 2006-DN-BX-K074	South Carolina Law Enforcement Division \$332,766 2006-DN-BX-K114
Nassau County \$24,222 2006-DN-BX-K082	Onondaga County Health Department \$24,093 2006-DN-BX-K072	South Dakota Division of Criminal Investigation \$63,706 2006-DN-BX-K073
Nebraska State Patrol \$118,106 2006-DN-BX-K081	Palm Beach County Sheriff's Office \$103,115 2006-DN-BX-K071	St. Louis County Police Department \$42,455 2006-DN-BX-K045
New Hampshire Department of Safety \$18,220 2006-DN-BX-K080	Philadelphia, City of \$681,455 2006-DN-BX-K115	St. Louis Metropolitan Police Department \$67,345 2006-DN-BX-K046
New Jersey Department of Law and Public Safety \$308,328 2006-DN-BX-K079	Prince George's County Police Department \$92,782 2006-DN-BX-K070	Suffolk County \$28,568 2006-DN-BX-K118
New Mexico, State of \$45,000 2006-DN-BX-K113	Richland County \$26,205 2006-DN-BX-K117	Texas, State of \$788,300 2006-DN-BX-K116
New York, City of \$331,946 2006-DN-BX-K067	Sacramento County District Attorney \$200,858 2006-DN-BX-K068	University of North Texas Health Science Center-Fort Worth \$155,314 2006-DN-BX-K056
New York State Police \$203,919 2006-DN-BX-K078	San Bernardino County Sheriff-Coroner \$208,007 2006-DN-BX-K096	

Ventura County Sheriff's Office \$41,139 2006-DN-BX-K089	Arizona Criminal Justice Commission \$481,397 2006-DN-BX-K149	Cuyahoga County Coroner's Office \$216,039 2006-DN-BX-K173
Vermont Department of Public Safety \$30,063 2006-DN-BX-K123	Arizona Department of Public Safety \$341,764 2006-DN-BX-K150	Dallas County \$502,447 2006-DN-BX-K171
Virginia Department of Forensic Science \$385,992 2006-DN-BX-K120	Arkansas State Crime Laboratory \$478,218 2006-DN-BX-K148	Delaware Health and Social Services \$128,998 2006-DN-BX-K172
Washington State Patrol \$545,256 2006-DN-BX-K053	Austin, City of \$145,710 2006-DN-BX-K143	Denver Police Department \$117,064 2006-DN-BX-K144
West Virginia State Police \$69,432 2006-DN-BX-K054	Baltimore City Police Department \$194,394 2006-DN-BX-K166	District of Columbia Metropolitan Police Department \$149,666 2006-DN-BX-K208
Westchester County \$24,053 2006-DN-BX-K090	Boston Police Department \$135,771 2006-DN-BX-K165	DuPage County Office of the Sheriff \$53,371 2006-DN-BX-K168
Wisconsin Department of Justice \$230,844 2006-DN-BX-K055	Broward County Sheriff's Office \$202,766 2006-DN-BX-K145	Erie County \$155,424 2006-DN-BX-K180
<b>Forensic DNA Capacity Enhancement Program</b>	California Department of Justice \$972,915 2006-DN-BX-K146	Florida Department of Law Enforcement \$1,886,239 2006-DN-BX-K167
Alabama Department of Forensic Sciences \$711,269 2006-DN-BX-K215	Charlotte-Mecklenburg Police Department \$107,210 2006-DN-BX-K164	Georgia Bureau of Investigation \$1,069,041 2006-DN-BX-K196
Alameda County \$136,825 2006-DN-BX-K152	Colorado Department of Public Safety \$652,289 2006-DN-BX-K157	Hamilton County \$72,013 2006-DN-BX-K195
Alaska Department of Public Safety \$212,026 2006-DN-BX-K216	Columbus Police Department \$72,013 2006-DN-BX-K163	Harris County \$437,306 2006-DN-BX-K194
Allegheny County \$102,588 2006-DN-BX-K217	Connecticut Department of Public Safety \$290,423 2006-DN-BX-K170	Hennepin County Sheriff's Office \$150,745 2006-DN-BX-K192
Anne Arundel County Police Department \$48,988 2006-DN-BX-K151	Contra Costa County \$136,825 2006-DN-BX-K154	Idaho State Police \$213,808 2006-DN-BX-K193



Illinois State Police \$1,668,051 2006-DN-BX-K191	Maine Department of Public Safety \$118,664 2006-DN-BX-K210	Montgomery County Police Department \$82,206 2006-DN-BX-K203
Indiana State Police \$604,079 2006-DN-BX-K189	Mansfield, City of \$72,013 2006-DN-BX-K160	Nassau County \$48,278 2006-DN-BX-K139
Indianapolis-Marion County Forensic Services Agency \$151,020 2006-DN-BX-K190	Maryland State Police \$159,335 2006-DN-BX-K211	Nebraska State Patrol \$235,189 2006-DN-BX-K140
Johnson County \$102,553 2006-DN-BX-K188	Massachusetts State Police \$565,520 2006-DN-BX-K209	New Hampshire Department of Safety \$169,977 2006-DN-BX-K138
Kansas Bureau of Investigation \$276,300 2006-DN-BX-K186	Miami-Dade County Police Department \$398,922 2006-DN-BX-K207	New Jersey Department of Law and Public Safety \$613,986 2006-DN-BX-K137
Kansas City Board of Police Commissioners \$261,576 2006-DN-BX-K147	Michigan State Police \$2,184,050 2006-DN-BX-K132	New Mexico, State of \$430,467 2006-DN-BX-K133
Kentucky State Police \$525,255 2006-DN-BX-K155	Minnesota Bureau of Criminal Apprehension \$646,047 2006-DN-BX-K229	New York, City of \$720,788 2006-DN-BX-K161
Kern County \$136,825 2006-DN-BX-K181	Mississippi Department of Public Safety \$494,610 2006-DN-BX-K206	New York State Police \$406,442 2006-DN-BX-K135
Lake County \$36,007 2006-DN-BX-K187	Missouri Southern State University \$30,814 2006-DN-BX-K182	North Carolina Department of Crime Control and Public Safety \$915,862 2006-DN-BX-K136
Las Vegas Metropolitan Police Department \$181,261 2006-DN-BX-K185	Missouri State Highway Patrol \$169,483 2006-DN-BX-K204	North Dakota Office of the Attorney General \$59,866 2006-DN-BX-K218
Los Angeles, City of \$564,048 2006-DN-BX-K162	Monroe County \$119,977 2006-DN-BX-K205	Northern Illinois Police \$57,463 2006-DN-BX-K219
Los Angeles County Sheriff's Department \$658,315 2006-DN-BX-K184	Montana Department of Justice \$107,973 2006-DN-BX-K169	Oakland, City of \$136,825 2006-DN-BX-K159
Louisiana State Police \$780,400 2006-DN-BX-K183	Montgomery County \$624,657 2006-DN-BX-K141	

Ohio Office of the Attorney General \$747,078 2006-DN-BX-K230	San Diego County \$167,652 2006-DN-BX-K197	Texas, State of \$1,253,871 2006-DN-BX-K131
Oklahoma State Bureau of Investigation \$621,113 2006-DN-BX-K221	San Diego Police Department \$158,805 2006-DN-BX-K156	University of North Texas Health Science Center-Fort Worth \$819,081 2006-DN-BX-K129
Onondaga County Health Department \$46,707 2006-DN-BX-K222	San Francisco, City and County of \$136,825 2006-DN-BX-K142	Utah Department of Public Safety \$348,864 2006-DN-BX-K212
Orange County \$199,767 2006-DN-BX-K179	San Mateo County \$136,825 2006-DN-BX-K225	Ventura Sheriff's Office \$136,825 2006-DN-BX-K174
Oregon State Police \$489,264 2006-DN-BX-K223	Santa Clara County \$136,825 2006-DN-BX-K178	Vermont Department of Public Safety \$59,866 2006-DN-BX-K232
Palm Beach County Sheriff's Office \$205,343 2006-DN-BX-K224	Sedgwick County \$58,385 2006-DN-BX-K176	Virginia Department of Forensic Science \$768,640 2006-DN-BX-K153
Pennsylvania State Police \$871,914 2006-DN-BX-K202	South Carolina Law Enforcement Division \$666,200 2006-DN-BX-K226	Washington State Patrol \$1,085,789 2006-DN-BX-K213
Philadelphia Police Department \$516,810 2006-DN-BX-K158	South Dakota Office of the Attorney General \$126,860 2006-DN-BX-K220	Washoe County Sheriff's Office \$219,986 2006-DN-BX-K128
Prince George's County Police Department \$169,687 2006-DN-BX-K201	St. Charles County Sheriff's Department \$21,477 2006-DN-BX-K227	West Virginia State Police \$138,263 2006-DN-BX-K130
Rhode Island Department of Health \$123,296 2006-DN-BX-K200	St. Louis County Police Department \$64,783 2006-DN-BX-K134	Westchester County \$47,958 2006-DN-BX-K175
Richland County \$48,632 2006-DN-BX-K199	St. Louis Metropolitan Police Department \$105,051 2006-DN-BX-K228	Wisconsin Department of Justice \$459,688 2006-DN-BX-K214
Sacramento County District Attorney \$227,236 2006-DN-BX-K198	Suffolk County \$56,918 2006-DN-BX-K231	
San Bernardino County Sheriff-Coroner \$235,321 2006-DN-BX-K177	Tarrant County \$316,681 2006-DN-BX-K127	

### Forensic DNA Research and Development

**Analysis of DNA Forensic Markers Using High Throughput Mass Spectrometry**  
 Isis Pharmaceuticals, Inc.  
 \$451,382  
 2006-DN-BX-K011

**Double-Strand Break Repair of Highly Degraded DNA**  
 University of Central Florida  
 \$174,025  
 2006-DN-BX-K005

**Effect of DNA Degradation and Inhibition on PCR Amplification of Single-Source and Mixed Forensic Samples**  
 Florida International University  
 \$347,399  
 2006-DN-BX-K006

**Isolation of Highly Specific Protein Markers for the Identification of Biological Stains: Adapting Comparative Proteomics to Forensics**  
 University of Denver  
 \$186,602  
 2006-DN-BX-K001

**Laser Microdissection as a Technique to Isolate Sperm Cells and Improve the Analysis of Touch Evidence**  
 Bode Technology Group, Inc.  
 \$191,429  
 2006-DN-BX-K032

**Repair of DNA for Forensic Analysis**  
 General Electric Company  
 \$453,472  
 2006-DN-BX-K018

**Separation of Sperm and Epithelial Cells in a Microfluidic Device: An Automated Method for High-Efficiency, High-Purity Separations**  
 University of Virginia  
 \$324,104  
 2006-DN-BX-K021

### Forensic Toxicology Research and Development

**Analysis of Cocaine Analytes in Human Hair: Evaluation of Concentration Ratios in Different Hair Types, Cocaine Sources, Drug User Populations, and Surface-Contaminated Specimens**  
 Research Triangle Institute  
 \$200,307  
 2006-DN-BX-K019

**Development of Reference Materials for Control and Calibration of Hair Drug Testing**  
 Research Triangle Institute  
 \$212,344  
 2006-DN-BX-K012

**LC/MS/MS Capabilities to Analyze Toxicology Postmortem Samples**  
 Georgia Bureau of Investigation  
 \$136,220  
 2006-DN-BX-K015

**New and Novel Direct Sample Introduction, Time of Flight Mass Spectrometry Instrument for Postmortem Toxicology Screening**  
 Research Triangle Institute  
 \$484,545  
 2006-DN-BX-K014

### Forensics Science Research Targeting Forensic Engineering, Forensic Pathology, Forensic Odontology, Trace Evidence, Controlled Substances, and Questioned Documents

**Advanced Raman Spectroscopy Methods and Databases for the Evaluation of Trace Evidence and Examination of Questioned Documents**  
 City University of New York  
 \$311,948  
 2006-DN-BX-K034

**Application of Fluorescence Line Narrowing Spectroscopy to Forensic Fiber Examination**  
 University of Central Florida  
 \$185,476  
 2006-DN-BX-K036

**Application of Laser-Induced Breakdown Spectroscopy to Forensic Science: Analysis of Paint Samples**  
 University of Central Florida  
 \$167,227  
 2006-DN-BX-K251

**Forensic Analysis of Ink, Arson, Explosive, and Controlled-Substance Samples Using a Revolutionary Mass Spectrometry Method**  
 Iowa State University  
 \$414,145  
 2006-DN-BX-K017

**Synthesis and Analytical Profiles for Regiosomeric and Isobaric Amines Related to MDMA, MDEA, and MBDB: Differentiation of Drug and Non-Drug Substances of Mass Spectral Equivalence**  
 Auburn University  
 \$533,746  
 2006-DN-BX-K016

**Test of the Lamendin Age Estimation Method**  
 State University of New York-Oswego  
 \$6,915  
 2006-DN-BX-K035

**Triacetone Triperoxide Synthetic Byproducts for Source and Route Determination**  
 University of Central Florida  
 \$257,134  
 2006-DN-BX-K009

### Graduate Research Fellowship

**Estimable Dynamic Model of Criminal Behavior**  
 University of California-Los Angeles  
 \$20,000  
 2006-IJ-CX-0002

**Intersection of Genes, the Environment, and Crime and Delinquency: A Longitudinal Study of Offending**  
 University of Cincinnati  
 \$20,000  
 2006-IJ-CX-0001

**Local Actors and U.S. Anti-Trafficking Policy: Interpretation, Mediation, and Implementation**

Columbia University  
\$20,000  
2006-IJ-CX-0003

**Mitochondrial DNA Mixture Separation Development and Validation by Denaturing High-Performance Liquid Chromatography**

University of Denver  
\$20,000  
2006-DN-BX-K002

**Information-Led Policing Research, Technology Development, and Testing and Evaluation**

**Detecting the Near-Repeat Phenomenon in Local and Regional Crime Data**

Temple University  
\$95,350  
2006-IJ-CX-K006

**Evaluation of the County Justice Information Exchange Project**

County Commissioners Association of Pennsylvania  
\$122,287  
2006-IJ-CX-K027

**SmartSearch: Automating Law Enforcement Searches Using GJXDM-Compliant Transactions**

Automated Regional Justice Information Systems  
\$399,135  
2006-IJ-CX-K042

**Justice System Response to Intimate Partner Violence and Stalking**

**Crime Control Effects of Prosecuting Intimate Partner Violence**

Joint Centers for Justice Studies  
\$113,203  
2006-WG-BX-0004

**Domestic Violence Courts: A National Portrait**

New York, City of  
\$275,064  
2006-WG-BX-0001

**Intimate Partner Violence: Justice System Response and Public Health Service Utilization in a National Sample**

University of Colorado  
\$279,955  
2006-WG-BX-0003

**Justice System Response to Intimate Partner Violence**

University of Minnesota  
\$370,966  
2006-WG-BX-0006

**Model of Domestic Abuse Against Older Women and Barriers to Seeking Help**

Florida International University  
\$469,590  
2006-WG-BX-0008

**Victim Participation in Intimate Partner Violence Prosecution: Implications for Safety**

University of Pennsylvania  
\$498,726  
2006-WG-BX-0007

**Less-Lethal Technologies**

**Injuries Produced by Law Enforcement's Use of Less-Lethal Weapons**

Wake Forest University Health Sciences  
\$149,804  
2006-DE-BX-K002

**Modeling and Simulation Research and Development: Software for Improved Operations, Operational Modeling, Speech-to-Text Recognition, and Training Technologies**

**A Bayesian Data Trawler for Urban Public Safety**

Structured Decisions Corporation  
\$350,000  
2006-IJ-CX-K011

**Using Portable Radios to Operate Mobile Data Terminals**

Portland State University  
\$158,356  
2006-IJ-CX-K012

**Officer Safety Equipment**

**Evaluation of Chemical and Electrical Flare Systems**

Florida Gulf Coast University  
\$32,015  
2006-IJ-CX-K008

**Officer Safety Equipment**

Blackhawk Industries Products Group  
\$174,600  
2006-IJ-CX-K039

**Use of a Strobe Personnel Tracking System in Officer Foot Pursuits and Perimeter Searches**

Florida Gulf Coast University  
\$43,849  
2006-IJ-CX-K009

**Outcome Evaluations of Violence Prevention Programs**

**Evaluation of SAFEChildren, a Family-Focused Prevention Program**

University of Illinois  
\$836,328  
2006-JP-FX-0062

**Outcome Evaluation of Tribes Learning Communities**

WestEd  
\$658,303  
2006-JP-FX-0059

**Randomized Trial of Healthy Families New York: Does It Prevent Child Maltreatment?**

New York Office of Children and Family Services  
\$648,056  
2006-MU-MU-0002

### Paul Coverdell Forensic Science Improvement Grant Program

Alabama Department of Economic and Community Affairs  
\$155,450  
2006-DN-BX-0014

Alaska Department of Public Safety  
\$91,015  
2006-DN-BX-0012

Anchorage, Municipality of  
\$95,000  
2006-DN-BX-0013

Anne Arundel County  
\$65,598  
2006-DN-BX-0015

Arizona Criminal Justice Commission  
\$202,568  
2006-DN-BX-0016

Arkansas Department of Finance and Administration  
\$94,787  
2006-DN-BX-0017

Austin Police Department  
\$94,100  
2006-DN-BX-0022

Baltimore, City of  
\$93,200  
2006-DN-BX-0023

Broome County  
\$94,803  
2006-DN-BX-0018

California Governor's Office of Emergency Services  
\$1,232,336  
2006-DN-BX-0020

Cherokee County  
\$73,151  
2006-DN-BX-0021

Cleveland Police  
\$95,000  
2006-DN-BX-0024

Colorado Division of Criminal Justice  
\$159,112  
2006-DN-BX-0040

Colorado Springs, City of  
\$51,650  
2006-DN-BX-0025

Connecticut, State of  
\$119,723  
2006-DN-BX-0077

Dallas County  
\$95,000  
2006-DN-BX-0037

Delaware Criminal Justice Council  
\$91,015  
2006-DN-BX-0038

District of Columbia Justice Grants Administration  
\$91,015  
2006-DN-BX-0039

Fairfax County  
\$94,435  
2006-DN-BX-0034

Florida Department of Law Enforcement  
\$606,747  
2006-DN-BX-0041

Fort Worth, City of  
\$95,000  
2006-DN-BX-0026

Gainesville Police Department  
\$62,146  
2006-DN-BX-0027

Georgia Criminal Justice Coordinating Council  
\$386,482  
2006-DN-BX-0042

Guam, Territory of  
\$91,015  
2006-DN-BX-0044

Hawaii Department of the Attorney General  
\$91,015  
2006-DN-BX-0045

Hillsboro, City of  
\$84,450  
2006-DN-BX-0019

Hillsborough County  
\$95,000  
2006-DN-BX-0046

Houston Police Department  
\$95,000  
2006-DN-BX-0028

Idaho State Police  
\$91,015  
2006-DN-BX-0047

Illinois Criminal Justice Information Authority  
\$435,312  
2006-DN-BX-0048

Indiana Criminal Justice Institute  
\$213,914  
2006-DN-BX-0049

Instituto de Ciencias Forenses de Puerto Rico  
\$133,400  
2006-DN-BX-0050

Iowa Governor's Office of Drug Control Policy  
\$101,171  
2006-DN-BX-0051

Jefferson County  
\$82,349  
2006-DN-BX-0052

Johnson County  
\$90,000  
2006-DN-BX-0053

Kansas Office of the Governor  
\$93,611  
2006-DN-BX-0069

Kenosha County Department of Human Services  
\$93,410  
2006-DN-BX-0054

Kentucky Justice and Safety Cabinet \$142,340 2006-DN-BX-0055	Missouri Department of Public Safety \$197,827 2006-DN-BX-0060	Ohio Office of Criminal Justice Services \$485,997 2006-DN-BX-0070
Lane County \$94,988 2006-DN-BX-0056	Monroe County Medical Examiner \$51,034 2006-DN-BX-0061	Oklahoma District Attorneys Council \$216,005 2006-DN-BX-0071
Louisiana Commission on Law Enforcement and Administration of Justice \$154,284 2006-DN-BX-0057	Montana Board of Crime Control \$91,015 2006-DN-BX-0062	Oregon State Police \$219,183 2006-DN-BX-0008
Maine, State of \$82,639 2006-DN-BX-0005	Nassau County \$95,000 2006-DN-BX-0063	Pennsylvania Commission on Crime and Delinquency \$423,929 2006-DN-BX-0072
Maine, State of \$91,015 2006-DN-BX-0078	Nebraska State Patrol \$91,015 2006-DN-BX-0011	Rapid City Police Department \$93,855 2006-DN-BX-0032
Maricopa County \$95,000 2006-DN-BX-0058	New Hampshire, State of \$91,015 2006-DN-BX-0080	Rhode Island, State of \$91,015 2006-DN-BX-0081
Maryland Governor's Office of Crime Control and Prevention \$191,009 2006-DN-BX-0043	New Jersey Department of Law and Public Safety \$297,337 2006-DN-BX-0064	Sedgwick County \$95,000 2006-DN-BX-0073
Massachusetts State Police \$305,476 2006-DN-BX-0059	New Mexico Department of Public Safety \$167,818 2006-DN-BX-0010	South Carolina Department of Public Safety \$145,125 2006-DN-BX-0074
Miami Police Department \$95,000 2006-DN-BX-0029	New York State Division of Criminal Justice Services \$751,705 2006-DN-BX-0065	South Dakota Office of the Attorney General \$124,353 2006-DN-BX-0068
Michigan, State of \$345,186 2006-DN-BX-0079	North Carolina Department of Crime Control and Public Safety \$296,154 2006-DN-BX-0066	Spokane County Medical Examiner \$94,233 2006-DN-BX-0075
Minneapolis, City of \$95,000 2006-DN-BX-0030	North Dakota Crime Laboratory Division \$104,085 2006-DN-BX-0067	St. Louis Metropolitan Police Department \$84,385 2006-DN-BX-0076
Minnesota Department of Public Safety \$175,061 2006-DN-BX-0007	North Miami, City of \$80,000 2006-DN-BX-0031	Tennessee, State of \$203,375 2006-DN-BX-0082
Mississippi Department of Public Safety \$99,628 2006-DN-BX-0009		Texas, State of \$779,670 2006-DN-BX-0083

Tooele City Corporation  
\$82,007  
2006-DN-BX-0084

Twin Falls County  
\$95,000  
2006-DN-BX-0085

Utah Department of Public Safety  
\$93,424  
2006-DN-BX-0086

Utica, City of  
\$43,975  
2006-DN-BX-0033

Ventura County  
\$95,000  
2006-DN-BX-0035

Vermont Department of Public Safety  
\$91,015  
2006-DN-BX-0087

Virgin Islands, Territory of  
\$91,015  
2006-DN-BX-0088

Virginia Department of Criminal  
Justice Services  
\$258,099  
2006-DN-BX-0089

Washington Department of Community,  
Trade, and Economic Development  
\$214,453  
2006-DN-BX-0090

West Virginia Division of Criminal  
Justice Services  
\$120,561  
2006-DN-BX-0091

Westchester County  
\$72,560  
2006-DN-BX-0036

Wisconsin Department of Justice  
\$188,820  
2006-DN-BX-0092

Wyoming Office of the Attorney General  
\$91,015  
2006-DN-BX-0093

### Process and Outcome Evaluation of G.R.E.A.T.

**Process and Outcome Evaluation of G.R.E.A.T.**  
University of Missouri–St. Louis  
\$2,497,585  
2006-JV-FX-0011

### Research and Development on Crime Scene Tools, Techniques, and Technologies

**Development of an Optical Handheld  
Biological Evidence Detection System**  
MicroBioSystems of Utah  
\$324,547  
2006-DN-BX-K028

**Enhanced Visualization of Bloodstains**  
John Jay College  
\$123,311  
2006-DN-BX-K026

**Field Detection of Drug and Explosive Odor  
Signatures Using SPME-IMS**  
Florida International University  
\$249,446  
2006-DN-BX-K027

### Research and Development on Impression Evidence

**Enhancing the Quality of Aged Fingerprints  
Developed by Cyanoacrylate Fuming**  
University of Tennessee  
\$126,505  
2006-DN-BX-K031

**Statistical Validation of the Individuality of  
Guns Using High-Resolution Topographical  
Images of Bullets**  
Intelligent Automation, Inc.  
\$102,798  
2006-DN-BX-K030

**Statistical Validation of the Individuality  
of Tool Marks Due to the Effect of Wear,  
Environmental Exposure, and Partial Evidence**  
Intelligent Automation, Inc.  
\$149,477  
2006-DN-BX-K029

### Research and Evaluation in Community Corrections: A Multijurisdictional Study of Reduced Caseload and Related Case Supervision Strategies in Managing Medium- and High-Risk Offenders

**Multijurisdictional Study of Reduced Caseload  
and Related Supervision Strategies in  
Managing Offenders on Probation**  
Abt Associates Inc.  
\$999,940  
2006-IJ-CX-0011

### Research and Evaluation on the Abuse, Neglect, and Exploitation of Elderly Individuals, Older Women, and Residents of Residential Care Facilities

**Financial Abuse of the Elderly Versus  
Other Forms of Elder Abuse: Assessing  
the Dynamics, Risk Factors, and Society's  
Response**  
University of Virginia  
\$290,414  
2006-WG-BX-0010

**Measuring the Financial Exploitation and  
Psychological Abuse of Elderly Individuals**  
University of Illinois  
\$304,300  
2006-MU-MU-0004

**Multisite Study to Characterize Pressure  
Ulcers in Long-Term Care Under Best Practices**  
University of California  
\$561,718  
2006-IJ-CX-0029

**Statewide Analysis of Elder Abuse**  
Advocates for Human Potential  
\$118,376  
2006-WG-BX-0009

### Research on Sexual Violence and Violent Behavior in Corrections

**Application of Situational Crime Prevention to Sexual Assaults in Jail Facilities: An Action-Research Partnership**  
Urban Institute  
\$496,704  
2006-RP-BX-0040

**Gender Violence and Safety: Improving Security in Women's Facilities**  
California State University-Fresno  
\$558,916  
2006-RP-BX-0016

### School Safety Technologies

**School Safety and Sex Offender Screening Project**  
Raptor Technologies, Inc.  
\$52,675  
2006-IJ-CX-0043

**SharpRIDE**  
AEPCO, Inc.  
\$189,949  
2006-IJ-CX-0042

### Sensors and Surveillance Technologies

**Handheld and Portable Sub-mmW Concealed Weapon Detection Sensors**  
Raytheon Company  
\$341,261  
2006-IJ-CX-K024

**Through-Wall Personnel Detector**  
Armadar, LLC  
\$275,000  
2006-IJ-CX-K025

**Through-Wall Surveillance for Locating Individuals Within Buildings**  
Time Domain Corporation  
\$199,966  
2006-IJ-CX-K026

**Weapons and Nonpermitted Device Detector**  
Luna Innovations, Inc.  
\$464,907  
2006-IJ-CX-K023

### Sexual Violence from Adolescence to Late Adulthood: Research, Evaluation, and the Criminal Justice Response

**Effectiveness of Sex Offender Registration and Notification Policies in Reducing Sexual Violence Against Women**  
Medical University of South Carolina  
\$484,106  
2006-WG-BX-0002

**Sexual Assault Among Latinas Project**  
University of New Hampshire  
\$450,585  
2006-WG-BX-0005

### Social Science Research on Terrorism

**Operation and Structure of Right-Wing Extremist Groups**  
University of Nebraska-Omaha  
\$144,140  
2006-IJ-CX-0027

**Organizational Learning and Islamic Extremism**  
Pennsylvania State University  
\$148,862  
2006-IJ-CX-0025

**Prosecution of Terrorism Cases**  
University of Arkansas  
\$292,893  
2006-IJ-CX-0026

**Terrorism in Time and Space: The Inclusion of Spatio-Temporal Data From Federal Terrorism Cases into the ATS Database**  
University of Arkansas  
\$350,000  
2006-IJ-CX-0037

**Using Data Mining to Identify Patterns in Hostile Surveillance**  
Research Triangle Institute  
\$124,919  
2006-IJ-CX-0024

### Social Science Research on the Role and Impact of Forensic Evidence on the Criminal Justice Process

California State University-Los Angeles  
\$600,000  
2006-DN-BX-0094  
  
Institute for Law and Justice, Inc.  
\$600,000  
2006-DN-BX-0095

### Study of Administration of Justice in Indian Country

University of California  
\$1,472,042  
2006-DD-BX-0557

### Transnational Crime

**Human Trafficking: A Case Study Approach to the Transnational Movement of Chinese Women for Sex Work**  
Rutgers State University of New Jersey  
\$284,287  
2006-IJ-CX-0008

**Prosecuting Human Trafficking Cases: Lessons Learned and Best Practices From the United States and Abroad**  
Caliber Associates, Inc.  
\$189,420  
2006-IJ-CX-0010

### W.E.B. Dubois Fellowship

**Significance of Courtroom Workgroup Racial Diversity to Criminal Case Outcomes**  
Northeastern University  
\$75,523  
2006-IJ-CX-0009



## Appendix C

### NIJ Publications, Products, and Web Dissemination in FY 2006

Most NIJ materials are free and can be obtained from these three sources:

- NIJ Web site: [www.ojp.usdoj.gov/nij](http://www.ojp.usdoj.gov/nij).
- National Criminal Justice Reference Service (NCJRS): [www.ncjrs.gov](http://www.ncjrs.gov), 800-851-3420, P.O. Box 6000, Rockville, MD 28049-6000.
- National Law Enforcement and Corrections Technology Center (NLECTC) (for science and technology materials): [www.justnet.org](http://www.justnet.org), 800-248-2742.

#### Publications (in alphabetical order):

"Automated Information Sharing: Does It Help Law Enforcement Officers Work Better?" *NIJ Journal*, No. 253, January 2006: 25–26.

"Analyzing Terror: Researchers Study the Perpetrators and the Effects of Suicide Terrorism," Hronick, Michael S., *NIJ Journal*, No. 254, July 2006: 8–11.

"Body Armor Safety Initiative: To Protect and Serve . . . Better," Tompkins, Dan, *NIJ Journal*, No. 254, July 2006: 2–6.

*Communications Interoperability: Basics for Practitioners*, In Short, March 2006, 2 pages, NCJ 212978.

*Co-Offending and Patterns of Juvenile Crime*, McCord, Joan, and Kevin P. Conway, Research in Brief, December 2005, 20 pages, NCJ 210360.

"Digital Evidence: How Law Enforcement Can Level the Playing Field With Criminals," Ritter, Nancy, *NIJ Journal*, No. 254, July 2006: 20–22.

"DNA Analysis for 'Minor' Crimes: A Major Benefit for Law Enforcement," Zedlewski, Edwin, and Mary B. Murphy, *NIJ Journal*, No. 253, January 2006: 2–5.

*Drug Courts: The Second Decade*, Special Report, June 2006, 38 pages, NCJ 211081.

*Enhancing Police Integrity*, Klockars, Carl B., Sanja Kutnjak Ivkovich, and Maria R. Haberfeld, Research for Practice, December 2005, 16 pages, NCJ 209269.

*Exploring the Spatial Configuration of Places Related to Homicide Events*, Groff, Elizabeth, and Tom McEwen, Final Report, March 2006, 136 pages, NCJ 214254.

*Extent, Nature, and Consequences of Rape Victimization: Findings From the National Violence Against Women Survey*, Tjaden, Patricia, and Nancy Thoennes, Special Report, January 2006, 46 pages, NCJ 210346.

"Has Rape Reporting Increased Over Time?" Taylor, Lauren R., *NIJ Journal*, No. 254, July 2006: 28–30.

*I-SAFE Evaluation*, Chibnall, Susan, Madeleine Wallace, Christine Leicht, and Lisa Lunghofer, Final Report, January 2006, 222 pages, NCJ 213715.

*Justicia Penal Siglo XXI: Una Selección de Criminal Justice 2000*, CD-ROM, August 2006, NCJ 213798.

- Juvenile Accountability Incentive Block Grants: Assessing Initial Implementation*, Parent, Dale G., and Liz Barnett, Research for Policy, December 2005, 9 pages, NCJ 210116.
- "Keeping an Eye on School Security: The Iris Recognition Project in New Jersey Schools," Cohn, Jeffrey P., *NIJ Journal*, No. 254, July 2006: 12–15.
- Lessons Learned From 9/11: DNA Identification in Mass Fatality Incidents*, September 2006, 142 pages, NCJ 214781.
- Lessons Learned From 9/11: DNA Identification in Mass Fatality Incidents*, CD-ROM, September 2006, NCJ 215295.
- "Maximize Your Evaluation Dollars," Zedlewski, Edwin, and Mary B. Murphy, *NIJ Journal*, No. 254, July 2006: 16–19.
- "Methamphetamine Abuse: Challenges for Law Enforcement and Communities," Hunt, Dana E., *NIJ Journal*, No. 254, July 2006: 24–27.
- "Police Responses to Officer-Involved Shootings," *NIJ Journal*, No. 253, January 2006: 21–24.
- "Predicting a Criminal's Journey to Crime," *NIJ Journal*, No. 253, January 2006: 10–15.
- Principles of Forensic DNA for Officers of the Court*, President's DNA Initiative, Online Training, February 2006, NCJ 212399.
- Public Law 280 and Law Enforcement in Indian Country—Research Priorities*, Goldberg, Carole, and Heather Valdez Singleton, Research in Brief, December 2005, 20 pages, NCJ 209839.
- Radio Spectrum*, In Short, August 2006, 2 pages, NCJ 214962.
- Reducing Gun Violence: Community Problem Solving in Atlanta*, Kellerman, Arthur L., Dawna Fuqua-Whitley, and Constance S. Parramore, Research Report, June 2006, 40 pages, NCJ 209800.
- Sexual Assault on Campus: What Colleges and Universities Are Doing About It*, Karjane, Heather M., Bonnie S. Fisher, and Francis T. Cullen, Research for Practice, December 2005, 21 pages, NCJ 205521.
- Status and Needs of Forensic Science Service Providers: A Report to Congress*, March 2006, 34 pages, NCJ 213420.
- Telephony Implications of Voice over Internet Protocol*, In Short, February 2006, 2 pages, NCJ 212976.
- Test Results for Hardwire Write Block Device: Digital Intelligence Firefly 800 IDE (FireWire Interface)*, Special Report, April 2006, 18 pages, NCJ 212957.
- Test Results for Hardware Write Block Device: Digital Intelligence UltraBlock SATA (FireWire Interface)*, Special Report, May 2006, 18 pages, NCJ 214067.
- Test Results for Hardware Write Block Device: Digital Intelligence UltraBlock SATA (USB Interface)*, Special Report, April 2006, 19 pages, NCJ 212961.
- Test Results for Hardware Write Block Device: FastBloc IDE (Firmware Version 16)*, Special Report, April 2006, 36 pages, NCJ 212956.

*Test Results for Hardware Write Block Device: ICS ImageMasster DriveLock IDE (Firmware Version 17)*, Special Report, April 2006, 36 pages, NCJ 212959.

*Test Results for Hardware Write Block Device: MyKey NoWrite (Firmware Version 1.05)*, Special Report, April 2006, 28 pages, NCJ 212958.

*Test Results for Hardware Write Block Device: WiebeTech Bus Powered Forensic ComboDock (FireWire Interface)*, Special Report, May 2006, 19 pages, NCJ 214066.

*Test Results for Hardware Write Block Device: WiebeTech Bus Powered Forensic ComboDock (USB Interface)*, Special Report, May 2006, 19 pages, NCJ 214065.

*Test Results for Hardware Write Block Device: WiebeTech FireWire DriveDock Combo (FireWire Interface)*, Special Report, April 2006, 18 pages, NCJ 212960.

*Test Results for Hardware Write Block Device: WiebeTech Forensic ComboDock (FireWire Interface)*, Special Report, May 2006, 18 pages, NCJ 214064.

*Test Results for Hardware Write Block Device: WiebeTech Forensic ComboDock (USB Interface)*, Special Report, May 2006, 19 pages, NCJ 214063.

"Tracking Prisoners in Jail With Biometrics: An Experiment in a Navy Brig," Miles, Christopher A., and Jeffrey P. Cohn, *NIJ Journal*, No. 253, January 2006: 6–9.

"Victim Satisfaction With the Criminal Justice System," *NIJ Journal*, No. 253, January 2006: 16–18.

*Visualization of Spatial Relationships in Mobility Research: A Primer*, Groff, Elizabeth, and Thomas McEwen, Final Report, March 2006, 65 pages, NCJ 214255.

## Exhibit C-1: Top 25 Publications Accessed From the NIJ Web Site, FY 2006

Title and Author	NCJ Number	Published
<i>Crime Scene Investigation: A Guide for Law Enforcement</i> (Research Report), Technical Working Group on Crime Scene Investigation	NCJ 178280	2000
<i>Electronic Crime Scene Investigation: A Guide for First Responders</i> (NIJ Guide), Technical Working Group for Electronic Crime Scene Investigation	NCJ 187736	2001
<i>Convicted by Juries, Exonerated by Science: Case Studies in the Use of DNA Evidence to Establish Innocence After Trial</i> (Research Report), Edward Connors, Thomas Lundregan, Neal Miller, and Tom McEwen	NCJ 161258	1996
<i>Death Investigation: A Guide for the Scene Investigator</i> (Research Report), National Medicolegal Review Panel and Steven C. Clark	NCJ 167568	1999
<i>Guns in America: National Survey on Private Ownership and Use of Firearms</i> (Research in Brief), Philip J. Cook and Jens Ludwig	NCJ 165476	1997
<i>Full Report of the Prevalence, Incidence, and Consequences of Violence Against Women: Findings From the National Violence Against Women Survey</i> (Research Report), Patricia Tjaden and Nancy Thoennes	NCJ 183781	2000
<i>The Sexual Victimization of College Women</i> (Research Report), Bonnie S. Fisher, Francis T. Cullen, and Michael G. Turner	NCJ 182369	2000
<i>What Every Law Enforcement Officer Should Know About DNA Evidence</i> (Research Report), National Commission on the Future of DNA Evidence	BC 000614	1999
<i>2000 Arrestee Drug Abuse Monitoring: Annual Report</i> (Research Report), Arrestee Drug Abuse Monitoring Program	NCJ 193013	2003
<i>Forensic Examination of Digital Evidence: A Guide for Law Enforcement</i> (Special Report), Technical Working Group for the Examination of Digital Evidence	NCJ 199408	2004
<i>Mapping Crime: Understanding Hot Spots</i> (Special Report), John E. Eck, Spencer Chainey, James G. Cameron, Michael Leitner, and Ronald E. Wilson	NCJ 209393	2005
<i>Correctional Boot Camps: A Tough Intermediate Sanction</i> (Research Report), Doris L. MacKenzie and Eugene E. Hebert	NCJ 157639	1996
<i>Extent, Nature, and Consequences of Intimate Partner Violence: Findings From the National Violence Against Women Survey</i> (Research Report), Patricia Tjaden and Nancy Thoennes	NCJ 181867	2000
<i>Sexual Assault on Campus: What Colleges and Universities Are Doing About It</i> (Research for Practice), Heather M. Karjane, Bonnie S. Fisher, and Francis T. Cullen	NCJ 205521	2005
<i>Co-Offending and Patterns of Juvenile Crime</i> (Research in Brief), Joan McCord and Kevin P. Conway	NCJ 210360	2005
<i>Extent, Nature, and Consequences of Rape Victimization: Findings From the National Violence Against Women Survey</i> (Special Report), Patricia Tjaden and Nancy Thoennes	NCJ 210346	2006
<i>Managing Adult Sex Offenders in the Community—A Containment Approach</i> (Research in Brief), Kim English, Suzanne Pullen, and Linda Jones	NCJ 163387	1997
<i>Using DNA to Solve Cold Cases</i> (Special Report), National Commission on the Future of DNA Evidence	NCJ 194197	2002
<i>Police Attitudes Toward Abuse of Authority: Findings From a National Study</i> (Research in Brief), Daniel Weisburd and Rosann Greenspan with Edwin E. Hamilton, Hubert Williams, and Kellie A. Bryant	NCJ 181312	2000
<i>Eyewitness Evidence: A Guide for Law Enforcement</i> (Research Report), Technical Working Group for Eyewitness Evidence	NCJ 178240	1999
<i>Sex Offender Community Notification: Assessing the Impact in Wisconsin</i> (Research in Brief), Richard G. Zevitz and Mary Ann Farkas	NCJ 179992	2000
<i>Child Sexual Molestation: Research Issues</i> (Research Report), Robert A. Prentky, Raymond A. Knight, and Austin F.S. Lee	NCJ 163390	1997
<i>The Appropriate and Effective Use of Security Technologies in U.S. Schools: A Guide for Schools and Law Enforcement Agencies</i> (Research Report), Mary W. Green	NCJ 178265	1999
<i>Enhancing Police Integrity</i> (Research for Practice), Carl B. Klockars, Sanja Kutnjak Ivkovich, and Maria R. Haberfeld	NCJ 209269	2005
<i>"Broken Windows" and Police Discretion</i> (Research Report), George L. Kelling	NCJ 178259	1999

## Exhibit C-2: Top 25 Publications by Number of Paper Copies Requested, FY 2006

Title and Author	Quantity	NCJ Number	Published
<i>Principles of Forensic DNA for Officers of the Court</i> (CD-ROM), President's DNA Initiative	6,046	NCJ 212399	2006
<i>Crime Scene Investigation: A Guide for Law Enforcement</i> (Research Report), Technical Working Group on Crime Scene Investigation	3,646	NCJ 178280	2000
<i>Electronic Crime Scene Investigation: A Guide for First Responders</i> (NIJ Guide), Technical Working Group for Electronic Crime Scene Investigation	2,974	NCJ 187736	2001
<i>Death Investigation: A Guide for the Scene Investigator</i> (Research Report), National Medicolegal Review Panel and Steven C. Clark	2,572	NCJ 167568	1997
<i>Eyewitness Evidence: A Guide for Law Enforcement</i> (Research Report), Technical Working Group for Eyewitness Evidence	2,319	NCJ 178240	1999
<i>A Guide for Explosion and Bombing Scene Investigation</i> (Research Report), Technical Working Group for Bombing Scene Investigation	2,154	NCJ 181869	2000
<i>What Every Law Enforcement Officer Should Know About DNA Evidence</i> (Research Report), National Commission on the Future of DNA Evidence	1,811	BC 000614	1999
<i>Identifying Victims Using DNA: A Guide for Families</i> (Brochure), President's DNA Initiative	1,750	NCJ 209493	2005
<i>Mass Fatality Incidents: A Guide for Human Forensic Identification</i> (Special Report), Technical Working Group for Mass Fatality Forensic Identification	1,719	NCJ 199758	2005
<i>Crime Scene Investigation: A Reference for Law Enforcement Training</i> (Special Report), Technical Working Group on Crime Scene Investigation	1,480	NCJ 200160	2004
<i>Fire and Arson Scene Evidence: A Guide for Public Safety Personnel</i> (Research Report), Technical Working Group on Fire/Arson Scene Investigation	1,439	NCJ 181584	2000
<i>DNA in "Minor" Crimes Yields Major Benefits in Public Safety</i> (In Short)	1,213	NCJ 207203	2004
<i>Forensic Examination of Digital Evidence: A Guide for Law Enforcement</i> (Special Report), Technical Working Group for the Examination of Digital Evidence	1,020	NCJ 199408	2004
<i>Lessons Learned From 9/11: DNA Identification in Mass Fatality Incidents</i> (Special Report), President's DNA Initiative	1,014	NCJ 214781	2006
<i>Radio Spectrum</i> (In Short)	1,005	NCJ 214962	2006
<i>Telephony Implications of Voice over Internet Protocol</i> (In Short)	956	NCJ 212976	2006
<i>Using DNA to Solve Cold Cases</i> (Special Report), National Commission on the Future of DNA Evidence	938	NCJ 194197	2002
<i>Education and Training in Forensic Science: A Guide for Forensic Science Laboratories, Educational Institutions, and Students</i> (Special Report), Technical Working Group for Education and Training in Forensic Science	935	NCJ 203099	2004
<i>Mapping Crime: Understanding Hot Spots</i> (Special Report), John E. Eck, Spencer Chainey, James G. Cameron, Michael Leitner, and Ronald E. Wilson	891	NCJ 209393	2005
<i>Co-Offending and Patterns of Juvenile Crime</i> (Research in Brief), Joan McCord and Kevin P. Conway	890	NCJ 210360	2005
<i>Communications Interoperability: Basics for Practitioners</i> (In Short)	801	NCJ 212978	2006
<i>NIJ Journal</i> , Issue No. 252	760	NCJ 208702	2005
<i>NIJ Journal</i> , Issue No. 253	745	NCJ 212261	2006
<i>Drug Courts: The Second Decade</i> (Special Report)	739	NCJ 211081	2006
<i>Advancing Justice Through DNA Technology</i> (Legislation), U.S. Executive Office of the President	735	NCJ 200005	2003

## Exhibit C-3: NIJ Web Site Visits, FY 2003–2006

	FY 2003	FY 2004	FY 2005	FY 2006
NIJ Web Site	904,969	1,017,169	1,181,936	1,423,712

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NIJ Federal Research Meeting: Summary and Bibliography (Posted 6/29/07)  
 "Standard Bullet" Identifies Suspected Firearms (Posted 6/19/07)  
 New topics pages on Rape and Sexual Violence, Victims and Victimization, Stalking, Elder Abuse, Child Abuse and Maltreatment, Hate Crime, Ranting, and Pitbull Rape (Posted 6/19/07)  
 NIJ Policing Research Workshop: Summary and Papers (Posted 6/14/07)

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**New Publications**

- NIJ Journal Issue No. 257 (Posted 6/18/2007)
- Public Safety Communications and Interoperability (Posted 6/15/2007)
- Understanding FCC Nonrenewal Requirements (Posted 6/14/2007)
- Voice over Internet Protocol (Posted 6/12/2007)
- Mental Health Screens for Corrections (Posted 5/22/2007)
- Addressing Shortfalls in Forensic Science Education (Posted 5/21/2007)

**Funding Opportunities**

- Criminal Justice Technology Centers of Excellence: Questions and answers (Posted 6/11/07) Due: July 3, 2007
- Research on Sex Offenders: Risk Prediction Models and Effectiveness of Residential and Community Restrictions Due: July 14, 2007
- Case Study Evaluation of the National Crime Victim Law Institute State and Federal Courts and Systems Demonstration Project Due: June 27, 2007
- W.E.B. Du Bois Fellowship Program 2008 Due: February 1, 2008
- Data Resources Program 2008: Funding for the Analysis of Existing Data Due: July 19, 2007
- Graduate Research Fellowships 2008 Due: November 24, 2007
- View other funding opportunities from the Office of Justice Programs.
- Receive an email notice of new funding opportunities.

**Events**

- Forensic Biology and DNA Continuing Education Program: July 30-August 3, 2007 Registration Deadline: July 15, 2007 5:00 p.m. eastern time
- Technologies for Critical Incident Preparedness Conference and Exposition: November 5-8, 2007
- NIJ Law Enforcement Technology Institute: August 28-31 Application Deadline: June 29, 2007

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