



NATIONAL INSTITUTE OF JUSTICE

# ANNUAL REPORT

2018

**U.S. Department of Justice**  
**Office of Justice Programs**  
**810 Seventh St. N.W.**  
**Washington, DC 20531**

**David B. Muhlhausen, Ph.D.**  
Director, National Institute of Justice

This and other publications and products of the National Institute of Justice can be found at:

**National Institute of Justice**

Strengthen Science • Advance Justice  
[NIJ.ojp.gov](http://NIJ.ojp.gov)

**Office of Justice Programs**

Building Solutions • Supporting Communities • Advancing Justice  
[OJP.gov](http://OJP.gov)

The National Institute of Justice is the research, development, and evaluation agency of the U.S. Department of Justice. NIJ's mission is to advance scientific research, development, and evaluation to enhance the administration of justice and public safety.

The National Institute of Justice is a component of the Office of Justice Programs, which also includes the Bureau of Justice Assistance; the Bureau of Justice Statistics; the Office for Victims of Crime; the Office of Juvenile Justice and Delinquency Prevention; and the Office of Sex Offender Sentencing, Monitoring, Apprehending, Registering, and Tracking.

## 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 2018, pursuant to Title 1 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 that reads "David B. Muhlhausen" followed by a long horizontal flourish.

David B. Muhlhausen, Ph.D.  
Director, National Institute of Justice



# Table of Contents

- About the National Institute of Justice ..... 1**
- Preventing and Reducing Crime ..... 3**
  - Understanding Radicalization to Terrorist Ideologies ..... 3
  - Violence Against Women ..... 4
  - Utilizing Artificial Intelligence ..... 4
  - Reducing Firearms Violence ..... 4
  - Combating Drugs and Crime ..... 5
  - Understanding the Impacts of Policing Strategies ..... 6
  - Human Trafficking ..... 6
- Law Enforcement ..... 9**
  - Protecting Police Officers and Public Safety Personnel ..... 9
  - National Law Enforcement and  
Corrections Technology Centers ..... 9
  - Testing and Standards for Law Enforcement ..... 9
- Corrections ..... 11**
  - Improving Offender Reentry ..... 11

Research and Evaluation in Corrections .....	12
Illicit Cell Phones in Correctional Facilities .....	12
<b>Forensic Science .....</b>	<b>13</b>
DNA Capacity Enhancement and Backlog Reduction Program .....	13
National Forensic Science Improvement Grants .....	14
Research and Development in Forensic Science .....	15
Forensic DNA Laboratory Efficiency Improvement and Capacity Enhancement Competitive Grants Program .....	16
Postconviction Testing of DNA Evidence Program .....	16
Strengthening the Medical Examiner-Coroner System Program .....	17
Research and Evaluation for the Testing and Interpretation of Physical Evidence in Publicly Funded Forensic Laboratories Program .....	17
<b>Supporting Victims of Crime .....</b>	<b>19</b>
Improving Victim Services .....	19
NIJ-FBI Sexual Assault Kit Partnership .....	19
<b>Improving the Criminal Justice System .....</b>	<b>21</b>
Law Enforcement Advancing Data and Science (LEADS) Scholars Program .....	21
Graduate Research Fellowship .....	21
Sentinel Events Initiative .....	22
National Missing and Unidentified Persons System .....	22
CrimeSolutions.gov .....	23

National Archive of Criminal Justice Data ..... 23

Solicitation Review ..... 23

**Highlights of Dissemination ..... 25**

NIJ Journal Issue No. 279 ..... 25

Body Armor Selection, Care, and Maintenance ..... 26

School Safety: By the Numbers ..... 26

Corrections Strategic Research Plan ..... 27

How Radicalization to Terrorism Occurs in the United States:  
What Research Sponsored by NIJ Tells Us ..... 27

Agency-Based Police Research ..... 28

**Social Media ..... 29**

**Appendix: Financial Data ..... 31**





# About the National Institute of Justice

The National Institute of Justice (NIJ) is the research, development, and evaluation agency of the U.S. Department of Justice.

We are dedicated to improving knowledge and understanding of crime and justice issues through science. NIJ provides objective and independent knowledge and tools to inform the decision-making of the criminal justice community to reduce crime and advance justice, particularly at the state and local levels.

NIJ is committed to supporting the development of rigorous and independent research that crosses scientific disciplines and leverages the expertise of both researchers and those working within the criminal justice system. Investments in science allow us to better understand the challenges facing the U.S. criminal justice system and to develop and test effective solutions.



# Preventing and Reducing Crime

## Understanding Radicalization to Terrorist Ideologies

The National Institute of Justice (NIJ) recognizes that law enforcement plays an essential role in keeping citizens safe from terrorism, but engagement and community partnerships also play a critical role in preventing radicalization. Terrorists target their messages to children, families, and individuals. Well-informed families, local communities, and local institutions are critical defenses against these terrorist ideologies.

In fiscal year (FY) 2018, NIJ continued to lead the federal government's efforts to understand the process of radicalization to terrorism, making four awards in this area totaling \$3.4 million. Among the funded projects is an effort to formulate strategies that encourage communities to identify individuals who have been radicalized to terrorism. Another award will support foundational research to better understand vulnerabilities for being radicalized online to terrorist ideologies and domestic terrorism, especially for individuals with multiple vulnerabilities related to their mental cognition and outward behavior.

### Understanding Domestic Radicalization

Countering and preventing terrorism is a primary concern for law enforcement as well as the federal government. The goal of NIJ's work on terrorism is to provide community leaders with evidence-based practices to bolster resilience and develop communitywide responses that can prevent and mitigate the threats posed by terrorists.

Since 2012, NIJ has focused its research investments related to terrorism on developing a better understanding of domestic radicalization and advancing strategies for effective intervention in and prevention of radicalization in the United States.

The Domestic Radicalization and Terrorism research portfolio at NIJ strives to better understand the primary drivers of radicalization and what can be done to prevent or intervene during the radicalization process.

"The FY18 funding cycle emphasized an interest in conventional research, as well as replication and rigorous scientific evaluations of new and existing demonstration programs to prevent terrorism," said Aisha Qureshi, a social science analyst in NIJ's Office of Research, Evaluation, and Technology.

In FY 2018, NIJ awarded funding to four projects, a total investment of more than \$3.4 million. NIJ encouraged applicants to submit projects that conduct comparative and multisite programmatic evaluations, help the field better understand risk factors, and develop risk assessment tools.

"Through these four new studies, NIJ was able to award research that will advance the field on an international scale, provide even more resources for practitioners working in this arena, and improve the field's understanding of how radicalization can occur in the on- and offline space," Qureshi said.

## Violence Against Women

Intimate partner violence is a pervasive issue throughout the United States. NIJ strives to support objective and independent knowledge and validated tools to reduce violence against women, promote justice for all victims of crime, and enhance criminal justice responses to such crimes.

For over 40 years, NIJ has invested more than \$130 million in research and evaluation to study violence against women. The mission of the program is to promote the safety of women, children, and family members.

In 2018, NIJ made five awards, totaling \$3.1 million, that address the challenges of violence against women. These awards further the Department's mission and the Attorney General's priorities by funding projects to reduce violent crime, respond to the needs of victims, and enhance investigations and prosecutions.

Projects funded in 2018 under this program examined the effectiveness of trauma-informed interview training for health care professionals, and the long-term trends of civil protective orders and their impact on the rates of recidivism in cases involving intimate partner violence.

## Utilizing Artificial Intelligence

Artificial intelligence (AI) is a transformative technology that holds promise for tremendous societal and economic benefits, including the recognition of patterns in data that can enhance IT system security and the effectiveness of law enforcement in pursuing crime.

In 2018, NIJ initiated a new area of research — applying AI technology in criminal justice settings. NIJ seeks to support innovative, early-stage research that brings the rapidly evolving AI research community's perspective to the challenges facing the criminal justice system, and supports the development of new AI-based tools that are designed for use in criminal justice agencies, particularly at the state and local levels.

NIJ sought to apply these AI advances in support of law enforcement on cases involving gang violence, trafficking in persons or drugs, smuggling of migrant workers, and child pornography. NIJ made three awards, totaling \$2.4 million, for AI research related to these areas. Two awarded applications were focused on combating human trafficking, and one dealt with opioid trafficking.

Projects include an effort to design and develop an intelligent system that leverages the latest advances in AI technologies to automate data analysis and to link traffickers on the dark web to the Internet, providing timely investigative leads to law enforcement agencies. Those leads can be exploited to profile opioid traffickers, collect forensic evidence against opioid trafficking rings, and disrupt their networks.

## Reducing Firearms Violence

Despite an overall downward trend in violent crime rates since the early 1990s, homicide rates related to firearms violence remain high in some localities and specific populations. The frequency of public mass shooting incidents has also increased in recent years.

Although the victims of these incidents represent a small fraction of overall firearms homicides in the United States, they have a disproportionate impact on the general public's perceptions of safety.

In 2018, NIJ made four awards, totaling \$2 million, to expand research on reducing firearms violence. One of these projects seeks to better understand how mass shooters come to be radicalized and explores strategies to deter and prevent future public mass shooting incidents. Another project will examine psychological and social histories of individual mass shooters, along with the cultural and economic factors in their communities, to learn more about the risk factors and predictors of firearms violence, the motivations of shooters, characteristics of mass shootings, and prevention strategies.

### Using Modern Methods To Detect New Illicit Drugs

One of the most serious challenges facing forensic toxicology laboratories is coping with the proliferation of new psychoactive substances. Synthetic cannabinoids, cathinones, psychedelics, benzodiazepines, and opioids have exploded onto the drug scene, even as older drugs such as heroin and cocaine have not gone away. Efforts to detect and identify the new drugs, many of which come from illicit laboratories overseas, have proven difficult as even slight alterations in the chemistry of some of the drugs can make them nonreactive in standard tests.

One of the 2018 NIJ grants is aimed directly at this problem, with a researcher at Sam Houston State University testing High Resolution Mass Spectrometry (HRMS) as a possible replacement for the immunoassay test that is currently the standard in forensic toxicology screening. "This is a big one," said NIJ scientist Frances Scott, who oversees grants related to toxicology. "This is where a lot of the field is going." HRMS can accurately detail the chemistry of an unknown substance, "sorting out everything, showing every peak [on a mass spectrometry result] that is in there with high precision," Scott said.

The research, led by Sarah Kerrigan, chair of Sam Houston State's Forensic Science Department, will analyze blood samples from impaired drivers that have already undergone immunoassay testing. The two types of analysis will be compared, and a cost-benefit analysis will be done to determine if switching to HRMS is cost-effective for toxicology laboratories.

"Traditional immunoassay-based screening no longer provides the scope of testing required in forensic toxicology investigations and must be replaced with improved techniques that provide sufficient sensitivity and scope," Kerrigan said of her research. "It's going to be initially more expensive," Scott concluded, "but it's going to be more comprehensive."

## Combating Drugs and Crime

The United States is experiencing an unprecedented increase in drug overdoses and deaths arising from the increased availability and use of heroin, fentanyl, diverted pharmaceuticals, and novel psychoactive substances (NPS). Manufacturers of NPS, specifically, have a nearly unlimited capacity for rapid development of high-purity analogues.

NIJ's drugs and crime portfolio supports research on law enforcement efforts to deter, investigate, prosecute, and address illegal drug trafficking, drug markets, and drug use. These efforts are crucial to understanding trends in drug markets and use, identifying drug deterrence and interdiction opportunities, and pursuing organized crime targets.

In 2018, NIJ continued its efforts to expand our knowledge base and tools to combat drugs and crime. The agency made three research awards totaling \$1.7 million, including a project that seeks to build drug intelligence networks to combat the opioid crisis in rural communities, and a project to improve the scheduling and effectiveness of law enforcement during drug surveillance activities.

## Understanding the Impacts of Policing Strategies

Evaluations of policing strategies have traditionally relied on crime reduction as the key indicator of an effective strategy. However, another factor to be considered is whether the policing strategies and practices that reduce crime might also generate negative collateral consequences, particularly for communities.

Examining the impact of police crime-reduction practices and strategies on crime and public safety is a long-standing NIJ research priority. Understanding the broad spectrum of collateral consequences that policing strategies can have on individuals, neighborhoods, communities, and police organizations will allow law enforcement practitioners to make better informed decisions when evaluating existing practices or considering new ones.

NIJ initiated a new approach in 2017 that not only considers how well policing strategies reduce crime in the near term but also how they affect community engagement and the longer-term effects on crime. NIJ began this research initiative to develop more complete measures of the impact of these practices and strategies. In 2018, NIJ made three research awards in this area, totaling \$1.7 million. These projects include the development of an expert system to guide homicide investigations using AI technologies, and the development of an AI tool to improve the effectiveness of the person-based, focused deterrence strategy.

## Human Trafficking

As a grave human rights abuse, human trafficking promotes the breakdown of families and communities, fuels organized crime, deprives countries of human capital, undermines public health, creates opportunities for extortion and subversion among government officials, and imposes large economic costs. It is a threat to all nations.

As people have become more aware of the extent of human trafficking in this country, they have also learned more specialized responses to the needs of trafficking victims. Through the funding of rigorous research, NIJ is committed to assisting with the detection and prosecution of human traffickers and to supporting victims' recovery from their experiences of being trafficked.

NIJ awarded two grants in 2018 that address the challenges brought on by human trafficking. One of these studies will extend our understanding of human trafficking by analyzing the lifetime trajectories of young victims of trafficking. This study will examine the relationships between trafficking victimization, youth characteristics, and youth experiences in the juvenile justice and child welfare systems.

## Identifying Youth Victims of Human Trafficking

Human trafficking is a complex crime that often occurs in plain sight. It may be difficult for law enforcement and even the victims themselves to understand and identify that they are involved in a human trafficking situation.

For youth, homelessness is a key indicator for potential victimization and human trafficking. Youth who are homeless sometimes trade sex for basic needs, a vulnerability that can lead them to become caught up in a variety of controlled trafficking situations.

One study funded by NIJ in 2018 will evaluate two vulnerable populations — youth in the child welfare system and youth in the juvenile justice system. The study will identify specific characteristics of trafficking victims within these groups, which may be able to inform intervention and prevention programs for youth moving between the two systems.

“I think really being able to look at this highly vulnerable population and see what commonalities exist, we can inform law enforcement and we can inform social service providers to help them do their jobs even better,” said Amy Leffler, an NIJ social science analyst.

The study builds on data from a previous NIJ-funded project that examined the human trafficking screening process of the Florida child welfare system. The initial study found evidence that the system may be underreporting minor victims of sex trafficking and is likely not capturing the totality of kids who are involved in labor trafficking.

“It’s another example of building on what we have funded, our previous investments, and continuing to learn more about the vulnerabilities and indicators for trafficking involvement of minors,” Leffler said of the new study.





# Law Enforcement

## Protecting Police Officers and Public Safety Personnel

Law enforcement officers commonly work extended hours in ever-changing and stressful environments. Longer work hours, in combination with secondary employment and overtime, can result in fatigue and stress among officers. These conditions can lead to other negative effects, such as impaired decision-making ability, substance abuse, and an increased probability of accidents and injuries.

In 2018, NIJ expanded its investment in protecting police officers and public safety personnel. NIJ made three awards in this area, totaling \$2.1 million. In particular, one award will build upon an ongoing NIJ-funded survey of police officer stress and resilience by expanding its focus to include a robust study on how occupational prestige and job satisfaction may mitigate or exacerbate occupational stress for law enforcement and correctional officers. This research may provide insights into how to prevent officer suicides and reduce the impact of stress and secondary trauma on their mental and physical health.

Other funded projects seek to apply existing technology in innovative ways to reduce police vehicle crashes. Over the past decade, traffic fatalities have been the largest single cause of line-of-duty deaths.

## National Law Enforcement and Corrections Technology Centers

Originally created in 1994, the National Law Enforcement and Corrections Technology Centers (NLECTC) system is the conduit for solving urgent and emerging technology issues that researchers and criminal justice professionals encounter in the field. The NLECTC system demonstrates new technologies, tests commercially available technologies, and publishes their results — linking research with practice.

NIJ continues to support NLECTC in conducting research, providing needed technology-related information to criminal justice agencies nationwide, and facilitating the integration of technology into their procedures and practices. Among its activities, NLECTC hosts the Justice Technology Information Network (JUSTNET); publishes *TechBeat*, a monthly journal reporting on technology developments in law enforcement; and hosts the Just Science Podcast for forensic science professionals and anyone interested in learning more about technological advances in this field.

## Testing and Standards for Law Enforcement

Firearms are one of the most dangerous threats that law enforcement officers face. During the past three decades, ballistic-resistant soft body armor has saved the lives of more than 3,000 police officers. Body armor is critical in protecting law enforcement and corrections officers in potentially deadly situations.

NIJ has been setting voluntary body armor standards since 1972 and is the only nationally accepted standard for the body armor worn by law enforcement and corrections officers. NIJ also administers a program that tests commercially available armor for compliance with the standard to determine whether it will function as expected.

NIJ continues to administer the national Compliance Testing Program, which certifies police body armor for ballistic performance. Through August 2018, 39 new models of body armor passed testing and were certified by NIJ and listed on its 2018 Compliant Products List, but 40 models failed the ballistics tests. During the same period, follow-up inspection and testing of 172 models of body armor were conducted, and six advisory notices were issued.

In November 2017, NIJ established a special technical committee (STC) to develop performance standards for the protective equipment worn by law enforcement in response to civil disturbances. No such standards currently exist that meet the unique needs and requirements of U.S. law enforcement officers. The STC includes representatives from 23 federal, state, and local law enforcement agencies across the United States and from nine other government agencies, laboratories, or technical organizations. The inaugural meeting of the STC was held in September 2018.

# Corrections

## Improving Offender Reentry

More than 600,000 Americans are released from prisons and jails annually, and more than 4.5 million are serving a sentence involving community supervision.

Offender reentry initiatives provide many types of services, skills training, and therapeutic interventions. These initiatives are designed to promote prosocial behavior, reduce recidivism, and improve the likelihood of the former offender's successful reintegration into the community from jail or prison. Given the potential public safety and financial implications of an offender's successful reentry into society, it is critical for corrections stakeholders to know which reentry initiatives are the most effective.

In 2018, NIJ collaborated with the Bureau of Justice Assistance (BJA) to launch a new initiative to discover best practices that support former offenders' reentry. Under this program, NIJ awarded almost \$6.2 million in funds to focus on young adults (ages 18-24) or older adults who are at moderate to high risk of reoffending.

One study funded through this initiative will evaluate the impact of expungement on recidivism, housing stability, and employment. Another study will test how a job interview training tool involving the use of virtual reality can support ex-offenders in obtaining employment once they are released from prison.

### Ensuring Rigorous Evaluation on Reentry Programming

The First Step Act was passed in 2018; it is a critical piece of legislation that aims to reduce recidivism and reform the federal prison system so that those exiting the system do not reoffend and return to prison.

NIJ has played a prominent role in the First Step Act, infusing research into First Step reforms and developing an independent review committee along with risk assessment tools.

While not a direct result of the First Step Act, 2018 was also the first year in which NIJ released a solicitation for reentry research that would support only randomized controlled trials (RCTs) for program evaluations. With this new approach, NIJ funded five programs through the Research and Evaluation on Promising Reentry Initiatives program.

"It was the first time we were able to say 'We are really interested in running RCTs, you need to come in with a rigorous design to get this,'" said Eric Martin, an NIJ social science analyst. "It's harder for researchers to be able to make those relationships with sites to allow an RCT to come in, but we funded five projects right off the bat. We were pretty excited."

In total, the five projects received more than \$6 million in funding from NIJ. Moving forward, RCTs will continue to be NIJ's preferred choice for program evaluation research.

"I don't really see us coming back from it now. There may be opportunities for other work in areas, but I think we really did set the standard that when it comes to the evaluation of programming, we're going to have them as RCTs," Martin said.

## Research and Evaluation in Corrections

Every correctional setting has a unique operating environment and challenges. Yet jails, community corrections, and rural and tribal corrections systems have received limited attention — despite the number of jurisdictions they serve and the critical functions they provide. NIJ remains concerned about the number of individuals under correctional supervision and supports further research in this area.

In 2018, NIJ made five awards, totaling nearly \$3.5 million, to evaluate promising practices and strategies that aim to promote the effective management and supervision of offenders in correctional facilities and in the community.

One study funded under this initiative will evaluate a correctional housing program for young adult offenders that is designed to reduce violent misconduct. The program consists of low officer-to-inmate ratios, inmates having more time in the community and learning its rules and expectations, and mentors who are serving life sentences and live in the facility.

## Illicit Cell Phones in Correctional Facilities

The use of contraband wireless devices in correctional facilities to engage in criminal activity poses a significant and growing security challenge to correctional facility administrators and law enforcement.

NIJ made three awards in 2018, totaling \$1.9 million, to address the use of cell phones in correctional facilities to commit crimes. Two of these awards will examine the application of micro-jamming technology, and the third award will fund the development of new technology to identify and locate illicit cell phones.

# Forensic Science

## DNA Capacity Enhancement and Backlog Reduction Program

NIJ's DNA Capacity Enhancement and Backlog Reduction Formula Grants program aims to help increase the output of evidence processing at forensic DNA laboratories and improve the quality of testing. Increased laboratory capacity and decreased sample turnaround time will help laboratories reduce the number of forensic DNA and DNA database samples awaiting analysis. NIJ made 127 awards in 2018, totaling over \$67.8 million. Recipients of funding under the program can use the funding to conduct DNA testing on all evidence that is submitted to the laboratories — including evidence related to sexual assaults, which often includes more than a sexual assault kit.

Approximately 130 state and local crime laboratories receive this funding annually. Since the funding first started in 2005, over 750,000 cases have been completed, over 330,000 forensic profiles have been uploaded to the Combined DNA Index System (CODIS), and over 3 million database samples have been completed.

### Increasing DNA Laboratory Capacity

DNA evidence is a critical piece to any law enforcement investigation. As testing technology has become more helpful to law enforcement over the years, there has been a greater demand for DNA testing — and that demand continues to grow.

Through the DNA Capacity Enhancement and Backlog Reduction program, NIJ helps laboratories increase their capacity to process more DNA samples, thereby reducing the number of samples awaiting analysis.

“This is so impactful to the laboratories, this helps them to keep up sexual assault kit testing and during periods of increased crime,” said Andrea Borchardt, a senior physical scientist in the NIJ Office of Investigative and Forensic Sciences. “It helps them respond to different types of crime that in previous years they wouldn't be able to use DNA testing for because they didn't have the capacity to do it, things like robberies or burglaries. It's also helping them get results to law enforcement faster.”

Grantees use NIJ funding at their own discretion for capacity-building purposes and for the direct analysis of DNA evidence from a variety of cases, including violent crimes, property crimes, and unsolved homicides and sexual assaults.

“We're constantly looking at better ways to use the money to have a bigger impact on the laboratories,” Borchardt said. “We look at the data that they provide as part of being a grantee and see what activities allow the laboratories to have the biggest impact on increasing their capacity or reducing their turnaround times.”

## National Forensic Science Improvement Grants

The alarming proliferation of heroin and synthetic opioids like fentanyl has had a crushing effect on many crime laboratories, which are unable to test samples more quickly. Synthetic opioids in particular may be more difficult to analyze than traditional opiates, and validating methods for new drugs as they emerge may significantly slow the processing of these samples.

The goal of the Paul Coverdell National Forensic Science Improvement Grants program is to help improve the quality and timeliness of forensic science and medical examiners' and coroners' testing and analyses.

All Coverdell grants are awarded to states and units of local government and are used for one of the following:

- To eliminate a backlog in the analysis of forensic evidence.
- To train and employ forensic laboratory personnel.
- To address emerging forensic science and technology issues.
- To educate and train forensic pathologists.

In FY 2018, NIJ awarded 77 Coverdell grants totaling \$27.2 million. Since Coverdell funding was first offered in 2002, NIJ has awarded 1,358 grants to state and local forensic laboratories, totaling over \$250 million.

### Understanding Coverdell

Of the many awards and grants NIJ provides in support of forensic science, perhaps the most basic, yet critical, to the functioning of forensic laboratories and medical examiners are the Paul Coverdell National Forensic Science Improvement Grants. These grants, which totaled \$27.2 million in 2018, are distributed based on both a formula that gives 85% of the funds to state administering agencies and a competitive process that awards the remaining 15% to individual laboratories and offices.

"This is general forensics money to be used in publicly funded forensic labs for a wide range of disciplines," says Luther Schaeffer, a physical scientist with NIJ. Although the states allocate the bulk of the money based on their particular needs, the competitive grants are awarded by NIJ after a peer review panel reviews the requests.

The grants cover a wide range of activities, but they are not for research. "These grants have to go into projects where the rubber meets the road, projects that increase and improve forensic science services," Schaeffer said. Although Coverdell does not cover the purchase of new, untested research equipment, it will fund new equipment for a laboratory in which people are trained to utilize that equipment. "So, if you're outfitting your forensic firearms unit, or you want to train people to analyze a new type of evidence, or you need to hire someone to handle backlogged evidence, that is Coverdell," he said.

NIJ pays particular attention to small labs that are overlooked in terms of funding. "You'll get projects like somebody requesting \$45,000 just to buy gurneys for their medical examiner or coroner," Schaeffer said. "There are a lot of critical, bare-bones projects that come out of Coverdell."

## Research and Development in Forensic Science

Better and faster tools improve the criminal justice system’s ability to identify, detain, charge, and sentence criminal offenders.

The Research and Development in Forensic Science for Criminal Justice Purposes program supports research and development projects relevant to criminal justice. The program encompasses basic scientific research, research within forensic science, and research and development in other scientific disciplines with forensic science applications.

NIJ made 51 awards, totaling nearly \$24 million, under the Research and Development in Forensic Science for Criminal Justice Purposes program in 2018.

Of these awards, 15 funded projects will develop solutions to meet the operational needs of forensic biology and DNA laboratories. Additional program investments will address the operational needs of forensic scientists working in anthropology, pathology, medicolegal death investigation, impression and pattern evidence, trace evidence, forensic toxicology, and controlled substances. Other projects focus on improving the understanding, characterization, identification, and classification of drugs of abuse. This can build a foundation to better control their use as well as improve our understanding of the emerging dangers to our communities. Further, the development of portable and noncontact methods for the detection of these drugs can minimize unnecessary exposure to harm of law enforcement officers in the course of their duty.

### Effects of Drugs After Death

The opioid crisis has created countless challenges for researchers as they scramble to identify the ever-changing nature of illicit drugs in the United States. Toxicology laboratories work on ways to more quickly identify illicit drugs, while law enforcement develops new methods of detection.

There is also the forensic reality that comes with the tens of thousands of drug-related deaths each year: Investigators who find a body must determine how long the person has been dead. Did the person die of an overdose? And if so, was it hours, days, or weeks ago? It is grim work, but for criminal cases the time of death is especially critical.

“Because of the opioid issue, we’ve funded research projects looking at the effect of drugs on human decomposition,” said NIJ scientist Danielle McLeod-Henning. “We’re trying to develop a timeline, and [determine] if drug abuse in life affects the timeline in death.”

One of those research projects is led by Dawnie Wolfe Steadman, a University of Tennessee anthropologist. Supported by a 2018 NIJ grant and working at the university’s Anthropology Research Facility (also known as the Body Farm), Steadman is trying to determine if prescribed, over-the-counter, and illicit drugs influence decomposition by the three groups of decomposers — insects/arthropods, scavengers, and microbes.

Steadman wants to know if metabolites, the substances formed in the body when a drug breaks down, change the growth rate of maggots. She is also determining if scavengers change their behavior when a body contains certain metabolites, and if decomposer microbes are altered by drug metabolites.

She is taking detailed drug information from donated bodies, then placing them in different environments within the research facility. The bodies are monitored and data are collected to determine the impact, if any, of drug use on the processes of decomposition.

## Improving Pattern Evidence

The last decade has been one of change for forensic research as forensic disciplines have attempted to raise scientific standards in the wake of a landmark 2009 National Academy of Sciences report that was critical of the science underlying forensics. That report, *Strengthening Forensic Science in the United States: A Path Forward*, called on forensic disciplines that rely on expert testimony to move toward modern analytical methods.

The report was particularly critical of impression and pattern evidence, citing a lack of “appropriate statistical standards to apply to the significance of individual characteristics.” Gregory Dutton, a physical scientist in NIJ’s Office of Investigative and Forensic Sciences, noted that in the past, matching a piece of evidence with a sample from a suspect was typically done by an examiner doing a visual comparison. “They used their faculties and experience to assess how well a questioned piece matches a known piece and relying on that experience, they would come to a conclusion,” Dutton said.

Such comparisons were not scientifically rigorous and could lead to a match with a random person who had nothing to do with the crime, he said. “So, a lot of what NIJ’s been funding, certainly since 2009, are projects to develop quantitative methods of pattern analysis that forensic examiners can use to inform their conclusions.”

One of the fields that has taken significant steps in developing quantitative methods of pattern comparisons is forensic firearms examination, with NIJ funding research into 3D imaging of firearms evidence. “They’re now getting an accurate digital representation of a cartridge surface, and they can use that to quantify the extent to which the surface features match. They’re constantly improving the computational methods.”

## Forensic DNA Laboratory Efficiency Improvement and Capacity Enhancement Competitive Grants Program

The Forensic DNA Laboratory Efficiency Improvement and Capacity Enhancement Competitive Grants program helps eligible crime laboratories to substantially increase their laboratory capacity through a well-defined project.

In 2018, NIJ awarded over \$9 million in competitive DNA grants to 19 recipients. The program objectives are (1) to increase efficiency and decrease turnaround time for DNA evidence processing and (2) to help laboratories reduce the number of DNA samples awaiting analysis by using methods to improve overall laboratory efficiency. This will, in turn, help prevent future backlogs of samples awaiting analysis.

## Postconviction Testing of DNA Evidence Program

Since the advent of forensic DNA analysis, a growing number of Americans wrongfully convicted of violent crimes have been exonerated through DNA analysis of evidence that was untested at the time of the trial. The goal of NIJ’s Postconviction Testing of DNA Evidence program is to fund projects that assist states and units of local government with postconviction DNA testing in cases of violent felony offenses where actual innocence might be demonstrated.

In 2018, NIJ funded nine projects in this area, totaling nearly \$5.5 million. Funding made under this program will sustain and improve access to postconviction DNA testing for prisoners, possibly leading to exonerations.



## Strengthening the Medical Examiner-Coroner System Program

Medical examiners and coroners have three primary responsibilities:

- To investigate deaths and injuries that occur under unusual or suspicious circumstances.
- To perform post-mortem examinations to determine the cause and manner of death.
- To recover any evidence that may be used to solve crimes.

The investigation of violent deaths by medical examiners' and coroners' offices is vital to criminal justice, but communities often lack adequate personnel and resources to address all of the issues involved in medicolegal death investigations (MDIs). Reports have also asserted the need to address issues regarding deficient or below-standard facilities, equipment, education, and training to conduct MDIs. Increasing death tolls from opioids and other drugs are putting additional strain on this already overburdened system.

NIJ introduced the Strengthening the Medical Examiner-Coroner System program in 2017 to increase the number of board-certified forensic pathologists, support the development of an independent quality assurance measure to produce forensically accurate and credible death investigation products, and provide resources for agencies to obtain accreditation. In 2018, NIJ made 14 awards, totaling more than \$2.4 million, under this program.

Projects funded under this program will support the hiring of death investigators, enable infrastructure improvements, and help medical examiners' and coroners' offices nationwide to receive accreditation.

## Research and Evaluation for the Testing and Interpretation of Physical Evidence in Publicly Funded Forensic Laboratories Program

The intent of the Research and Evaluation for the Testing and Interpretation of Physical Evidence in Publicly Funded Forensic Laboratories program is to apply research and evaluation to find the most efficient, accurate, reliable, and cost-effective methods for the identification, analysis, and interpretation of physical evidence for criminal justice purposes.

NIJ made five awards in this area in 2018, totaling \$1.5 million. Projects focused on (1) assessing existing laboratory protocols to better understand the scientific methodologies behind existing laboratory processes and (2) evaluating new methods to assess emerging laboratory processes.



# Supporting Victims of Crime

## Improving Victim Services

NIJ has a long-standing history of supporting and collaborating with the Office for Victims of Crime (OVC) on research, evaluation, and program-funded projects. Over the years, the shared priorities of OVC and NIJ have resulted in a number of collective projects, workshops, and research.

In FY 2018, NIJ awarded eight grants, totaling more than \$3.9 million, to add to our knowledge on victimization and victim services. These awards are intended to address programs and services dealing with housing assistance, legal assistance, and technology-based services. These projects will determine which interventions are effective in reducing revictimization and in supporting victims' needs.

## NIJ-FBI Sexual Assault Kit Partnership

Since 2014, NIJ and the FBI Laboratory have partnered to help address the complex issues surrounding unsubmitted sexual assault kits (SAKs). NIJ and the FBI expect the work to lead to improved policies and practices for collecting sexual assault evidence and more effective protocols for submitting and testing kits. Under this program, state and local law enforcement agencies can send their SAKs to be analyzed for free by the FBI Laboratory in Quantico, Virginia. Using funding from the previous year, the program is ongoing. More than 3,000 kits have been processed, almost 1,800 profiles have been entered into the CODIS database, and CODIS hits have led to more than 700 investigative leads.

The Sexual Assault Forensic Evidence — Inventory, Tracking, and Reporting Program (SAFE-ITR) assists law enforcement agencies with the inventory, tracking, and reporting of all untested and unsubmitted SAKs. The program also stresses the importance of accountability and transparency in the collection, processing, and testing of SAKs. Over \$3.6 million of the FY 2018 funds support projects focused on improving the analysis of sexual assault evidence and providing assistance to sexual assault nurse examiners. With the increased demand to process sexual assault evidence, it is not enough for forensic laboratories to focus solely on improving the current technology, equipment, and procedures, and the staff who use them. The long-term solution will require innovation and evaluation of new technologies and processes that are more efficient and timely, and that produce more accurate results.



# Improving the Criminal Justice System

## Law Enforcement Advancing Data and Science (LEADS) Scholars Program

NIJ continues to support and expand the Law Enforcement Advancing Data and Science (LEADS) Scholars program, which supports the professional development of sworn law enforcement officers who engage in research and champion the integration of proven policies and practices within and between agencies. NIJ LEADS scholars are pioneers in the evidence-based policing movement; they regularly present and publish their research and findings.

Under the LEADS Scholars program, NIJ awards merit-based scholarships to sworn, mid-rank officers who have either partnered on a research project or infused research into policy development within their agencies. LEADS scholars have used data to answer empirical research questions on body-worn cameras, GPS monitoring of convicted felons, the development of risk assessment tools, and how to integrate high-quality research and proven practices into police academy curricula.

With the goal of preparing tomorrow's police chiefs, NIJ supported attendance for 30 officers to the International Association of Chiefs of Police Annual Conference and Exposition, the George Mason University Center for Evidence-Based Crime Policy Annual Conference, and the NIJ Summer Symposium. NIJ also supports these officers by building a community of practice and integrating program participants into expert working groups and peer reviews, offering publication opportunities, and supporting site visits to ongoing research projects.

## Graduate Research Fellowship

Under the Graduate Research Fellowship (GRF) program, NIJ supports doctoral students who are conducting studies that advance the agency's scientific mission, particularly at the state and local levels. The goal of the program is to increase the pool of scholars engaged in research that addresses the challenges of crime and justice in the United States. The two tracks offered through the GRF program focus on the social and behavioral sciences and on science, technology, engineering, and mathematics (STEM).

NIJ awarded 42 new and supplemental grants under the GRF-STEM program in 2018. These competitive research awards will examine topics that have implications for criminal justice policy and practice, such as improving the recovery of DNA from previously inconclusive evidence and predicting repeat gang activity with advanced crime forecasting models. Of the new awards granted, more than half are supporting research by female doctoral candidates. Applications ran the gamut of scientific disciplines — from electrical and computer engineering and applied mathematics to human genetics and analytical chemistry.

## Sentinel Events Initiative

When bad things happen in a complex system, the cause is rarely a single act, event, or slip-up. More often, negative outcomes are “sentinel events.” In criminal justice, a sentinel event might be a police shooting, the wrongful conviction of an innocent person, the release from prison of a dangerous offender, or even a “near miss” that could have led to a bad outcome, had it not been caught.

NIJ continues to support the development of the Sentinel Events Initiative in partnership with BJA, including a multiyear national demonstration project to support 20 to 25 standing sentinel event review panels across the country. Reviews of sentinel events in the criminal justice system are modeled largely on innovative learning-from-error mechanisms in the transportation and medical fields. This demonstration project builds on five years of scientific research, outreach to practitioners, and successful pilot projects. The goal of the national demonstration project is to determine how best to empower state and local jurisdictions to explore criminal justice system weaknesses and generate tailored solutions to mitigate risk and improve performance throughout the system.

## National Missing and Unidentified Persons System

NIJ continues to support the National Missing and Unidentified Persons System (NamUs), a national, centralized repository and resource center for locating and identifying missing persons and unidentified human remains and repatriating unclaimed persons. A web-based system, NamUs is provided free of charge to medical examiners, coroners, law enforcement officials, allied forensic professionals, families of missing persons, and other stakeholders who are attempting to resolve these cases.

NamUs is a collaborative system, accessed by users in all 50 states. It bridges the communication gaps between the medical, forensic, and law enforcement communities and the families — and fosters enhanced information sharing and support in pursuing the answers in missing persons cases.

Since March 2017, the NamUs program has submitted over 1,500 fingerprint images from unidentified persons to the FBI’s Latent Print Support Unit. These images were run through a new technology, Next Generation Identification, which enables more focused searches and increases the likelihood of an identification, even with fingerprints that had been searched in the past. Through this partnership, these searches were able to identify 220 missing persons.

Since its inception in 2007, NamUs has helped to resolve over 19,000 cases involving missing persons or unidentified human remains.

## CrimeSolutions.gov

CrimeSolutions.gov, funded and administered by NIJ and the Office of Juvenile Justice and Delinquency Prevention (OJJDP), continues to assess and rate programs and practices to help practitioners and policymakers make evidence-based decisions on how to commit their resources. A total of 43 programs were assigned ratings in 2018: Five were rated as effective, 24 were rated as promising, and 14 were deemed to have no effects.

An additional 24 programs were reviewed, but the evidence base was not robust enough to determine the programs' effectiveness. These Inconclusive Evidence programs are posted on CrimeSolutions.gov to give policymakers and practitioners an overview of the range of evaluated programs and to inform researchers of where additional program evaluations are needed.

## National Archive of Criminal Justice Data

Archiving is an important vehicle for maximizing the transparency and accountability of science and scientists. Since 1978, the Office of Justice Programs has hosted and operated a data archive of its criminal and juvenile justice data sets at the National Archive of Criminal Justice Data (NACJD). A diverse set of studies — including longitudinal data sets, cross-sectional surveys, and program evaluations — are curated and archived for secondary analysis. In 2018, a total of 114,315 unique NACJD data users downloaded 653,670 sets of data or documentation files from the website.

NACJD added over 2,000 references to the Bibliography of Data-Related Literature during 2018. Of these references, 713 were based on NIJ data, 1,391 were based on Bureau of Justice Statistics data, and 206 were based on OJJDP data.

## Solicitation Review

NIJ further streamlined its solicitation review and approval process in 2018. These improvements provided applicants with sufficient time to prepare and submit quality applications as well as providing optimal time to peer review the applications, brief the internal stakeholders, make informed funding decisions, and process the awards by established deadlines.

NIJ staff participated in a number of Business Process Improvement activities sponsored by the Office of Audit, Assessment, and Management, including one focused on the Pre-Award Process and another on the Solicitation and Forecaster Process. These activities are important because they help to streamline processes to optimize the use of both human and financial resources to achieve the greatest impact.





# Highlights of Dissemination

## *NIJ Journal* Issue No. 279

The *NIJ Journal* features articles that help criminal justice policymakers and practitioners stay informed about new developments. The *Journal* presents research-based information that can help inform policy decisions and improve understanding of the criminal justice system. By putting the results of recent and ongoing NIJ research in the hands of policymakers and practitioners, the *Journal* ensures that NIJ will have the widest possible impact in advancing criminal justice nationwide through science.

In April 2018, NIJ released Issue No. 279 of the *NIJ Journal*. This issue focused on recent advances in forensic science. The articles in this issue discussed:

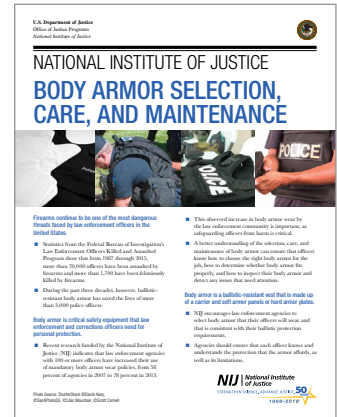


- Wrongful convictions and the lessons they offer for improving the reliability of forensic evidence, the interpretation of results, and the clarity of forensic expert testimony.
- The potential for medicolegal death investigators to use advanced imaging technologies, such as CT scans, prior to or in place of traditional autopsies.
- The importance of non-DNA evidence in prosecuting sexual assault cases, particularly when consent between acquaintances is an issue and DNA evidence is not available.
- The intersections between 3D printing technology and criminal justice, including use of 3D printing in accident reconstruction, replication of crime scene evidence, and facial reconstruction from unidentified skeletal remains.
- The National Missing and Unidentified Persons System (NamUs), an NIJ-administered repository and resource center for information on the nation's missing and unidentified persons.
- A new U.S. Department of Justice directive that forensic scientists should no longer use the phrase “reasonable degree of scientific certainty” in their testimony, and what this will mean for testimonial practice.
- The need to engage people from a broad array of scientific disciplines and backgrounds in the forensic sciences, and the ways that diversity and inclusion can produce stronger, more innovative solutions to complex criminal justice issues.

## Body Armor Selection, Care, and Maintenance

Since the early 1970s, NIJ has been the national leader in setting standards for ballistic resistant police body armor. For just as long, NIJ has advanced the widespread use of body armor as critical safety equipment for law enforcement officers, sponsoring research to improve its effectiveness.

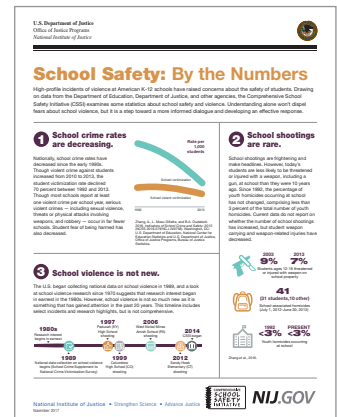
The fact sheet “Body Armor Selection, Care, and Maintenance” provides a brief, practical overview for agencies on how to choose body armor for their officers and use it most effectively. NIJ certifies models of armor panels and armor plates that meet the requirements of the NIJ Compliance Testing Program, listing all certified models publicly online. The fact sheet outlines which features and aspects of the armor to consider when choosing an appropriate model. Agencies should select armor models that meet the mobility and comfort needs of their officers, and that fit properly for optimal protection and comfort. The fact sheet also explains that some wear and tear on a ballistic-resistant vest will occur, so frequent inspections and proper care of body armor are necessary to maintain its integrity.



## School Safety: By the Numbers

NIJ’s Comprehensive School Safety Initiative is an investment in developing knowledge about the root causes of school violence, developing strategies for increasing school safety, and rigorously evaluating innovative school safety strategies through pilot programs. NIJ made 100 research awards through this initiative from 2014 to 2017, and the results of that research are beginning to improve our understanding of how schools can be made safer.

With easy-to-read data visualizations, the fact sheet “School Safety: By the Numbers” highlights six key points from school safety research: (1) victimization in schools is decreasing, as is students’ fear of harm; (2) school shootings are rare events, despite receiving much media attention; (3) school violence is not a new phenomenon, and research into school violence has been ongoing since at least the 1980s; (4) school officials’ concern about school shootings is growing, reflected in upward trends in school security measures; (5) traumatic events are common in schools, and more than one-fifth of students are bullied; and (6) how social media figures into threats of violence remains largely unknown.

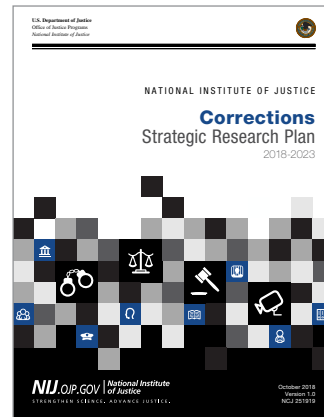


## Corrections Strategic Research Plan

From its inception 50 years ago, NIJ has encouraged research on issues affecting corrections systems. NIJ's mission for corrections research is to develop knowledge and science-based tools to enhance public safety and the successful reintegration of offenders.

NIJ developed the *Corrections Strategic Research Plan* to describe its current and projected efforts to help corrections practitioners and policymakers enhance public safety. The plan is directed at multiple audiences, including researchers in academia, government, and industry; federal, state, local, tribal, and international government partners; and justice policymaker and practitioner communities.

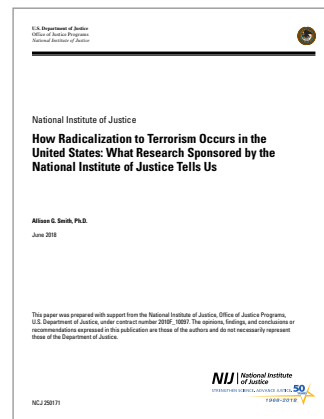
The strategic goals outlined in the plan are to promote and support research to (1) optimize workforce development for corrections personnel, (2) enhance corrections practices, and (3) examine the experiences of individuals involved with the corrections system. The plan also provides individual objectives and action plans for each goal to help translate them into practice.



## How Radicalization to Terrorism Occurs in the United States: What Research Sponsored by NIJ Tells Us

Since its founding in 2012, NIJ's Domestic Radicalization to Terrorism program has sponsored research on how radicalization to terrorism occurs in the United States in order to support prevention and intervention efforts. These projects have taken a variety of approaches to examining the process of radicalization to terrorism, and collectively they provide evidence of the importance of several facilitators of radicalization. In addition, the projects demonstrate the need to assess how the radicalization process unfolds within individuals over time.

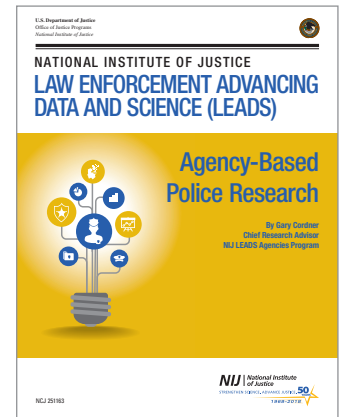
The white paper "How Radicalization to Terrorism Occurs in the United States: What Research Sponsored by NIJ Tells Us" discusses the factors that facilitate radicalization. These factors include terrorist belief systems, connections with terrorists in person and online, personal grievances, and triggering events. The paper notes that while these beliefs and behaviors may facilitate individuals' radicalization, terrorism does not have to be their outcome. One important implication of this is that trusted information and resources need to be available for the friends and family members of those who are being radicalized, since these people are best positioned to spot radicalization as it is happening. NIJ research also indicates that prevention and intervention efforts may benefit from addressing beliefs that justify violence and helping individuals to develop identities in which these beliefs are not central, thereby removing one of radicalization's catalysts.



## Agency-Based Police Research

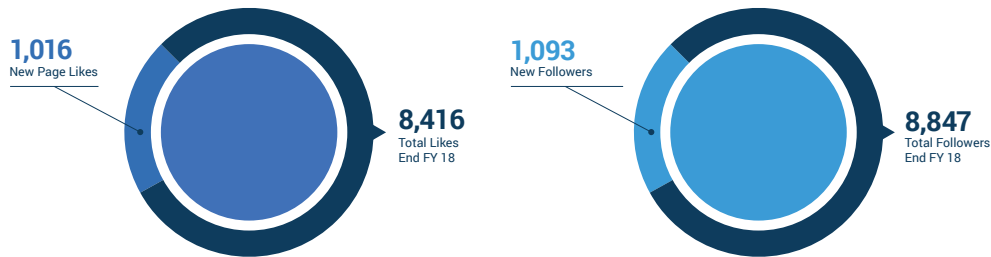
NIJ created the Law Enforcement Advancing Data and Science (LEADS) Agencies program in 2016 to encourage law enforcement agencies to develop and enhance their internal capacity to use data, analysis, research, and evidence to improve police effectiveness. The initiative complements NIJ's LEADS Scholars program, started in 2014, which recognizes and supports midcareer personnel who have demonstrated an aptitude and appreciation for research. It also complements NIJ's longstanding support of partnerships between researchers and police organizations.

The paper "Agency-Based Police Research" is part of a series of articles, briefs, and other publications designed to provide a practical understanding of the role of data, analysis, research, and evidence in modern policing and police administration. The paper explains what research looks like in the context of policing and then highlights how an individual police agency might do research primarily to address its own needs and problems. It also offers a number of models for police agencies that want to conduct research, such as contracting or partnering with researchers, hiring researchers to be embedded in the agency, or using internal researchers, whether in the form of specialized research units or motivated officers who act as "researchers in the ranks."



# Social Media

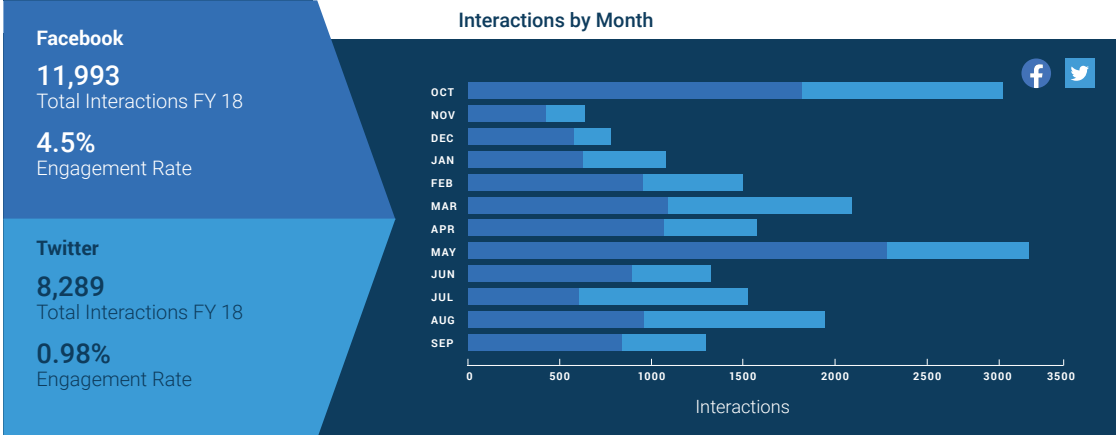
## How Many People Connected with NIJ on Social Media?



## How Many People Saw NIJ's Social Media Posts?



## How Did People Engage with NIJ on Social Media?





# Appendix: Financial Data

## Exhibit 1: Funds Made Available Pursuant to P.L.

Type of Funds	Enacted Amount
<b>Research, Evaluation, and Development</b>	
NIJ "Base" Appropriation	\$38,000,000
Domestic Radicalization Research	\$4,000,000
National Institute of Standards and Technology	\$0
<b>Total Research, Evaluation, and Development Programs</b>	<b>\$42,000,000</b>
<b>Office of Violence Against Women Programs Transferred to OJP</b>	
Analysis and Research on Violence Against Indian Women	\$1,000,000
Research and Evaluation on Violence Against Women and Related Issues	\$3,500,000
<b>Total OVW Programs Transferred to OJP</b>	<b>\$4,500,000</b>
<b>State and Local Law Enforcement Assistance</b>	
National Missing and Unidentified Persons System	\$2,400,000
DNA-Related and Other Forensic Programs and Activities	\$120,000,000
Postconviction DNA Testing	\$6,000,000
Sexual Assault Forensic Exam Program	\$4,000,000
Paul Coverdell Forensic Science Improvement Grants (85% formula and 15% competitive)	\$30,000,000
Comprehensive School Safety Initiative	\$0
<b>Total State and Local Law Enforcement Assistance</b>	<b>\$162,400,000</b>
<b>Section 215 2% RES Set-Aside for Research and Statistics</b>	
2% RES Set-Aside for Research and Statistics	\$19,560,000
<b>Total Section 215 2% RES Set-Aside</b>	<b>\$19,560,000</b>
<b>Total Funding</b>	<b>\$228,460,000</b>
<b>Transfers and Assessments</b>	
Transfers Out to the National Institute of Standards and Technology	\$0
Assessments (M&A Assessment and 2% RES Set-Aside)	\$17,550,630
<b>Total Transfer Out and Assessments</b>	<b>\$17,550,630</b>
<b>Total Funding After Transfers and Assessments</b>	<b>\$210,909,370</b>
<b>Reimbursements and Carryforward Funds</b>	
Reimbursements From Other Federal Entities (including OJP components)	\$16,315,276
Carry-Forward Funds From Prior Fiscal Years (including reimbursements)	\$5,439,060
<b>Total Reimbursements and Carryforward Funds</b>	<b>\$21,754,336</b>
<b>Total NIJ Funding</b>	<b>\$232,663,706</b>

\* P.L. 113-235 directed NIJ to transfer \$3 million to the National Institute of Standards and Technology.

**Exhibit 2: Allocation of Funds**

<b>Type of Activity</b>	<b>Subcategory</b>	<b>Percentage</b>	<b>FY 2018 Amount</b>
<b>Social Science</b>	Research and Development*	12.2%	\$30,876,081
	Training and Technical Assistance	0.2%	\$546,715
<b>Science and Technology</b>	Research and Development*	6.7%	\$17,055,552
	Technology Assistance/Test and Evaluation	0.1%	\$175,000
<b>Investigative and Forensic Science</b>	Analysis and Capacity Enhancement**	45.4%	\$115,016,107
	Research and Development*	11.1%	\$28,019,166
	Training and Technical Assistance	3.6%	\$9,169,965
<b>Dissemination/Outreach/Program Support</b>		5.2%	\$13,262,963
<b>Total</b>		<b>84.5%</b>	<b>\$214,121,549</b>
Tribal 7% Set-Aside Assessment		0.0%	\$0
Carve-Out for Section 215 Set-Aside for Research and Statistics		1.3%	\$3,248,000
OJP Management and Administration		5.6%	\$14,302,630
Direct Transfer to the National Institute of Standards and Technology		0.0%	\$0
Carryover (including reimbursements)***		8.6%	\$21,849,402
<b>Total</b>		<b>15.5%</b>	<b>\$39,400,032</b>
		<b>100.0%</b>	<b>\$253,521,581</b>



**Exhibit 3: Solicitations**

<b>FY18 Solicitation</b>	<b>Awards Made</b>	<b>Value of Awards</b>
Artificial Intelligence Technology Applied Research and Development for Law Enforcement Applications	3	\$2,352,871
Communications Technologies Research and Evaluation for Law Enforcement and Corrections Applications	4	\$2,712,796
Criminal Justice Requirements and Resources Consortium	2	\$1,797,434
Criminal Justice Testing and Evaluation Consortium	1	\$3,500,000
DNA Capacity Enhancement and Backlog Reduction (CEBR) Program (Formula)	127	\$67,826,527
Forensic DNA Laboratory Efficiency Improvement and Capacity Enhancement Program	19	\$9,335,260
Graduate Research Fellowship in Science, Technology, Engineering, and Mathematics	12	\$1,503,951
Graduate Research Fellowship in Social and Behavioral Sciences	7	\$223,989
Investigator-Initiated Research and Evaluation on Firearms Violence	4	\$2,011,251
NIJ Continuations	41	\$15,971,532
Non-solicited Applications	4	\$1,103,323
Paul Coverdell Forensic Science Improvement Grants Program (Competitive)	25	\$3,950,935
Paul Coverdell Forensic Science Improvement Grants Program (Formula)	52	\$23,244,103
Postconviction Testing of DNA Evidence	9	\$5,449,201
Programs and Services for Victims of Crime: Phased Evaluation Research	8	\$3,771,876
Research and Development in Forensic Science for Criminal Justice Purposes	50	\$23,421,660
Research and Evaluation for the Testing and Interpretation of Physical Evidence in Publicly Funded Forensic Laboratories	5	\$1,597,136
Research and Evaluation in Corrections	5	\$3,458,849
Research and Evaluation in Safety, Health, and Wellness in the Criminal Justice System	3	\$2,095,984
Research and Evaluation on Decision-Making	1	\$846,536
Research and Evaluation on Drugs and Crime	3	\$1,691,890
Research and Evaluation on Gangs and Gang Violence	2	\$1,371,454
Research and Evaluation on Hate Crimes	1	\$840,649
Research and Evaluation on Prevention and Mitigation of Domestic Pathways to Terrorism	4	\$3,432,255
Research and Evaluation on Promising Reentry Initiatives	5	\$6,190,497
Research and Evaluation on the Administration of Justice	5	\$2,310,479
Research and Evaluation on Trafficking in Persons	2	\$1,117,454

**Exhibit 3: Solicitations (continued)**

<b>Solicitations</b>	<b>Awards Made</b>	<b>FY 2017 Amount (in millions)</b>
Research and Evaluation on Violence Against Women: Sexual Violence, Intimate Partner Violence, Stalking, and Teen Dating Violence	5	\$3,132,178
Sexual Assault Forensic Evidence-Inventory, Tracking, and Reporting Program (SAFE-ITR)	3	\$1,427,310
Strengthening the Medical Examiner-Coroner System Program	14	\$2,482,771
Tribal-Researcher Capacity Building Grants	4	\$454,226
Understanding the Impacts of Policing Strategies and Practices	3	\$1,698,711
W.E.B. Du Bois Program of Research on Crime	4	\$823,347
<b>Total</b>	<b>437</b>	<b>\$203,148,435</b>
Legacy OJJDP Research Grants	63	\$39,459,690



