U.S. Department of Justice
Office of Justice Programs
National Institute of Justice

DNA Backlog Reduction Program:
Fiscal Year 2011 Awards and Abstracts

This document lists grants awarded by NIJ in 2011 under the DNA Backlog Reduction Program. The abstracts are reproduced here exactly as they were submitted by the grantee.

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FY11 DNA Backlog Reduction Program Abstracts

This table is a summary of DNA Backlog Reduction Awards issued in FY2011. Following this table are their respective abstracts.

State	FY11 Recipient Name	Award Amount
AK	Alaska Department of Public Safety	$314,852
AL	Alabama Department of Forensic Sciences	$1,489,966
AR	Arkansas State Crime Laboratory	$1,030,056
AZ	Arizona Criminal Justice Commission	$862,102
AZ	Arizona Department of Public Safety	$966,685
CA	California Department of Justice	$4,128,334
CA	City And County of San Francisco	$388,669
CA	City of Los Angeles	$1,570,465
CA	City of Oakland	$443,201
CA	City of San Diego	$386,972
CA	Contra Costa County	$264,767
CA	County of Alameda, California	$286,820
CA	County of Kern	$319,182
CA	County of San Bernardino	$654,937
CA	County of San Mateo	$213,288
CA	County of Santa Clara	$327,077
CA	County of Ventura	$131,862
CA	Fresno County Sheriff Department	$306,263
CA	Los Angeles County Sheriff's Department	$1,200,000
CA	Orange County Sheriff Coroner Department	$484,711
CA	Sacramento County	$586,429
CA	San Diego County	$309,000
CO	City and County of Denver	$213,569
CO	Colorado Department of Public Safety	$960,004
DC	Metropolitan Police Department	$483,515
DE	Delaware Health and Social Services	$387,580
FL	Broward County Sheriff’s Office	$571,367
FL	Florida Department of Law Enforcement	$4,834,486
FL	Miami Dade County	$1,190,348
FL	Palm Beach, County of	$482,941
FL	Pinellas County	$414,921
FL	St. Lucie County Sheriff's Office	$94,500
GA	Georgia Bureau of Investigation	$2,756,031
HI	City and County of Honolulu	$263,212
IA	Iowa Department of Public Safety	$461,560
ID	Idaho State Police	$261,474
IL	DuPage County Sheriff's Office	$349,561
IL	Illinois State Police	$3,600,275
IL	Northeastern Illinois Regional Crime Laboratory	$349,561
IN	Indiana State Police	$959,314
IN	Indianapolis-Marion County Forensic Services Agency	$512,906
KS	Johnson County Kansas	$156,000
KS	Kansas Bureau of Investigation	$604,552

KY	Commonwealth of Kentucky	$718,511
LA	Louisiana State Police	$1,793,272
MA	City of Boston	$371,006
MA	Massachusetts State Police	$1,534,319
MD	Anne Arundel County MD	$184,709
MD	City of Baltimore	$669,143
MD	Maryland State Police	$758,796
MD	Montgomery County	$140,798
MD	Prince George's County	$369,620
ME	Maine State Police	$200,000
MI	State of Michigan	$3,308,790
MN	Hennepin County	$130,787
MN	Minnesota Department of Public Safety	$758,263
MO	Board of Police Commissioners	$487,635
MO	Missouri State Highway Patrol	$790,074
MO	Saint Charles County	$100,000
MO	St. Louis County	$187,969
MO	St. Louis Metropolitan Police Department	$441,533
MS	Mississippi Department of Public Safety	$559,464
MT	Montana Department of Justice	$200,000
NC	City of Charlotte	$365,831
NC	North Carolina Department of Justice	$2,129,891
ND	North Dakota	$200,000
NE	Nebraska State Patrol	$353,073
NH	New Hampshire Department. of Safety	$200,000
NJ	County of Union	$90,000
NJ	New Jersey Department of Law And Public Safety	$1,741,523
NM	New Mexico Department of Public Safety	$808,675
NV	Las Vegas Metropolitan Police Department	$839,498
NV	Washoe County Sheriff's Office	$342,000
NY	City of New York, Office of Chief Medical Examiner	$1,500,000
NY	County of Erie	$597,722
NY	County of Suffolk	$264,319
NY	County of Westchester	$267,323
NY	Monroe County	$315,381
NY	Nassau County	$258,312
NY	New York State Police	$1,542,876
NY	Onondaga, County of	$180,218
OH	City of Columbus	$272,315
OH	City of Mansfield	$237,476
OH	Cuyahoga County Office of Medical Examiner	$123,718
OH	Hamilton County	$164,543
OH	Montgomery County	$298,563
OH	Stark, County of	$130,000
OH	State of Ohio Office of The Attorney General	$1,511,159
OK	Oklahoma City	$306,000
OK	City Of Tulsa	$254,549
OK	Oklahoma State Bureau of Investigation	$654,135

OR	Oregon State Police	$737,848
PA	Allegheny County Pennsylvania	$341,929
PA	City of Philadelphia	$1,146,517
PA	Pennsylvania State Police	$1,662,908
PR	Instituto de Ciencias Forenses	$678,552
RI	Rhode Island Department of Health	$209,355
SC	Richland County Government	$195,000
SC	South Carolina Law Enforcement Division	$1,815,233
SD	South Dakota Office of The Attorney General	$200,000
TN	Tennessee Bureau of Investigations	$2,346,924
TX	City of Austin	$240,532
TX	City of Houston Police Department	$1,532,118
TX	County of Bexar	$335,751
TX	Dallas County	$849,881
TX	Harris County	$690,850
TX	State of Texas	$3,304,246
TX	Tarrant County	$314,879
TX	University of North Texas Health Science Center At Fort Worth	$654,539
UT	Utah Department of Public Safety	$417,873
VA	Virginia Department of Forensic Science	$1,447,358
VT	Vermont Department of Public Safety	$200,000
WA	Washington State Patrol	$1,548,332
WI	Wisconsin Department of Justice	$1,036,095
WV	West Virginia State Police	$373,262
WY	Wyoming Office of the Attorney General	$200,000
	FUNDING TOTAL	**$88,707,086**

FY11 Recipient Name: Alaska Department of Public Safety
Award Number: 2011-DN-BX-K418
Award Amount: $314,852
Abstract: The State of Alaska's Scientific Crime Detection Laboratory (SCDL), the only crime laboratory in the state, receives requests to perform biological testing on more than 400 forensic cases per year, with approximately 75% of those continuing on for DNA analysis. The laboratory also receives approximately 400 convicted offender and arrestee samples per month for DNA analysis and entry into the Combined DNA Index System (CODIS). These services are available at no cost to all law enforcement agencies within the State.

The primary objective of this program is to decrease the Alaska SCDL's backlog (requests for DNA analysis exceeding 30 days) of forensic DNA casework. The laboratory is requesting to utilize the $50,000 available for database samples for casework analysis as the database function of the laboratory currently has no un-met needs, and is meeting its mission of analysis in 30 days or less. The laboratory intends to achieve this by using funds from this award to purchase consumables and reagents for forensic DNA casework analysis, purchase of a liquid handler, and calibrate pipettes used in DNA casework analysis.

By October 2011, the number of fully trained casework DNA analysts will have increased from 4 to 6 and therefore, the laboratory expects to see a decrease in forensic DNA sample turnaround time and an increase in the capacity of the laboratory. Both of these outcomes will serve to decrease the backlog of forensic DNA cases. The laboratory anticipates that at least 252 requests for DNA analysis can be completed using funds from this award.

FY11 Recipient Name: Alabama Department of Forensic Sciences
Award Number: 2011-DN-BX-K423
Award Amount: $1,489,966
Abstract: The State of Alabama - and ADFS specifically - continues to face serious budgetary constraints, already having experienced a 32% reduction in State level funding for forensic services over the last 3 years. ADFS is also beginning to see the reality of increased database sample submissions arising from the implementation of an 'all felony arrestee' DNA testing statute, which was implemented on September 30, 2010.

The Federal funding from this award will greatly offset these serious shortfalls, and will be used to realize the following goals:

1. Reducing the forensic DNA case backlog through analyst overtime and the purchase of Biology supplies.
2. Reducing the DNA database sample backlog through analyst overtime and the purchase of database supplies.
3. Increasing the capacity of the statewide DNA laboratory system by purchasing equipment which will further streamline the DNA testing process; specifically a genetic analyzer, thermal cyclers, and robotic DNA platforms, as well as service contracts for the genetic analyzers and robotic platforms.
4. Providing the required continuing education for Forensic Scientists to maintain their continuing education compliance in accordance with the FBI Director's Quality Assurance Standards.

The ADFS expects to reduce the statewide DNA case backlog by at least 485 cases by the end of the award period. The ADFS DNA Database laboratory also expects to process at least 4,730 DNA database samples (which includes 430 QC samples) using Federal funding. The statewide turnaround time on Biology casework is expected to be reduced by an additional 20 days, with the analyst throughput in the casework sections expected to increase a minimum of 7%.

FY11 Recipient Name: Arkansas State Crime Laboratory
Award Number: 2011-DN-BX-K420
Award Amount: $1,030,056
Abstract: The Arkansas State Crime Laboratory Forensic Serology and DNA Sections analyze evidence submitted by law enforcement agencies for the state of Arkansas. These two sections complement one another in the screening and DNA analysis of biological evidence. The Arkansas State Crime Laboratory is proposing to utilize the "FY 2011 DNA Backlog Reduction Program" to update CODIS computers and software, to renovate existing laboratory space and purchase the necessary equipment to process human remains samples, to purchase additional equipment and software for the Forensic DNA Section and to continue to fund the 3 Forensic Serologists and 2 Forensic DNA Analysts that were originally funded from the FY2010 Backlog Reduction Program.

The goals of this program are to:

1. Improve the infrastructure of the CODIS Section.
2. Improve the capability and capacity of the Forensic DNA Section.
3. Decrease the backlog in the Forensic Serology and DNA Sections.

FY11 Recipient Name: Arizona Criminal Justice Commission
Award Number: 2011-DN-BX-K429
Award Amount: $862,102
Abstract: This application for use of the DNA Backlog Reduction Program grant funding is submitted by the Arizona Criminal Justice Commission acting as the State Administering Agency for the Department of Justice on behalf of the following local laboratories through these police departments: Mesa, Phoenix, Scottsdale and Tucson. These agencies are committed to establishing the highest standards of laboratory analysis of evidence and are working as a collaborative group focused on establishing improved procedures and reducing DNA case backlog. Funding is currently allocated to each participating agency based upon the number of Uniform Crime Report (UCR), Part 1 violent crimes reported to the Federal Bureau of Investigation (FBI) for 2009. The Commission will provide grant oversight and be responsible for reporting to the National Institute of Justice (NIJ) on the progress of this grant.

The State of Arizona is facing major budgetary constraints and shortfalls that impacts all of the municipalities and, as a result, adds to each municipality's deficit. The Federal funding from this award will be used for the following goals:

Goals:

1. Reduce the number of backlogged DNA criminal cases through analyst, lab technician and crime scene specialist overtime and outsourcing.

2. Increase the laboratories' capacity by purchasing equipment (genetic analyzers and robotic instruments)
3. Provide required continuing education for analysts.

Results: The four crime laboratories represented in this application can expect to reduce the overall backlog by 490 cases (250 in-house and 240 outsourced) by the end of the grant period. The laboratories expect to increase capacity by 10 percent with the use of the multi-capillary genetic analyzers and the robotic instrument. The laboratories expect to increase throughput by 10 percent with the new equipment, use of overtime and outsourcing.

FY11 Recipient Name: Arizona Department of Public Safety
Award Number: 2011-DN-BX-K411
Award Amount: $966,685
Abstract: The Arizona Department of Public Safety (AZ DPS) Crime Laboratory System provides complete DNA profiling services from three of its Regional Crime Laboratories: the Central Regional Crime Laboratory, Phoenix; the Southern Regional Crime Laboratory, Tucson; and the Northern Regional Crime Laboratory, Flagstaff. These DNA services, include STR analysis of autosomal nuclear DNA, Y-STR analysis of the Y chromosome and mitochondrial DNA analysis of evidence submitted by 295 law enforcement and prosecutorial agencies statewide, including municipal police departments, county sheriffs, tribal police, and state law enforcement. Also, the AZ DPS Crime Laboratory, by statute, maintains the DNA Database for the State of Arizona and has been processing convicted offender DNA samples since 1993 and DNA arrestee samples for those arrested for certain violent crimes beginning in 2008.

The AZ DPS Crime Laboratory System for the last three years has faced severe budget reductions due to the dire economic conditions in the State of Arizona. As a result, the AZ DPS Crime Laboratory DNA programs have been reduced as follows:

- The DNA Arrestee Database Program has 100% elimination of funds – a loss of $980,000 per year.
- The DNA convicted offender database program has a 49% reduction in funds – a loss of $1,852,419 per year.
- The DNA casework program received a 12% reduction in funds – a loss of $593,584 per year.
- In addition to the above, a hiring freeze has resulted in a 24% vacancy factor, with 11 DNA positions vacant.

Therefore, the Federal funding from this Grant request would be utilized to accomplish the following goals eliminating bottlenecks and producing the expected results below:

- Reduce the projected backlog of DNA Database samples by utilizing two laboratory technicians to free DNA analysts to concentrate solely on DNA sample processing. Over

the eighteen month period of the Grant and with DNA supplies purchased from the Grant funds, 12,800 DNA database samples will be processed which otherwise would have been backlogged.

- Reduce the number of DNA casework samples backlogged by utilizing a combination of capacity enhancement projects to increase sample throughput. 1,600 samples out of the current backlog of 3,249 will be processed over the 18 months of the Grant, reducing the current DNA casework backlog by 49%.

FY11 Recipient Name: California Department of Justice
Award Number: 2011-DN-BX-K466
Award Amount: $4,128,334
Abstract: The California Department of Justice (CA DOJ) Bureau of Forensic Services (BFS) seeks funding for casework backlog reduction of $3,111,279.20 and funding for sample backlog reduction by the CA DOJ BFS Jan Bashinski DNA Laboratory's (JBDL) Data Bank Program of $1,017,054.78 from the National Institute of Justice (NIJ) FY2011 Forensic DNA Backlog Reduction Program. This funding includes an initial allocation for casework of $2,577,618.49 with a shift of an additional $533,660.71 from the data bank allocation of $1,550,715. All work is to be accomplished in the eighteen month period of the award sought.

The purpose of the program is to:

- reduce the overall turnaround time for the handling, screening, and analysis of forensic DNA samples;
- increase the throughput of evidence by DNA laboratories;
- reduce existing DNA casework backlogs;
- reduce the number of backlogged requests for analysis of convicted offender/arrestee samples for the offender database;
- reduce the number of backlogged requests for Familial Searches by the Data Bank Program's CODIS Unit (SDIS for California);
- build capacity for the anticipated demand in these services; and
- build capacity and enhance the efficiency of the Data Bank Program by validating two direct STR amplification methods for the Data Bank, PowerPlex 18D and Identifiler Direct.

The CA DOJ BFS proposes to fulfill the grant requirements by:

- hiring and training or continuing the employment of 15 limited-term Criminalists funded by the FY2010 DNA Backlog Reduction Program allocated as follows:
  - Ten positions to handle, screen, and analyze forensic DNA samples in order to reduce DNA casework turnaround times,
  - Four positions to expand the Familial Search capacity,
  - One position to validate two direct STR amplification methods
- funding the purchase of DNA amplification kits and supplies;

- providing overtime for DNA casework and Data Bank backlog reduction;
- implementing a rapid DNA service (RADS) program;
- purchasing high-throughput DNA analysis equipment;
- purchasing additional GeneMapper ID-X (GMID-X) software to reduce data analysis time;
- purchasing computers to effectively use the GMID-X software; and,
- renovating existing DNA laboratory spaces to increase and improve sample handling and analysis.

The CA DOJ BFS expects to complete 675 additional DNA cases using grant funding by the end of the award period and reduce casework turnaround time by 10%. The JBDL expects to work 12,000 database samples using grant funding, double familial search capacity, and increase the efficiency of data bank sample handling and processing.

FY11 Recipient Name: City and County of San Francisco (CA)
Award Number: 2011-DN-BX-K437
Award Amount: $388,669
Abstract: The San Francisco Police Department is the agency that is responsible for analyzing evidence items associated with criminal investigations for local law enforcement agencies. SFPD has one Criminalistics Laboratory that primarily services the City and County of San Francisco Police Department, as well as the Sheriff's Department and other local law enforcement agencies operating within the City and County of San Francisco.

SFPD is facing budgetary constraints related its operational budget for equipment purchases, laboratory instruments, training and hiring staff. The Federal funding from this award will be used for the following goals:

Reduce the forensic DNA case backlog through hiring a temporary contract laboratory staff, increase the capacity of the laboratory by purchasing equipment (sequence detection systems), and by hiring a contractor for LIMS development, and provide the required continuing education for each analyst through training.

SFPD can expect to reduce the DNA case backlog by at least 75 cases by the end of the award period. The turnaround time is expected to be reduced to 90 days or less.

FY11 Recipient Name: City of Los Angeles (CA)
Award Number: 2011-DN-BX-K450
Award Amount: $1,570,465
Abstract: The Los Angeles Police Department Serology/DNA Unit (LAPD SDU) intends to reduce its backlog by 550 cases and increase its laboratory capacity to meet existing and future

demand for Deoxyribonucleic Acid (DNA) screening and testing. To accomplish its objectives, the LAPD will provide training, purchase equipment, utilize analyst overtime, and procure contract laboratory services for DNA analysis and validations. Moreover, this strategy reduces bottlenecks that have in the past, prevented the LAPD from meeting its goals.

Training will ensure that Criminalists acquire the skills necessary to perform DNA typing, and will enable those who are already trained, to meet continuing education requirements that are necessary to keep the laboratory's accreditation. Independent of this or any grant, the City has hired additional criminalists in support of DNA testing. Once these newly hired Criminalists are trained, they can perform evidence screening that will improve efficiency and reduce turnaround time. Those Criminalists who are already trained to perform DNA typing will be able to increase the number of samples that they analyze, further reducing turnaround time.

To improve the overall capacity of the DNA analysis, the LAPD SDU continues to reorganize the testing process. The acquisition of additional robotic platforms will further increase capacity, increase sample throughput capabilities, and improve our casework analysis efficiency. In order to fulfill the robotic needs, the following instruments will be purchased with funds from this grant: one additional high capacity, high throughput DNA extraction, purification and quantification robot; two high capacity, high throughput DNA amplification set-up and normalization robots; two high capacity, high throughput DNA differential extraction robots; and, one high capacity Real Time PCR quantitation instrument. Grant funds will be used for method validation of the new robotic platforms.
During this grant period, a new LAPD policy will be instituted requiring that all sexual assault evidence be screened and have the DNA analysis performed in-house. This is a departure from past protocols when much of our sexual assault evidence was sent to contract laboratories for analysis, both screening and DNA. This will increase our monthly case load significantly, which will require more overtime for the analysis of backlogged cases in-house.

The LAPD SDU will also reduce its backlog by providing Criminalists with overtime to screen and/or type samples; to send out casework to City approved contract laboratories; and, to perform CODIS review prior to uploading profiles. Because screening and/or DNA typing of samples from active cases takes priority over other duties, Criminalists now scramble to find the time to analyze and upload results from the contract labs to the CODIS database. By providing overtime, the LAPD will ensure that the Criminalists can perform the CODIS review.

With the addition of our new policy related to in-house analysis of sexual assault cases, contract laboratory services will allow the LAPD SDU to reduce the resulting increase in backlog of non-sexual assault related cases, as well as the existing backlog that continues to grow due to an increasing demand for DNA analysis. The use of contract laboratory services will ensure that the Criminalists have the time to receive training and work on active cases. Services to be provided

by the contract laboratory will include DNA typing but will not include the data review for CODIS upload. Since Criminalists will have the opportunity to work on active cases, the number of cases that will eventually become part of the backlog will be fewer. The LAPD SDU will also utilize contract laboratory services to validate equipment and analytical platforms. The LAPD SDU intends to validate new polymerase chain reaction (PCR) technologies that will provide an improvement in sensitivity and resilience against sample inhibition.

FY11 Recipient Name: City of Oakland (CA)
Award Number: 2011-DN-BX-K484
Award Amount: $443,201
Abstract: Forensic Biology casework capacity and case completion turnaround times at the Oakland Police Department's Criminalistics Laboratory have improved significantly over the years as a result of grant funds received from the National Institute of Justice's DNA Backlog Reduction and Capacity grant programs. Forensic Biology Unit staffing has increased to a level that allows the Unit to evaluate, analyze, and submit probative DNA profiles into CODIS on the majority of sexual assault kits collected in Oakland. The implementation of electronic sample documentation and the automated DNA processes as a result of the acquisition of DNA extraction robots, DNA sample manipulation robots, real-time PCR for human DNA quantitation, and higher capacity capillary electrophoresis instruments and computer software to aid the Criminalists in data interpretation have resulted in an increase in the number of biological samples analyzed. It is clear that these processes significantly increase our capabilities.

Through enactment of the proposed FY 2011 DNA Backlog Grant initiative, the Laboratory will analyze one hundred (100) of the backlogged case requests. This will be accomplished by:

1. Reducing the forensic DNA case backlog through Criminalist overtime and purchasing supplies
2. Increasing the capacity of the Laboratory by purchasing an in-house bench-top ultra pure water filtration system and dishwasher
3. Increasing Biology Unit staff by hiring 1.0 newly trained Criminalist and 1.0 Forensic DNA Technician
4. Providing the required continuing education for each Criminalist and Technician

The Forensic Biology Unit scientific staff's continuing education is needed to comply with the Laboratory's ASCLD-LAB accreditation, individual scientist's certification, NDIS requirements for CODIS data entry, and the FBI DNA Quality Assurance Standards' mandatory educational requirements. The Laboratory does not have an independent budget for training. It is anticipated that case completion time would improve to less than 100 days on average upon the attendance of conferences, implementation of the new technologies learned, and training of new Forensic Biology Unit staff.

The Forensic Biology Unit case completion time for the year 2010 was 220 business days; based on the date of the request from the investigator to the publication of the report. This is higher than previous years due to the assignment of a Criminalist to conduct the validation and complete revamping of the DNA processes to incorporate all of the robotic instrumentation and electronic documentation of samples and the learning curve needed to reach full capacity. If awarded the FY11 DNA Backlog Reduction grant, a grant-funded Forensic Technician will be trained to operate the automated DNA processes. Thus, increasing the number and capacity of available Criminalists that will be devoted to data interpretation and case completion.

in 2010, one Biology Unit Criminalist position was permanently reassigned to fill a more critical need in a different unit in the Laboratory; this decreased the Biology Unit's capacity by one Criminalist without a replacement plan. Even with this, the Biology Unit still increased the number of completed case requests by 8% in 2010 as compared to 2009. Additionally, the Biology Unit was able to complete the analyses on 28 rush cases in approximately 18 business days. The ultimate goal of the Oakland Police Department's Criminalistics Laboratory's request for FY 2011 DNA Backlog Reduction grant funds is to continue to decrease the Biology Unit's turnaround time on non-rush DNA analyses; ideally to less than 100 business days. The addition of a Criminalist will increase the Unit's capacity to complete case requests. This decrease in turnaround time and the increase in the number of DNA samples analyzed will enable the Lab to increase the number of cases completed annually by approximately fifteen percent. The DNA profiles obtained from probative evidence will be entered into CODIS. Based upon past experience with DNA profiles obtained from cases without suspects, we anticipate a 35% 'Hit-Rate'.

FY11 Recipient Name: City of San Diego (CA)
Award Number: 2011-DN-BX-K442
Award Amount: $386,972
Abstract: The demand for DNA typing services in the City of San Diego continues to increase steadily. Homicide and sex crime submissions remain steady; however, there has been a dramatic increase in submission of lesser felonies and property crimes. It is our goal to utilize these grant funds to increase the efficiency of casework output in our DNA laboratory, and to provide the funding to allow additional cases to be worked on overtime. The combination of these two things should result in a decrease in backlogged cases. We seek $386,972 in grant funds in an attempt to achieve some important specific results.

1. Reduce the average turnaround time on DNA cases from 84 days to 75 days.
2. Increase the average number of samples analyzed per analyst per month from 34 samples (currently) to 38 samples per month.
3. Reduce the backlog (cases over 30 days) by approximately 10% from 313 to 280.
4. Provide mandated training to all analysts in the DNA laboratory.

5. Purchase equipment that will increase casework efficiency.
6. Increase casework throughput by DNA analysts by providing them support staff via the addition of a full time screener and 2 interns.

In the absence of the expenditures outlined in this grant proposal, the implications for turnaround time and the backlog are grave. Funding from this proposal will allow the laboratory to continue to offer DNA analysis in all criminal investigations where it is deemed important. The increased personnel, money, and equipment will increase our efficiency and case output, thereby allowing us to better serve the citizens of San Diego.

FY11 Recipient Name: Contra Costa County (CA)
Award Number: 2011-DN-BX-K448
Award Amount: $264,767
Abstract: The Contra Costa County Office of the Sheriff Forensic Services Division is the agency responsible for analyzing evidential material associated with criminal investigations for twenty five routine law enforcement clients and other governmental agencies in Contra Costa County, CA. The population served by the Forensics Services Division exceeds one million. The Forensic Service Division includes the Forensic Biology Unit which is a full service DNA unit within the laboratory. The DNA staffing has increased due partially to the support from previous Federal awards, however, overall unit efficiency is poor due to lack of automated equipment, bottlenecks at targeted tasks, a discontinuous workflow and no comprehensive integrated sample management system.

The Federal funding from this award will be used for the following goals:

1. Increase the casework capacity of the laboratory by purchasing equipment (DNA extraction robot) to automate DNA workflow from sample preparation to assay set-up.
2. Increase the casework capacity of the laboratory by purchasing two microscopes equipped with photo capability to eliminate bottlenecks during the cytology examinations (sperm cell searches) and allow for rapid image capture.
3. Increase overall efficiency of the Forensic Biology Unit by evaluating and implementing a DNA laboratory management plan, such as lean six sigma, through the direction of a consultant team.
4. Increase overall efficiency of the Forensic Biology Unit by evaluating, purchasing and implementing an integrated DNA sample management system, such as the JusticeTrax DNA Module.

The Forensic Biology Unit can expect an increase to sample throughput by 20% resulting in faster turnaround times and a DNA backlog reduction of at least 300 cases by the end of the award period.

FY11 Recipient Name: County of Alameda, California (CA)
Award Number: 2011-DN-BX-K441
Award Amount: $286,820
Abstract: The Alameda County Sheriff's Office (ACSO) Crime Laboratory is responsible for processing all evidence submitted to the laboratory associated with criminal investigations from local law enforcement agencies throughout Alameda County excluding the City of Oakland.

In order to continue meeting the needs of our user agencies in providing DNA analysis in a timely manner, grant funds from this award will be used to continue funding two positions (Criminalist and DNA Technical Lead) in the DNA Unit and pay for annual maintenance contracts for DNA instrumentation. Although these grant funds will not completely finance the two positions, local funds will be used to continue funding in order to complete this program.

The funding from this award will be used for the following goals:

1. Maintain case throughput
2. Reduce case backlog
3. Reduce case turn around time to 45 days or less

The DNA Unit expects to maintain monthly case productivity as well as reduce the case backlog. The DNA Unit expects to reduce turn around time to 45 days or less. The funded Criminalist will be responsible for conducting DNA casework and performing technical reviews of casework. The DNA Technical Lead will be responsible for the technical aspects of the DNA Unit as well as oversight of day-to-day quality assurance and accreditation compliance activities. The DNA Technical Lead will perform technical and administrative reviews of casework, conduct and review validations as necessary, and perform casework at least 25% of their time.

FY11 Recipient Name: County of Kern (CA)
Award Number: 2011-DN-BX-K440
Award Amount: $319,182
Abstract:
Problem the grant will help to alleviate:
The Crime Lab has demonstrated improvements in TAT and Backlog reduction over the last several years with the infusion of funds provided by the DNA Capacity and Backlog grants. DNA Grant funds have provided for the hiring and training of two new Forensic Laboratory Technicians; improved the DNA Section’s automation with the purchase of instrumentation and equipment, such as the 3130 Genetic Analyzer, microscopes, robotics and liquid handler; and provided training funds for the required continuing education of staff.

However, due to County budgetary constraints the Crime Lab has had to redirect those funds to provide salaries and benefits to retain trained and experienced DNA analysts, who were slated

for lay-off. This year the County is proposing the lay-off of four (4) of 18 Criminalists, or 22% of seasoned analysts. (Refer: Attached letter to the County Administrative Officer)

The Crime Lab's DNA Unit is in jeopardy. Due to the difficulty in recruiting DNA Scientists and the mandatory Civil Service rules regarding layoffs the DNA Criminalists are the most vulnerable for elimination. A lay-off of this magnitude would jeopardize the level of trained staff and unit functionality that currently exists in the DNA Unit of the Crime Lab.

Proposed goals and objectives:
The Goals are to increase capacity and throughput, improve TAT and reduce backlog. The objectives are the retention of qualified, experienced DNA Analysts and to provide the DNA Unit with much needed support for non-analytical duties of the unit.
Summary of the implementation plan:

With funding provided by the 2011 DNA Backlog Reduction Program grant the Crime Lab will have the resources to retain two qualified and experienced DNA scientists, and hire a Laboratory Assistant to assist the DNA Unit with meeting their goals.

Expected results:
The Crime Lab expects an improvement in throughput and TAT and a reduction in the backlog. However, as law enforcement become more familiar with DNA evidence collection and the impact that DNA evidence analysis has on the prosecution of cases, the Crime Lab anticipates an ever increasing demand for DNA analysis. A challenge, equipped with proper staffing and equipment, the Crime Lab gladly accepts.

FY11 Recipient Name: County of San Bernardino (CA)
Award Number: 2011-DN-BX-K474
Award Amount: $654,937
Abstract: The San Bernardino County Sheriff's Department - Scientific Investigations Division (Crime Laboratory) is part of a unit of local government. We are responsible for analyzing evidential material associated with criminal investigations for local law enforcement agencies within the county of San Bernardino. The overall goals of the San Bernardino County Sheriff's Department Crime Laboratory are to increase the throughput of our DNA laboratory, reduce DNA casework backlog and reduce DNA case turnaround time. Our objectives will be to fund overtime and supplies to complete backlogged DNA cases, fund necessary training, fund a new genetic analyzer and fund a DNA Analysis Module (DAM) to significantly enhance the communication between DNA instrumentation and tracking of casework samples. A DNA Analysis Module is similar to a LIMS but will be designed and customized to fit our DNA lab protocols and procedures. It will assist with DNA sample tracking, case management, standardized case documentation, sample chain of custody, reagent and chemical quality control tracking/inventory, and provide statistical data related to DNA casework. The DNA Analysis

Module will allow our lab to improve our DNA process by reducing hand written documentation in notes, worksheets and instrument log pages, reducing typographical errors in sample itemization and calculations, and providing a measure of quality control in regards to reagents and supplies. We expect the DNA Analysis Module to standardize and streamline our entire DNA process resulting in increased case output. We would also like to purchase an AB 3500 Genetic Analyzer to replace our older 3130 Genetic Analyzer which would double the number of samples analyzed at one time on this type of instrumentation. Our Crime Laboratory has experienced an increase in staff that has created limited space for expansion. The projected plans will incorporate the most prudent and efficient use of equipment, allowance for overtime, supplies and training which will allow us to reach our goals.

FY11 Recipient Name: County of San Mateo (CA)
Award Number: 2011-DN-BX-K472
Award Amount: $213,288
Abstract: The County of San Mateo is located in Northern California. It is positioned just south, and adjacent to, the City of San Francisco. It has a population over 730,000 and comprises 450 square miles, 25% of which is urban space.

Forensic Services for the County are provided by the San Mateo County Sheriff's Office. The San Mateo County Sheriff's Office Forensic Laboratory services approximately thirty law enforcement and law enforcement related agencies in the County of San Mateo. These agencies include San Mateo County Departments: Sheriff's Office, District Attorney, Probation, Coroner, Parks and Recreation, and Animal Control, as well as the California Highway Patrol, local police departments, California Fish and Game, and local transportation authorities. The San Mateo County Sheriff's Office Forensic Laboratory also provides forensic services, by contractual agreement, to the City of Vallejo (Solano County), and the City of Concord (Contra Costa County).

On May 11, 2005, the San Mateo County Sheriff's Office Forensic Laboratory began performing STR DNA analysis.

On September 11, 2010, the San Mateo County Sheriff's Office Forensic Laboratory was accredited by the American Society of Crime Laboratory Directors/Laboratory Accreditation Board International (ASCLD/LAB). The San Mateo County Sheriff's Office Forensic Laboratory undergoes external audits, not less than once every 2 years, to demonstrate compliance with the DNA Quality Assurance Standards established by the Director of the Federal Bureau of Investigation.

The Federal funding from this award will be used for the following goals:

1. Reducing the forensic DNA case turnaround times through Criminalist overtime and purchasing supplies.

2. Increasing the capacity of the laboratory by purchasing equipment (Qiagen EZ1 Advanced XL) and by continuing to employ one (1) contract Criminalist and three (3) contract Forensic Biology Processing Technicians.
3. Providing the required continuing education for four Criminalists.

The San Mateo County Sheriff's Office does anticipate a reduction in the DNA case backlog; however, this reduction will not occur until two (2) of the remaining four (4) Criminalists in training have completed their training in February 2012. The Laboratory does expect to complete at least 151 cases by the end of the award period. The turnaround time is expected to be reduced to 200 days or less, and the Criminalist throughput for samples analyzed per month per analyst is expected to increase to 20 samples. Currently, three (3) qualified examiners are responsible for working on DNA cases and the Laboratory anticipates the completion of training for two (2) additional Criminalists. The addition of these two (2) Training Examiners will assist in decreasing the turnaround time of all casework submitted to the Forensic Biology Section.

FY11 Recipient Name: County of Santa Clara (CA)
Award Number: 2011-DN-BX-K465
Award Amount: $327,077
Abstract: The Crime Laboratory, under the Office of the Santa Clara County District Attorney, is the regional laboratory responsible for the analysis of physical evidence collected within Santa Clara County; it serves over 30 criminal justice agencies, including the sheriff, medical examiner, and all municipalities within the County. Crimes reported for the county in calendar year 2008, included 5,452 violent crimes, 23,472 property crimes, 28,347 instances of larceny-theft, and 498 cases of arson. This information was obtained from the website of the Office of the Attorney General for the State of California Department of Justice, and has been provided as an attachment. We are a full-service DNA laboratory providing biological screening of evidence, autosomal STR analysis and YSTR analysis.

The SCCCL is currently facing budgetary constraints in California, which makes assistance through Federal funding essential to decrease the laboratory's backlog. We are hoping to use the Federal award to achieve the following goals:

1. Reducing the overall DNA backlog through the purchase of supplies and funding two full-time analyst positions.
2. Purchasing small ticket equipment items (UV cross-linker and thermal cycler probe) to expedite laboratory processes.
3. Providing the required continuing education for analysts and send one analyst to the annual CODIS conference.

The SCCCL can expect to complete approximately 660 cases during the grant period. The turnaround time is expected to reduce to 80 days or less, and the analyst casework throughput is expected to increase by at least 10% at the end of the award through the assistance of two grant-funded positions to an existing full-trained staff.

FY11 Recipient Name: County of Ventura (CA)
Award Number: 2011-DN-BX-K443
Award Amount: $131,862
Abstract: In this grant application the Forensic Sciences Laboratory (FSL) is requesting funds to continue funding a fixed term DNA position to help reduce the backlog. The DNA position was established three years ago through this grant.

Senior examiners have been required to perform screening tests, which could equally well be performed by a junior person. The FSL would like to continue employment of a Forensic Scientist I/II in the DNA section, thereby allowing the senior staff to concentrate on the more complex DNA cases. This individual will help screen evidence and conduct DNA analysis.

The overall objective of this grant is to improve DNA analysis capacity and to reduce the number of backlogged DNA cases. The laboratory's goals are 1) to reduce the turn around time by ten percent (from 136 days to 122 days) between submission of a DNA sample to the laboratory to having a report written for the submitting agency. 2) To reduce the number of pending cases by sixty in a one year period of time. This will result in an additional 25 to 35 DNA profiles being entered into CODIS with an anticipated result of eight to ten CODIS hits.

FY11 Recipient Name: Fresno County Sheriff Department (CA)
Award Number: 2011-DN-BX-K451
Award Amount: $306,263
Abstract: The geographic location of Fresno County is approximately an equal distance between Joaquin Valley. From east to west, the County's boundaries extend 135 miles, encompassing a geographical area of 6,007 square miles with the Coast Mountain Range to the west and the Sierra Nevada Mountain Range to the east. Fresno County has a population of 899,348 that is expected to grow 3.4% annually in the future.

The Fresno County Sheriff's Department Forensic Laboratory provides services for the Sheriff's Department. The forensic laboratory has two Criminalists that are trained and qualified to perform STR analysis, one currently for casework and one as the DNA Technical Lead. We also have two Criminalists currently in our DNA training program. Due to staffing needs and the growing demand for DNA analysis, the Fresno County Sheriff's Department Forensic Laboratory needs to find a way to reduce backlogged DNA casework and increase capacity. The Sheriff's Department has over 35 unsolved homicide/rape cases that need to be examined for

potential DNA evidence. DNA cases can take ten to twelve month from request to final report, due to the size of our staff and ageing non-efficient equipment.

The forensic laboratory is seeking $306,263 in federal funds to decrease the backlog of cases from the DNA unit and purchase updated equipment to increase the capacity of the DNA unit. Increased capacity will be accomplished by using grant funds to purchase one Applied Biosystems 3500 genetic analyzer, two Barnstead NanoPure water purification units, four laptop computers, one data storage computer/server, and sending backlogged DNA cases out to be analyzed by accredited fee-for-service vendors for analysis of evidence that may contain DNA. The expected result will be a reduction in the number of days from request to issuing final DNA results to our clients and a reduction of in the numbers of backlogged DNA cases.

FY11 Recipient Name: Los Angeles County Sheriff's Department (CA)
Award Number: 2011-DN-BX-K482
Award Amount: $1,200,000
Abstract: The Los Angeles County Sheriff's Department, Scientific Services Bureau (LASD-SSB) Crime Lab exists under the County of Los Angeles and is responsible for analyzing evidence from criminal investigations for the entire County, excluding the City of Los Angeles and the area it serves.

The LASD-SSB is under severe budget constraints and overtime is nearly eliminated department wide. In the upcoming fiscal year the department has been notified of further budget cuts. The Federal funding from this award will be used for the following goals:

1. Reduce and prevent casework backlog through analyst overtime and purchasing supplies.
2. Increase capacity of the biology section by purchasing equipment (extraction robots, DNA mixture interpretation software, pipettes, copier, CODIS computer system upgrade, and laptop computers).
3. Provide the required continuing education for 26 analysts.

The LASD-SSB can expect to reduce the DNA case backlog by 663 cases by the end of the award period. The turnaround time is expected to be reduced to 120 days or less, and the analyst throughput for casework is expected to increase by 25%.

FY11 Recipient Name: Orange County Sheriff Coroner Department (CA)
Award Number: 2011-DN-BX-K444
Award Amount: $484,711
Abstract: The goals and objectives of this project are to use the 2011 Backlog Reduction and Capacity Enhancement Program Grant funds to retain two full-time Forensic Scientists and one

Forensic Technician who are currently employed in the DNA Section of our Crime Laboratory. These employees were hired during the implementation of the 2009 DNA Unit Efficiency Improvement Grant and their salaries and benefits have been funded by that grant 100%. The 2011-2012 budget forecast for the Orange County Sheriff-Coroner Department shows that there are no local funding sources to continue paying the salary and benefits for these employees after the 2009 Efficiency Grant ends. Without the funding that the FY 2011 DNA Backlog Reduction and Capacity Enhancement Program Grant provides, these three positions in the DNA Section would be terminated.

Retaining at least three of the five laboratory staff who were hired and trained with funds from the 2009 DNA Unit Efficiency Improvement Grant will allow the Orange County Crime Laboratory to continue its "Property Crime DNA Program". The "Property Crime DNA Program" consists of two teams of DNA Analysts dedicated to analyzing property crimes, a High Volume DNA Analysis Line that is comprised of state-of-the-art DNA robotics and instrumentation, and work request triage. The Property Crime DNA Program and High Volume DNA Analysis Line has allowed our Crime Laboratory to reduce our casework backlog, decrease turnaround times, and increase the capacity of our laboratory to analyze more DNA cases.

FY11 Recipient Name: Sacramento County (CA)
Award Number: 2011-DN-BX-K436
Award Amount: $586,429
Abstract: The Sacramento County District Attorney Laboratory of Forensic Services (hereafter referred to as the crime laboratory) is to continue partnering with local police agencies and the District Attorney to target and solve those criminal cases that will have the most significant impact on the prosecution of violent crimes. The emphasis of the crime laboratory's 2011 backlog reduction operations will be on the timely analysis of DNA-related evidence from violent crime cases and the remediation/prevention of a backlog of DNA cases across the spectrum of reported crimes.

The objectives of the crime laboratory to be completed during the eighteen month operation of the FY 2011 Forensic DNA Backlog Reduction Program includes directing the two grant-funded DNA analysts to conduct the screening and DNA profiling of biological evidence recovered from at least 40 DNA cases (20 DNA cases per analyst), and upload the eligible profiles to CODIS. Likewise two consultants will be involved in backlog reduction and DNA case turnaround time projects.

The crime laboratory has prepared an implementation plan that funds two DNA analysts, two consultants, continuing education and training opportunities for DNA analysts in the Crime Laboratory's Biology Unit, and equipment to improve the Biology Unit's overall productivity.

The Project Director will closely monitor the grant to ensure progress is being made in all aspects of the grant.

In order to achieve the goal and objectives outlined for this grant period the crime laboratory will employ two (2) criminalists who will each be responsible for screening evidence associated with designated crime cases for probative evidence and profiling samples; and, uploading profiles to CODIS developed from those cases that screened positive for biological fluids.

Two (2) consultants will be funded to assist in backlog reduction and casework turnaround time projects (one to conduct administrative reviews of DNA casework reports prior to release to the investigating agencies. The second to review and screen evidence from backlogged DNA cases identified by law enforcement agencies as critical homicide or rape-homicide cases. There is no crime scene collection component to this grant.

As with previous DNA grants, the FY 2011 Forensic DNA Backlog Reduction Program will provide funds for training and continuing education of the DNA analysts per the FBI's quality assurance standards for forensic testing laboratories. Providing continuing education and advanced training to the laboratory's experienced DNA analysts will ensure that the crime laboratory delivers the best possible, most efficient, and timely forensic DNA analytical services to Sacramento County.
Remaining funds will be used to add equipment that is used by all DNA analysts in an effort to improve casework production.

FY11 Recipient Name: San Diego County (CA)
Award Number: 2011-DN-BX-K477
Award Amount: $309,000
Abstract: The San Diego Sheriff's Regional Crime Laboratory (the Lab) is a full-service, ASCLD-LAB accredited forensic science facility. The Lab's forensic biology section provides casework DNA analysis services to law enforcement agencies in the County of San Diego, California (exclusive of the City of San Diego).

The Lab faces a steadily increasing workload of DNA analysis requests, occasioned by our recent focus on property crime cases and the expectations of our clients. This increase will further strain our already stretched financial and personnel resources. We hope to minimize the resulting impact on our operation by pursuing the following goals:

1. Reducing our backlog of work requests by providing overtime and supplies for additional casework.
2. Improving our analysis capacity by replacing obsolete pipettors and alternate light sources, providing service contracts for critical DNA analysis equipment, and obtaining a lease on a copier.

3. Providing required continuing education for some of the Lab's DNA analysts.

FY11 Recipient Name: City and County of Denver (CO)
Award Number: 2011-DN-BX-K492
Award Amount: $213,569
Abstract: The Denver Police Department (DPD) Crime Laboratory serves the City and County of Denver and aims to use forensic technology to solve crime, thereby increasing public safety. The DPD Crime Laboratory DNA and Forensic Biology (DNA/FBIO) units seek federal support in order to reduce the number of cases backlogged throughout the 2011 year, as well as to increase the efficiency and effectiveness of the analysts working in the laboratory, by way of the following goals:

1) To retain one trained, grant-funded analyst for 18 months of the 2011 grant period to process the equivalent of 144 DNA cases (or 720 DNA samples, assuming an average of 5 samples per DNA case).
2) To retain one trained, grant-funded analyst for 5 months of the 2011 grant period to process 25 forensic biology cases.
3) To fund a part-time laboratory technician for 12 months to support FBIO and DNA analysts and perform necessary laboratory processes, such as equipment maintenance and QA/QC duties.
4) To fulfill the continuing education requirements specified in the DNA Quality Assurance Standards for five DNA/FBIO analysts.
5) To replace a broken, non-repairable 96-well plate centrifuge that will aid in maintaining and increasing the capacity of the laboratory.
6) To replace an old set of hand-held pipettes with a new, ergonomic set of light touch pipettes.

By implementing these goals, the DPD Crime Laboratory will target specific bottlenecks that have been identified in the laboratory process and the lab will continue to comply with national quality assurance standards regarding continuing education.

FY11 Recipient Name: Colorado Department of Public Safety (CO)
Award Number: 2011-DN-BX-K503
Award Amount: $960,004
Abstract: The Colorado Bureau of Investigation – Forensic Services Division (CBI-FSD) is the state agency responsible for analyzing evidential material associated with criminal investigations for all state and local criminal justice agencies. CBI-FSD maintains five regional laboratories located in Denver, Durango, Grand Junction, Greeley and Pueblo. The facilities located in Denver, Grand Junction and Pueblo have DNA analysis capabilities.

Senate Bills 06-150 and 09-241 designate the CBI-FSD as the agency responsible for conducting DNA analysis on all biological samples collected from all felony convicted offenders and all adult felony arrestees. The CBI-FSD is responsible for storing and maintaining the resultant profiles in the CODIS DNA database. The Denver regional laboratory maintains the DNA Database Unit.

In accordance with SB09-241, the CBI-FSD began receiving biological samples from all adult felony arrestees within the state of Colorado beginning September 30, 2010. SB09-241 requires adult arrestees to be charged with a felony before the biological sample can be processed and entered into the CODIS DNA database, therefore not all arrestee samples collected are processed. However, SB09-241 runs concurrently with all previous legislation requiring collection and processing of all felony convictions. Since the start of SB09-241, September 30, 2010, CBI-FSD has increased its total of required processed database samples by approximately 184%.

The downturn in the nation's economy has not spared the State of Colorado, and the CBI-FSD has seen its budgets reduced for the last two budget cycles. Current expectations for the 2011-2012 budget cycle, which starts July 1, 2011, are for an additional 5 to 12% reduction in operating budgets.

The four goals of the FY 2011 DNA Backlog Reduction Program are to:

Goal 1: Increase the capacity of the CBI-FSD DNA Casework Unit
Goal 2: Increase the throughput capacity of the CBI-FSD DNA Database Unit
Goal 3: Reduce the backlog of DNA forensic samples
Goals 4: Provide required continuing education

FY11 Recipient Name: Metropolitan Police Department (DC)
Award Number: 2011-DN-BX-K431
Award Amount: $483,515
Abstract: In 2008, the DC Metropolitan Police Department developed the capability to perform forensic DNA testing by establishing a crime laboratory which includes a forensic biology unit. The MPD Crime Laboratory was accredited in November 2008 and assumed forensic DNA testing of all District of Columbia cases in early 2009. The MPD Crime Laboratory was granted CODIS access in 2009.

The MPD Crime Laboratory will use FY11 Forensic DNA Backlog Reduction grant funding for the following goals:

1. Reducing the forensic DNA casework backlog through analyst overtime and outsourcing.

2. Increasing the database capacity of the laboratory by purchasing equipment (genetic analyzer).
3. Providing the required continuing education for all analysts assigned to the Forensic Biology Unit.

FY11 Recipient Name: Delaware Health and Social Services (DE)
Award Number: 2011-DN-BX-K426
Award Amount: $387,580
Abstract: The Office of the Chief Medical Examiner - Forensic Sciences Laboratory is the agency that is responsible for analyzing evidential material associated with criminal investigations for all state and local law enforcement agencies and medical examiners within the state of Delaware. Delaware Code (Title 29, Chapter 47) designates the DE OCME as the agency responsible for conducting DNA analysis on DNA samples collected by the Delaware Department of Correction from all convicted felons; the DE OCME is responsible for storing and maintaining the resultant DNA profiles in the Delaware State DNA Index System.

The DE OCME is facing budgetary constraints and the number of forensic DNA casework and DNA database samples are increasing (~20% Casework Section and ~50% CODIS Section). The Federal funding from this award will be used for the following goals:

1. Reducing the forensic DNA case backlog through overtime and purchasing supplies.
2. Reducing the DNA database sample backlog through overtime and purchasing supplies.
3. Increasing the capacity of the laboratory by purchasing equipment (updated refrigerators and freezers and a temperature monitoring system).
4. Increasing the capacity of the laboratory by purchasing modules and extended services for LIMS (Batch Processing and DNA Databank modules).
5. Improving document management, process management, training management, and reporting by purchasing Qualtrax compliance software.
6. Providing the required continuing education for each analyst and purchasing a subscription to the Forensic Science International (FSI) Journal.

The DE OCME - DNA Unit can expect to reduce the DNA case backlog by at least 122 cases by the end of the award period. The agency also expects to work at least 1,800 DNA database samples using Federal funding. The turnaround time is expected to be reduced to 90 days or less, and the analyst throughput in the casework sections is expected to increase 20%.

FY11 Recipient Name: Broward Sheriff's Office (FL)
Award Number: 2011-DN-BX-K486
Award Amount: $571,367
Abstract: At the current time, the Broward Sheriff's Office has a backlog of approximately 350 cases. We are requesting funding so that the unit can perform in-house analysis on these cases. This funding will assist in keeping the backlog from growing and will be utilized to work cases that are being requested or those that have court dates in the foreseeable future. In addition, cases which lack suspects will also be worked. Funding is being requested for kits, consumables and personal protection equipment.

As part of the DAB requirements, every DNA analyst must attend training on a yearly basis. This has always presented a challenge due to budget restraints; this has not changed and will continue to be more difficult as we have been asked to cut our budget drastically and training has historically been one of the first places that get hit. As a result, funding for training is being requested so that we can circumvent this continuing critical issue.

As part of this grant proposal we would like to hire two (2) additional individuals. By bringing these individuals on line, not only will we be able to increase our throughput and decrease our backlog, but it will also allow analysts the time to work on other things such as validations. By renovating the existing DNA section and being able to branch out into what used to be the Trace section (it was shut down last year), we will be able to enhance the analysis flow by positioning the necessary rooms parallel to one another and by not having to mix analyst work areas with lab areas. This will only enhance the analysis work flow.

FY11 Recipient Name: Florida Department of Law Enforcement
Award Number: 2011-DN-BX-K461
Award Amount: $4,834,486
Abstract: Florida Department of Law Enforcement (FDLE), as mandated by Chapter 943 Florida Statutes, operates a statewide forensic crime laboratory system to provide timely, expert and professional examination of evidentiary materials to aid in the investigation, prosecution and/or exclusion of criminal offenses in the state of Florida. The Biology/DNA needs of Florida's criminal justice community are serviced by a network of FDLE laboratories and five local laboratories that comprise the Florida crime laboratory system. FDLE has six internationally accredited DNA laboratories that provide Biology/DNA analysis services.

The heavy demand for Biology services continued in 2010, with over 20,500 incoming service requests. The large volume of requests has been attributed to a number of factors including Florida's 18 million population and continued high volume of reported crime (770,518 index crimes reported in 2010). Increased law enforcement awareness of the crime-solving value of Florida's DNA database also contributes to requests for Biology/DNA service that would not

have been submitted a few years ago. Requests related to cold cases, and requests for touch DNA are on the rise. During 2011, Florida will begin collecting DNA from persons arrested for violent felony offenses. Moving from the current conviction-based criteria to include arrestees is expected to not only increase submissions to the database, but to increase case work demand as well. Based on these factors, FDLE anticipates that incoming service requests for Biology will continue to be significant over the next several years.

The Federal funding from this award will be used for the following goals:

1. Reduce the forensic DNA case backlog.
2. Increase DNA analysis throughput.
3. Increase the capacity of the laboratory.
4. Provide the required continuing education for each analyst.

FY11 Recipient Name: Miami Dade County (FL)
Award Number: 2011-DN-BX-K454
Award Amount: $1,190,348
Abstract: The National Institute of Justice has allocated $6,801,989 to the State of Florida as part of the FY 2011 Forensic DNA Backlog Reduction Program. The Miami-Dade Police Department (MDPD) Forensic Services Bureau (FSB)Crime Laboratory has, through data obtained from the 2009 Florida Uniform Crime Report (UCR), been offered $1,190,348 as its portion of the formula grant. The FSB Crime Laboratory proposes to use these funds to continue to increase the laboratory's capacity to analyze DNA samples, reduce the DNA sample turnaround time, and reduce the number of backlogged DNA cases awaiting analysis.

Improvements to the FSB Crime Laboratory infrastructure will continue to increase the capacity for in-house DNA analysis. Funds will be utilized by the FSB Crime Laboratory to purchase and validate instruments that will automate the extraction of DNA from casework evidence samples. The validation and implementation of new DNA test kits will further increase the efficiency of the entire DNA analysis procedure and increase the laboratory's capacity for in-house DNA analysis with a more fully automated DNA workflow.

The Forensic Photographer will continue to enhance case documentation by photographing each evidence package upon submission to the laboratory. The Police Property and Evidence Specialist (PPES) will continue to aid in evidence storage and retrieval, removing these duties from FSB Criminalists who can focus more time on analyzing evidence items. Also, the laboratory's capacity to analyze DNA samples will benefit directly from the addition of another Criminalist.

Funds are being requested to reduce the backlog of DNA cases by outsourcing casework to a commercial DNA laboratory. These cases will include cold homicide and sexual battery cases and current property crime cases. To maximize the number of cases that can be outsourced for

DNA analysis, funds are requested to pay overtime to FSB Crime Laboratory Criminalists to conduct the initial examination and screening of the evidence for potential biological material, prepare the DNA samples to be shipped and conduct the DNA technical review required to determine whether the criteria are met for DNA database entry. The commercial laboratory will conduct the DNA analysis, issue a court-ready report and provide testimony in any future judicial proceedings. Travel and registration funds are also requested to enable FSB Criminalists to meet continuing education requirements and to receive training on specialized instrumentation.

The FSB Crime Laboratory has identified these goals for this project and has formulated a detailed plan to accomplish these goals. Ultimately, through funding from this award, the FSB Crime Laboratory will be able to increase its capacity to analyze DNA cases and reduce its backlog. This will generate more DNA profiles for database entry and more investigations will be assisted, thus contributing to the safety of Miami-Dade County's residents.

FY11 Recipient Name: Palm Beach, County of (FL)
Award Number: 2011-DN-BX-K447
Award Amount: $482,941
Abstract: There are three main objectives for this FY11 Backlog Reduction Grant: 1) decrease the FBU case backlog through continued salary support for two Forensic Scientists, 2) replace aged instruments with updated instruments and outsource new instrument validation and 3) increase laboratory services to the customer through Y-STR testing and progressing to a paperless document system. The Forensic Biology Unit (FBU) has been in the forefront of forensic laboratory automation for nearly a decade. The efficiency of the laboratory has been positively significantly impacted by using validated high throughput automated platforms . Although functional, many of the original 2002 robotics and 2005 PCR instruments in the laboratory are ageing, becoming obsolete and must be replaced. In fact, the vendors are either discontinuing the robotics or the cost of upgrading prohibitive. Replacement of these instruments is critical to sustaining the level of service offered to the county's law enforcement agencies. In addition to maintaining automation within the laboratory, the FBU has determined it is now cost effective to offer Y-STR technology for testing casework evidence and through the FY11 grant funding, validation and training of analysts will provide additional technology to the customers. The laboratory has used grant funding for the past two grant cycles to move towards a paperless document archived program in which all FBU records are scanned and made available electronically. This document scanning program process is on-going. The objectives for this grant may be obtained through 1) providing salary support for two Forensic Scientists, 2) the replacement of the BioMek2000 extraction robotic instrumentation with the validation and implementation of the QIASymphony, a more sensitive automated large scale DNA extraction liquid handler, 3) addition of a simple liquid handler for repetitive preparation pipetting to replace the procedures the BioMek2000 could conduct, 4) replacement of older MasterCycler

PCR instruments with AB PCR instruments which a contracted vendor will provide validation, analyst training and protocol implementation, 5) continued support for the scanning of all FBU documents and records for the purpose of becoming paperless in the future, 6) validation of the Promega PowerPlex-Y STR kit for use on casework evidence and 7) install GeneMapperID-X on the common CODIS server for ease of researching profiles. In order to provide continued services to the customer, validation studies will be outsourced to private vendors. Past NIJ grant funding was successfully used to contract validation studies for robotic methods including DNA extraction, quantification, amplification and allele detection. One of the most important FBU objectives has been progress towards a completely automated DNA process and this has largely been successful. There are, however, more scientifically sophisticated protocols for DNA processes which make replacement of FBU robots timely and will provide additional liquid handling capabilities and improve PCR protocols using new thermal cyclers. In light of the significant increase in the number of crime scene samples that are considered "touch evidence", nearly 63% of all DNA samples, these new technologies and protocols are imperative to help reduce the backlog and provide quality profiles for CODIS. The mini-robots and the high throughput robots provide a more seamless DNA process that avoids human intervention which can be inefficient. The addition of newer robotics will increase the capacity of the FBU laboratory by allowing the unit to increase the number and quality of DNA samples analyzed as well as to handle, screen, and analyze backlogged forensic DNA casework samples by the two grant-funded Forensic Scientists currently on staff. The entire FBU staff will benefit from the validation of the Promega PowerPlex-Y technology thereby offering alternative analysis for DNA extracts. All of these grant requests will provide increased capacity and quality to the FBU DNA program.

FY11 Recipient Name: Pinellas County (FL)
Award Number: 2011-DN-BX-K487
Award Amount: $414,921
Abstract: The Pinellas County Forensic Lab (PCFL) is a public county crime laboratory that analyzes evidence in criminal investigations for the Pinellas County, Florida criminal justice community as well as the district medical examiner.

The laboratory recently expanded to add the DNA discipline. The DNA has been fully operational, to include CODIS uploads since the fall of 2010. Due to an extra emphasis placed on the submission of non-violent crime and touch DNA, the laboratory submissions have outpaced initial projections. Budget constraints, as well space limitations have limited the laboratories ability increase efficiencies and productivity.

The federal funding from this award will be used to increase the analytical capacity of the laboratory to achieve the following goals:

1. Increase the throughput of samples analyzed per month by purchasing supplies and laboratory equipment (centrifuges, pipetters, lab tables, chairs, hoods, microscopes, etc) for use in expanded space. Note: this is currently non-utilized laboratory space, no construction will be involved.
2. Increase the number of samples analyzed per month by increasing the analytical staff and purchasing of supplies (kits) necessary to train the new staff and conduct the additional casework.
3. Increase the capacity of the laboratory by purchasing equipment (thermocyclers, automated extraction robotics) and purchasing kits associated with the use of the automated extractions system.
4. Increase the efficiency of the lab by validating new technology with new technology that may eliminate or minimize the need for multiple chemistries (currently Identifiler and Mini-filer) with a single, more stable technology (Identifiler Plus or equivalent).
5. Increase the efficiency of the laboratory by purchasing office equipment (copier, server, copier and laptop computer) for the specific use of the DNA section for managing casework, casefiles, and providing/receiving training.

PCFL can expect to increase the number of DNA cases analyzed per year by at least 300 and the number of samples processed by at least 1000 by the end of the award period. The turnaround time is expected to be maintained at 30 days or less and the analyst throughput is expected to increase by at least 10%.

FY11 Recipient Name: St. Lucie County Sheriff's Office (FL)
Award Number: 2011-DN-BX-K476
Award Amount: $94,500
Abstract: The Indian River Crime Laboratory provides scientific and technical services to all state, county, federal and municipal law enforcement agencies within the 19th Judicial Circuit of Florida, and occasionally assists agencies outside the Circuit. The Laboratory is located in the city of Fort Pierce and covers a four county service area of 2,420 square miles which includes St. Lucie, Indian River, Okeechobee and Martin counties. The Laboratory's budget is comprised of funds input by 12 law enforcement agencies located within the circuit. As with all public sector agencies, the nation’s economic problems have caused significant cuts to be made over the past few years. This has resulted in an approximate 11% decrease in agencies funding levels for the laboratory since the 2007-2008 fiscal year. While funding is being decreased, manufacturers of the equipment, software and reagents are raising their costs. Therefore, during the same time frame, the IRCL has experienced a greater than 36% increase in the operating budget. Projections for the near future suggest additional budget cuts will continue over the next few years. With this in mind, IRCL is continually looking for ways to make the best use of our existing funding as well as further streamline our processes to increase throughput, reduce the time of delivery to our service area and continue our efforts to reduce/eliminate our backlog.

In an effort to thwart DNA processing slowdowns due to increasing operational costs, as well as seek new ways to further streamline current processes, the IRCL is requesting funds to accomplish the following two goals:

Goal 1: Reduce the current backlog by maintaining adequate stocks of DNA analysis supplies alleviating the need to schedule with other analysts based on case load needs.
Goal 2: Provide required annual continuing education for existing DNA analysts to meet the FBI DNA Quality Assurance Standards and investigate new ways to streamline workflow processes.

With the use of these funds, IRCL expects to maintain a steady flow of DNA processing. Based on past experience, this will result in an estimated 150 analyzed cases and 45 uploadable samples into CODIS.

FY11 Recipient Name: Georgia Bureau of Investigation
Award Number: 2011-DN-BX-K414
Award Amount: $2,756,031
Abstract: The Georgia Bureau of Investigation- Division of Forensic Sciences (GBI-DOFS) currently has a relatively small backlog of forensic biology cases. The major problems faced by the laboratory is insufficient state funding to maintain an adequate staffing level to address new casework analysis requests and procure adequate levels of supplies necessary to maintain uninterrupted testing. In the 2011 legislative session, the Georgia General Assembly passed legislation requiring sample collection from all felony convictions, including individuals on probation/parole. This amended legislation will take effect by July 1, 2011 and is projected to increase the number of database samples by 7000-10,000 annually.

The goals of this project are to achieve adequate staffing in forensic biology, provide training opportunities, update and increase instrumental capacities, and provide supplies for database sample analysis. The project will be implemented through maintaining employment of current DNA award funded employees, hiring of additional staff, attendance at national meetings/conferences or in-house training, development of a customized data module in the Lab Information Management System (LIMS), and procurement of instruments (genetic analyzers, robotics), and supplies. The additional staff will be hired in the first half of 2012 and trained to begin participation in sample analysis by late 2012.

The expected outcome of this project is that at least 1156 cases and 20,000 database samples will be analyzed in-house as a result of award funding. Report timeliness will be improved so that by the end of the project, the average number of days to issue a DNA report will be 60 days or less as measured from the date of evidence submission. Database samples will continue to be analyzed and DNA profiles uploaded to CODIS within 30 days of sample submission to the laboratory.

FY11 Recipient Name: City and County of Honolulu (HI)
Award Number: 2011-DN-BX-K416
Award Amount: $263,212
Abstract: The Scientific Investigation Section (SIS) of the Honolulu Police Department (HPD) maintains the only forensic DNA testing laboratory in the State of Hawaii. The section serves an island population of more than 900,000 and is staffed with six criminalists and two contract criminalists. In addition to providing casework services, the unit is also responsible for the State's convicted offender DNA database. Although we are a county agency, we are often asked to assist other jurisdictions, including federal agencies (the Bureau of Alcohol, Tobacco and Firearms; the Department of Immigration and Customs Enforcement; various branches of the U.S Military, and the Office of the United States Attorney) and law enforcement agencies located in the Pacific Basin (neighboring islands, Guam, Saipan, and Micronesia.

The HPD-SIS will be facing increased budgetary constraints in the next fiscal year. Budget cuts in the last fiscal year adversely affected the section's ability to provide timely results due to employee furloughs as well as purchasing restricting on supplies. The Federal funding from this award will be used toward the following goals:

1) Reducing the forensic DNA case backlog through analyst overtime and purchasing supplies.
2) Reducing the DNA database sample backlog through purchasing supplies.
3) Increasing the capacity of the laboratory through equipment purchase and hiring personnel
4) Providing the required continuing education for each analyst

The HPD-SIS can expect to reduce the DNA case backlog by at least 73 cases, processed in-house, by the end of the award period. The section also expects to work at least 967 DNA database samples using Federal funding. The casework turnaround time is expected to be reduced to 90 days or less and the databasing turnaround time is expected to be reduced to 30 days or less.

FY11 Recipient Name: Iowa Department of Public Safety
Award Number: 2011-DN-BX-K490
Award Amount: $461,560
Abstract: The Iowa Division of Criminal Investigation (DCI) Criminalistics Laboratory is soliciting an award of $461,560.00 from the National Institute of Justice (NIJ), "*FY 2011 Forensic DNA Backlog Reduction Program*" for the purpose of Backlog Reduction and Capacity Enhancement.

Due to a tight State budget and the loss of staff, the laboratory has not been able to keep up with the demand for DNA services. With the grant this laboratory would reduce the casework backlog through overtime salaries. The DNA unit would also purchase equipment and software

for the purpose of replacement of old/outdated items in the unit. These equipment purchases will help increase the capacity of the casework unit in processing more samples and therefore more cases. The success of the proposed work will be measured through tracking of case turn-a-round time and the number of cases completed each month by the DNA Casework Unit.

The DCI Laboratory is projecting that an expanded DNA database law will be passed in future legislative sessions and therefore is planning for increased capacity enhancement in the DNA Database unit of the Lab. The Database unit plans to add a DNA CODIS LIMS module to more fully automate accessioning and tracking of DNA Database samples into the Convicted Offender Unit of the DCI Crime Lab. This LIMS system will also be used to track all samples through the actual DNA processing. Money will also be used to purchase new DNA Offender Database kits which will help streamline DNA Database sample processing, facilitate the implementation of high throughput processes and maximize sample storage space.
The success of the DNA CODIS LIMS module in the database unit should decrease the average number of days to complete a batch of convicted offender samples for upload.

FY11 Recipient Name: Idaho State Police
Award Number: 2011-DN-BX-K509
Award Amount: $261,474
Abstract: The Idaho State Police Forensic Services (ISPFS) provides service to 88 police agencies, 44 sheriff agencies and all federal and state law enforcement agencies in the state of Idaho. In the 2009 Crime in Idaho (Uniform Crime Report) publication these agencies reported a total of 19,307 violent crimes against persons, 48,832 crimes against property, and 13,697 crimes against society which brings the violent crimes to a total of 81,836. This is a decrease of 2% from the 2008 report. Based upon an adjusted population base of 1,543,741 this breaks down to 5301.1 violent crimes committed per every 100,000 persons. The ISPFS has three regional labs located throughout the state. Region 1 - Coeur d'Alene, Idaho; Region 3 - Meridian, Idaho; and Region 5 - Pocatello, Idaho. THE ISPFS Biology/DNA section is located in Region 3 and is the only human forensic DNA lab in the state of Idaho. The Idaho Code Title 19 Chapter 55 designates the ISPFS as the agency responsible for conducting analysis on DNA samples collected from all convicted felons in the state of Idaho. The ISPFS is responsible for storing and maintaining the resultant profiles in CODIS. The Biology/DNA section is maintained in Region 3.

The ISPFS is facing budgetary constraints and in April 2011 the Idaho legislature passed new DNA database legislation authorizing DNA collection on an additional approximately 112 felony and attempted felony convictions in the State of Idaho. The laboratory anticipates that there will be an average of at least an additional 1436 samples per year. Over the last three years the laboratory has received an average of 1558 samples per year. Because Idaho had not been processing samples until January 2011, a backlog of unprocessed samples was developed. Idaho

has 5542 DNA database samples that have not been processed as of May 2011. The ISP CODIS database contains approximately 4,900 convicted offender profiles. With the current statute for collection of these samples, it is estimated that ISP receives approximately 130-150 samples per month.

The scope of this project is to increase the capacity of the DNA database lab, eliminate the current DNA Database sample backlog, reduce the cycle time of each sample, and to implement the new Idaho "all felony conviction" legislation a year earlier than anticipated. The objectives are:

1. Purchase an Applied Biosystems 3130xl instrument to increase the processing capacity of the Idaho State Police Forensic Services (ISPFS) Meridian DNA Database Laboratory.
2. Utilize training funds to train newly hired DNA Database Analysts and provide continuing education to trained DNA examiners.
3. Supply overtime funds to reduce the DNA database backlog by increasing the number of eligible technical reviewers and using currently proficiency tested staff for extra work.
4. Provide the necessary DNA kits, consumables, and components to process the backlogged DNA Database samples.

Project Design and Methodology:
Idaho State Police Forensic Services has chosen a proactive and strategic approach to DNA database backlog reduction in Idaho. Currently Idaho has approximately 5500 DNA samples that have not been processed or entered into the DNA database, as well as approximately 3400 previously outsourced but unreviewed samples. The unreviewed samples are a result of the vendor going out of business. Last year the laboratory finished training the first dedicated DNA Database analyst. The laboratory obtained funding to hire two additional analysts in the DNA database program and that training has been initiated. In addition, the laboratory built a new DNA database laboratory, finished validation on all required instruments, and began to process backlogged samples. The backlog reduction plan is coupled with a capacity enhancement plan due to the Idaho legislature passing "all felony conviction" DNA sample collection in April 2011. The objectives will be accomplished in the following manner.

To meet objective #1, the laboratory will work with the Applied Biosystems (Life Technologies) sales staff to obtain one of the last 3130xl instruments in production for the Meridian DNA database laboratory. The laboratory will trade in a 310 instrument to offset the cost of the new instrument. The instrument is necessary to increase the capacity of the database unit and purchasing this instrument before its planned obsolescence will alleviate unnecessary instrument platform validation, software migration, and analyst training. Purchasing this instrument instead of an AB 3500 will save the laboratory over $140,000.00 in instrumentation and software alone. ISPFS already has one 3130xl instrument so the timely purchase of a second instrument gives the

laboratory the capacity needed to process the additional samples anticipated from new legislation and more trained analysts.
Objective #2 is to provide training funds for DNA examiners. State funding has been cut for DNA analysts. The grant funding allows analysts to attend critical DNA conferences and training out of state. The DNA Technical Leader orchestrates the staff strategically attending all of the important DNA conferences and regional meetings. The staff will attend meetings such as AAFS, Green Mountain, ISHI, CAC, NWAFS, MAFS, CODIS, and others. The attending staff member will report back to the other staff members on the training using a "train the trainer" format. New analysts in the DNA database unit will be sent to introductory DNA courses that accelerate their introductory training. The DNA section will also continue to send staff members to process mapping training to identify efficiencies in the DNA database program.

For objective #3 the laboratory will allocate funds for analyst overtime. Some of the funds will be allocated for processing of the samples, but the majority of the overtime will be used for technical review. Because most of the senior level analysts at ISPFS are in management or DNA casework positions, overtime funds are needed to allow them to technically review samples after their normal work hours. The DNA database laboratory is implementing an expert system for review, but until that system can be validated, the laboratory has a need for qualified technical reviewers to perform manual data review.

Objective #4 is a critical part of the plan because without reagents, kits, and consumables, the ISPFS backlog reduction plan would be ineffectual. ISPFS has never been funded by the Idaho legislature to perform DNA database work. The supplies needed to run the analysis have been taken from other programs. Now that the ISP general budget has been cut by approximately 51%, there is no budget to take from other programs. ISPFS does not have the money allocated to be able to process the backlog of samples in the accelerated time frame without reliance on Federal grant funding. With the environmental protection documents in place, ISPFS will dedicate the entire 2011 CODIS formulary grant to reagents, kits, and consumables to process the DNA database backlog in Idaho.

The scope of this project will be realized by eliminating the instrumental and personnel bottlenecks in the DNA database section. The objectives outlined will allow ISPFS to accomplish the goals of quicker and more efficient DNA sample processing time. ISPFS is firmly committed to backlog elimination and capacity enhancement and this grant will provide the required funds for that to happen in Idaho.

FY11 Recipient Name: DuPage County Sheriff's Office (IL)
Award Number: 2011-DN-BX-K517
Award Amount: $349,561
Abstract: The DuPage County Forensic Science Center (DCFSC) analyzes DNA using STRs, Y-STRs and Minifiler amplification systems. All validations and much of the equipment needed for the validations of this technology has been supported through NIJ grants. DCFSC is under increasing regulatory scrutiny while demand for various DNA services also expands. The grant will reduce some of the pressure for case analysis by adding additional staff. The DCFSC is poised to implement the most advanced technologies and processes in order to reduce the need for further outlays for years to come, while simultaneously continuing to provide exceptional service.

Funding from this grant will be used for the following goals:

1. Reducing the forensic DNA case backlog through a grant funded hire, analyst overtime, and purchasing supplies.
2. Increasing the capacity of the laboratory by purchasing equipment and software (robotic devices, thermal cyclers, an advanced mixture de-convolution tool, computers and a LIMS for the improvement of a paperless LIMS system, and a workspace for the analyst supported through the project).
3. Improve the laboratory's processes by validating new amplification, robotic, and quality systems.
4. Providing the required continuing education for each analyst, purchasing text books for each analyst, and supporting the development of an analyst pursuing a Master's Degree, which will allow them to one day possible serve as DNA Technical Leader.

At least 180 cases will be analyzed with funds from this grant over 18 months that otherwise cannot be analyzed. The 180 cases represent both backlog reduction and capacity enhancement. The turnaround time is expected to decrease to 14 days as an average and have no more than 5% of all cases tested having a backlog greater than 45 days.

FY11 Recipient Name: Illinois State Police
Award Number: 2011-DN-BX-K498
Award Amount: $3,600,275
Abstract: The ISP, DFS, FSC is responsible for analyzing evidential material associated with criminal investigations for approximately 1,200 criminal justice agencies located throughout the state of Illinois. The ISP forensic science laboratory system is comprised of seven caseworking laboratories, a Research and Development Laboratory, and a statewide training program. Each one has a DNA unit and they all function under the ISP, DFS, FSC. The state's DNA indexing laboratory is a part of the Springfield Forensic Science Laboratory.

The ISP is facing budgetary constraints. The federal funding from this award will be used for the following goals:

1. Reducing the FB and DNA case backlog through analyst overtime and purchasing supplies.
2. Reducing the turnaround time of FB and DNA case backlog through analyst overtime and purchasing supplies.
3. Increase the capacity of the laboratory system by purchasing equipment (genetic analyzers) for all of the casework laboratories.

The ISP expects to work at least 2,655 cases more than what could be worked without this funding.

FY11 Recipient Name: Northeastern Illinois Regional Crime Laboratory
Award Number: 2011-DN-BX-K495
Award Amount: $349,561
Abstract: The Northeastern Illinois Regional Crime Laboratory (NIRCL) has the CODIS capacity, analyzes DNA using STR, y-STR and mini-filer amplification systems. All validations and much of the equipment needed for the validations of this technology has been supported through NIJ grants. For the last three years NIRCL has had funding and support reduced by local funding. At the same time, DNA, the most expensive operation in the lab has seen increased demand, both in cases submitted and the amount of DNA items requested for analysis. The grant will mitigate some of the pressure seen for case analysis. The lab has changed protocols to improve quality that addresses quality issues, but also consumes time and supply resources. On the other hand, NIRCL is utilizing Identifier Plus, which should save resources. Maintaining the DNA grant supported hire, overtime, supply and instrument support will assist NIRCL in providing timely DNA analysis with the quality accepted by the community at large.

Funding from this grant will be used for the following goals:

1) Reducing the backlog through maintaining a DNA grant funded hire and overtime
2) Purchasing the supplies necessary for the analysis conducted by the staff supported with the grant
3) Purchasing equipment that will replace aging DNA analyzers as well as other support equipment including computers and servers
4) Providing training through conferences that have instructional presentations at the meeting

At least 470 cases will be analyzed with funds from this grant over 18 months that otherwise cannot be analyzed. The 470 cases represent both backlog reduction and capacity enhancement. The turnaround time is expected to decrease to 30-35 days as an average and have no more than 8% of all cases tested having a backlog greater than 60 days.

FY11 Recipient Name: Indiana State Police
Award Number: 2011-DN-BX-K500
Award Amount: $959,314
Abstract: The Indiana State Police (ISP) is the agency that is responsible for analyzing evidentiary material associated with criminal investigations for all state and local law enforcement agencies within the state of Indiana with the exception of Indianapolis/Marion County. The ISP maintains four regional laboratories - the Evansville, Fort Wayne, Indianapolis and Lowell laboratories. Indiana Code designates the ISP as the agency responsible for conducting DNA analysis on DNA samples collected from all convicted felon offenders in the state of Indiana; the ISP is responsible for storing and maintaining the resultant profiles in the Indiana DNA Database. The Indianapolis Regional Laboratory maintains the DNA Database Unit.

The ISP is facing budgetary constraints. The Federal funding from this award will be used for the following goals:

1. Reducing the forensic DNA case backlog through analyst overtime, and outsourcing.
2. Validation of in-house analysis of DNA database samples through analysts overtime.
3. Increasing the capacity of the laboratory by purchasing equipment (thermal cyclers and a DNA extraction robot) and by purchasing and upgrading software for the Biology Section.
4. Providing the required continuing education for each analyst, and purchasing a subscription to a forensic journal package.

The ISP can expect to reduce the DNA case backlog by at least 310 cases (300 in-house and 10 outsourced) by the end of the award period. The turnaround time is expected to be reduced to 45 days or less, and the analyst throughput in the casework sections is expected to increase 30%.

FY11 Recipient Name: Indianapolis-Marion County Forensic Services Agency (IN)
Award Number: 2011-DN-BX-K516
Award Amount: $512,906
Abstract: The Indianapolis-Marion County Forensic Services Agency, (I-MCFSA) is a local government agency, that provides the criminal justice system with forensic laboratory services. We provide prompt, accurate and quality forensic analysis to all requests. The I-MCFSA performs scientific examinations of physical evidence pertaining to crimes occurring in Indianapolis and Marion County.

This laboratory is the first full service forensic laboratory in Indiana accredited in the ASCLD/LAB–International program, and the 35th laboratory accredited in the ASCLD/LAB-International program, worldwide. This accreditation consisted of a very comprehensive assessment in which every aspect of the laboratory's operation, to include the Crime Scene Unit

process, and was carefully reviewed to include its management practices, evidence handling procedures, and laboratory security procedures.

As part of a joint effort within the various criminal justice and public safety agencies of Marion County and the City of Indianapolis, the Indianapolis-Marion County Forensic Services Agency is an integral participant in eliminating increases in crime. Crime reduction continues to be an issue that several Marion County and City of Indianapolis government entities have attempted to address over the past few years. The Criminal Justice Planning Council, created by the Indianapolis-Marion County Council, is aggressively seeking solutions to solve crime problems or and eliminate the jail overcrowding issue exacerbating. The Indianapolis-Marion County Forensic Services Agency plays a vital role in the Council's plan. As part of a solution, the laboratory continues to pursue the goal of reducing the amount of time between submissions for requests of analysis to the point of case completion to a maximum of six weeks in all forensic disciplines.

The submissions for analysis in the Forensic Biology Unit of the Indianapolis-Marion County Forensic Services Agency (IMCFSA) continue to increase even though the turnaround time has decreased. Several reasons exist for the increase to include: the greater demand for DNA analysis from prosecutors; more items per case submitted; a broader application of DNA analysis to multiple sample types; and, the overall success of the Biology Unit in aiding investigations. This, coupled with the drastic budget cuts in local government, has resulted in an ongoing increase in the number of cases in the Biology Unit's backlog.

In 2010, the number of items of evidence analyzed stood at 5,889. As of 4/30/11, the items of evidence analyzed total 2,035. Based on this total, by the end of 2011, the Biology Unit will have analyzed over 6,100 items of evidence, with a staff of nine (9) forensic scientists. The average monthly submissions have increased from 75 in 2008, to 120, as of April, 2011, which represents an increase of approximately 60% from 2008 to 2011. In 2010, the nine (9) member staff of the Biology Unit completed 1178 cases which results in 130 cases completed per analyst. For year 2009, the Uniform Crime Report, Part One, Violent Crime reported over 9,831 violent crimes committed in the City of Indianapolis and Marion County, which represents approximately 46% of the 21,404 violent crimes committed in the entire State of Indiana. Of this total, the City of Indianapolis and smaller communities within Marion County listed 101 murders and 464 forcible rapes for the City of Indianapolis and smaller communities within Marion County. This represents approximately 31% of the murders and 27% of the forcible rapes that occurred in the State of Indiana, in 2009.

The homicides for the City of Indianapolis, for the first four months of 2011, stood at 41. The monthly average of approximately 8 murders reported in 2010 and the year-to-date monthly average is currently at 10. Based on this information and, if the trend continues, there would be

an increase, in 2011, of over 26%. These totals are significant when determining the factors concerning DNA backlog cases. With approximately 46% of all UCR Part 1 crimes listed for the State of Indiana occurring in Marion County and the City of Indianapolis, the local Public Safety Agencies, to include the I-MCFSA, are experiencing that increase first hand.

While recent grant programs have resulted in an impact, backlogs continue to be an ongoing problem. Cases completed during this time increased but, cases submitted nearly outstripped our increased output. As of April 30, 2011, the Biology Unit backlog is 496 when combining both the Serology and DNA backlog. Current case turnaround times are at an average of 98 days which exceeds our goal of six weeks. The average number of DNA samples worked per analyst was approximately 237 (evidentiary samples plus control samples), for the period of January 1, through April, 2011. Delays in case analysis cause backups and problems for the criminal justice system. Based on trend analysis, the number of backlogged forensic cases, listed as UCR, Part One Violent Crime DNA cases, is anticipated to reach approximately 500, as of September 30, 2011.

Currently, the number of UCR, Part One Violent Crime cases awaiting DNA analysis is 496. The laboratory's Biology Unit has experienced an approximate 74% increase in case submissions from 2008 (905 submissions) to 2010 (1577 submissions) which results in a drastic increase in the case backlog, even though more cases were completed in 2010 (1178 completed) than in 2008 (898 completed).

With the acquisition of grant funding, the following goals will be met:

1. Reducing the forensic DNA case backlog through analyst overtime, purchasing supplies, and outsourcing.
2. Increasing the capacity through the continued maintenance of existing equipment, such as, the 3130 Genetic Analyzers, Maxwell 16, and ABI7500; the renewal of licensing fees, such as JusticeTrax and Qualtrax; completing an annual internal audit, and renovating the Biology Unit work area.
3. Providing required training for the Biology Unit analysts and costs associated with continuing education.

If approved, the Indianapolis-Marion County Forensic Services Agency expects to reduce the DNA case backlog by a minimum of 231 cases during the grant period. Of those, 131 will be completed in-house and 100 will be outsourced. The continued goal of the laboratory is to reduce the turnaround time to six weeks.

FY11 Recipient Name: Johnson County Kansas
Award Number: 2011-DN-BX-K493
Award Amount: $156,000
Abstract: The Johnson County Sheriff's Office Criminalistics Laboratory (JCCL) is the agency responsible for analyzing evidential material associated with criminal investigations for all local law enforcement agencies and medical examiners within the county of Johnson in Kansas. The Biology section of the laboratory performs STR and Y-STR DNA analysis methods on forensic casework samples. All CODIS eligible DNA profiles generated by JCCL are uploaded into NDIS.

Johnson County became the most populous county in the state in 2003 with a population of 486,500. Johnson County Strategic Facilities Master Plan (2004) projected population growth at 30% in the next fifteen years. This equates to the addition of approximately 12,000 individuals per year to Johnson County. In 2010, the population of Johnson County rose to 544,179 according to the 2010 census. Past KBI Crime Index Reports support that an increase in population can be followed by an increase in criminal activities. Even though the Biology section has increased and maintained its DNA analysis productivity over the past six years, it has not kept pace with the demand for timely biological and DNA analyses. Backlogs and turnaround times have continued to increase despite increases in productivity. In the first quarter of 2011, backlogs, turnaround times, and exam requests have shifted downward primarily due to Process Mapping and new DNA submission guidelines with the current staffing levels (7 Forensic Scientists).

The Federal funding from this award will be used for the following goal and objectives:
Goal:

1. Retain two fully trained Forensic Scientists in the Biology section with this grant funding. This funding will be used to pay the salary and benefits only for these two positions.

Objectives:

1. Maintain or increase current productivity levels in biology screening and DNA analysis.
2. Maintain or reduce the biology screening and DNA item backlogs and turnaround times.
3. Focus on reducing part I UCR violent crime DNA backlogs.

The JCCL can expect to reduce the DNA backlog by at least 178 cases and the biology processing backlog by 148 cases for 48 weeks of funding for two positions. Performance measurement data will be collected and reported primarily with data obtained from the JCCL LIMS.

FY11 Recipient Name: Kansas Bureau of Investigation
Award Number: 2011-DN-BX-K508
Award Amount: $604,552
Abstract: The Kansas Bureau of Investigation (KBI) Forensic Laboratory is the agency that is responsible for the analysis of evidentiary samples from possible crimes for all state and local law enforcement agencies and medical examiners offices within the state of Kansas. The KBI has four laboratories within the system, three of which conduct DNA testing. The three laboratories conducting DNA testing are Great Bend (West Region Laboratory); Topeka (headquarters) and Kansas City. The KBI laboratory in Topeka also houses the Databank Laboratory, which is responsible for the DNA analysis, storage and maintenance of arrestee and convicted offender samples.

The KBI Forensic Laboratory along with all state agencies in Kansas are facing significant budgetary constraints. The current backlog of samples awaiting testing at both the screening and DNA level are significant. The Federal funding from this award will be used for the following goals:

1. Reduce the forensic DNA case backlog and turnaround times through the hiring of additional analysts, equipment and supplies.
2. Increase the capacity of the laboratories through the purchase of small extraction robots.
3. Provide the required continuing education for some of the analysts.

The KBI Forensic Laboratory can expect to reduce the DNA case backlog by approximately 600 cases if three trained analysts can be hired. If there are no trained analysts to be hired then the case backlog can be expected to decrease by approximately 120 cases, most cases will be done in screening during the award period. It will be closer to the end of the award period before the positive impact will be seen from the hiring of personnel at the entry level. Turnaround times are expected to continue to drop with the addition of more personnel and equipment. The goal will be to have a turnaround time between 60 and 90 days.

At the current time, there is no backlog in the DNA Databank Laboratory. The pending samples are ones submitted within the month they are tested. Therefore, there are no un-met needs in the databank laboratory and the additional funding will be used for casework and capacity enhancement.

FY11 Recipient Name: Commonwealth of Kentucky
Award Number: 2011-DN-BX-K480
Award Amount: $718,511
Abstract: The Kentucky State Police Forensic Laboratories (KSPFL) has continued to provide DNA analysis to the Commonwealth of Kentucky since 1989. During this period of 20 years

many technological advances have occurred in DNA analysis. Along with these technological advances, procedural changes have been implemented within the KSPFL to accommodate the ever advancing science of DNA analysis. Current evaluations have identified multiple procedural areas in the laboratory that are leading to inefficiencies in regard to DNA analysis. First, is a lack of implementation of high throughput technologies for the DNA casework section. These technologies include robotics, data management and informatics. Second, is a lack of additional analytical time dedicated to processing cases in both the casework and database sections. Submissions that request DNA analysis are increasing and are being requested in a wider variety of case types. This trend leads to larger backlogs and longer turn around times (TAT). Third is a continued need to purchase reagents utilized in DNA analysis in both the casework and database sections. Fourth is analysts need to attend workshops and training to stay abreast of new advances and techniques in the forensic biology field as the topics relate to both casework and database.
By providing high throughput procedures, overtime (OT) hours, reagents, and training opportunities the Kentucky State Police Forensic Laboratory Casework and Database section anticipates that the TAT will decrease along with the number of backlogged cases.

The KSPFL can expect to reduce the DNA case backlog by at least 300 cases (all in-house) by the end of the award period. The agency also expects to work at least 18,000 DNA database samples using Federal funding. The turnaround time is expected to be reduced to 130 days or less for casework samples.

FY11 Recipient Name: Louisiana State Police
Award Number: 2011-DN-BX-K428
Award Amount: $1,793,272
Abstract: Louisiana has six active ASCLD/LAB accredited crime laboratories at this submission that are currently performing DNA analysis: the Acadiana Criminalistics Laboratory, Jefferson Parish Sheriff's Office Regional DNA Laboratory, the Louisiana State Police Crime Laboratory, the North Louisiana Criminalistics Laboratory System, St. Tammany Parish Coroner's Office, and Southwest Louisiana Criminalistics Laboratory. All six labs are fully accredited and maintain their individual accreditation. Each lab undergoes a stringent external audit every two years to maintain their accreditation. All six labs are equipped and perform forensic DNA case work; however, the LSPCL is the only lab that uploads all eligible DNA profiles into NDIS. All DNA analyses performed under this program are maintained in each respective lab as mandated by the federal privacy regulations. All other labs participating in this grant solicitation send their eligible profiles to LSPCL CODIS-State Administrator for upload into the NDIS system.

The entire state of Louisiana and all of the Crime labs within it, are facing stricter budgets. This could potentially reduce appropriations for staff, supplies, equipment, needed support contracts

and/or valuable training dollars. Although crime rates have begun to decrease compared to prior years, there are still backlogs of cases that were submitted when crime rates were increasing. In addition, Louisiana 2009 UCR Violent Crime Rates were higher than the national rates in every pertinent category, with the exception of robbery. To provide the maximum assistance to the crime fighting agencies, Louisiana crime laboratories must maintain and exceed their current level of funding support. The goals of the projects funded by this grant are:

1. Reduce forensic DNA case/sample turnaround time,
2. Increase the throughput of current public DNA laboratories, and
3. Reduce forensic DNA backlogged cases.

By outsourcing cases to external laboratories, the analysis time is decreased, allowing laboratories time to review the cases produced more quickly than they could analyze the cases and then still review the cases. WAE technicians allow for the less technical duties to be completed by staff who can be readily trained to screen evidence and complete quality control duties. This frees DNA analysts to focus on the steps of DNA analysis and interpretation, which requires a more experienced analyst. Outsourcing of training allows the current staff analysts to continue casework, while certain aspects of training are conducted by an external trainer. By applying the analysts' time to casework, a higher productivity is obtained and hence the forensic case turn-around-time is reduced, as well as the backlog is attacked. A DNA module is a tool that will be used to increase the efficiency of analysis through the electronic leverage of the current LIMS systems. Continuing education is critical to maintaining a high level of quality of DNA analysis. Training is essential in fully equipping the DNA analyst to perform at the highest level possible.

By allowing these agencies to increase the capacity of their perspective labs we give them the tools to conquer the backlog and become poised to complete the number of requests that are submitted. As a State we expect there to be a decrease in the laboratory backlogs throughout the state, a decrease in sample turnaround times, and a higher laboratory throughput, which provides more timely investigative support of the law enforcement agencies that fight crime.

In the 2011 solicitation allocation table, the state of Louisiana is estimated to receive an aggregate amount of $1,792,372.00. It is our intent to share these funds corporately among the six accredited public laboratories performing DNA analysis. Our anticipated breakdown is as follows:

- Louisiana State Police Crime Laboratory - $858,984.00
- Jefferson Parish Sherriff’s Office Regional DNA Lab - $316,991.00
- North Louisiana Crime Laboratory - $220,225.00
- Acadiana Criminalistics Laboratory - $161,832.00
- Southwest Louisiana Criminalistics Laboratory - $135,138.00
- St. Tammany Parish Coroner’s Office - $100,102.00

FY11 Recipient Name: City of Boston (MA)
Award Number: 2011-DN-BX-K424
Award Amount: $371,006
Abstract: The Forensic DNA Backlog Reduction Grant Program serves to advance the over quality, efficiency and productivity that the Boston Police Department (BPD) Crime Lab delivers to the BPD and the Suffolk County District Attorney's Office, particularly during a period of staffing and fiscal challenges. Over the years, NIJ grant funds have been instrumental in the BPD Crime Laboratory's ability to enhance its performance.

Through prior NIJ DNA Backlog funds, the BPD has secured funding for one DNA Analyst, one Forensic Technologist, and one LIMS Coordinator for at least one additional calendar year. As such, the BPD has looked beyond personnel for this year's award in order to pursue other portions of Crime Lab improvements that are in need of fiscal assistance. As part of the BPD Crime Laboratory's overall plan to meet its goals and objectives, the Boston Police Department is requesting funds to acquire a 3500xl Genetic Analyzer, overtime, training, and supplies. With these additions to the lab, the BPD will be able to better meet demands in 2011 to further reduce backlogs while maintaining its ability to analyze casework in a timely manner.

The BPD plans to purchase a 3500xl Genetic Analyzer, a newer version than what is currently in the lab; a model that is being retired and will no longer be serviced by the company. With that, the BPD will also enter into a service contract to ensure long-term results for the Crime Lab. In addition to having a current analyzer that will be able to be serviced, the analyzer will have a 50% greater capillary capacity, as well as take up less laboratory space and require fewer resources to operate. Finally, with the improvements in the 3500xl model, time will also be saved in chemical and reagents preparation, through the easier use and installation of reagents, and through improvement in the data signal reproducibility and data quality.

Beyond the analyzer and the essential costs associated with its service and installation, the BPD will also request funds for overtime. This will allow analysts and technicians in the lab to validate equipment; screen, analyze, record, and process cases beyond the normal hours of their workdays. With this additional time, the BPD expects a reduction in its backlog of DNA cases, as well as the time period for results to be returned to detectives.

As is the case in many other localities, the City of Boston has seen large fiscal cutbacks which have trickled down to the operational budget of the BPD Crime Lab. To offset cuts to the Crime Lab operational budget, the BPD will also be requesting funds for needed supplies for DNA analysis and validation as well as supplies for the LIMS system currently being implemented.

Finally, funds will be requested for travel and training, so that the BPD DNA Section may send its 5 analysts to required continuing education courses. The analysts will attend the Promega

International Symposium on Human Identification, and the Bode Annual Advanced DNA Technical Workshop.

FY11 Recipient Name: Massachusetts State Police
Award Number: 2011-DN-BX-K434
Award Amount: $1,534,319
Abstract: The Massachusetts State Police Forensic Services Group (FSG) is the state laboratory system responsible for analyzing submitted evidence on all criminal cases in Massachusetts excluding the city of Boston. The Boston Police Department has their own crime laboratory. The FSG system is comprised of the main laboratory in Maynard and eight additional satellite laboratories regionally based. All DNA forensic and database testing is done at the Maynard facility. The state designated DNA database laboratory also resides in Maynard.

As the state budget continues to contract, the DNA Unit is continuing to fight the forensic DNA backlog. The federal funding from this award will be used for the following goals during the proposed project dates of October 1, 2011 through March 31, 2013:

1. Reduce the forensic DNA backlog through hiring and training 3 new DNA analysts, purchasing supplies, outsourcing and through the Lean Six Sigma initiative.
2. Increasing the capacity of the laboratory by hiring and training one laboratory technician for CODIS related duties, hire and train 4 temporary contract technicians to assist with reagent preparation, quality control function, sample intake and preparation and case management duties as they pertain to outsourcing for a total of 5 temporary technician hires. In addition, the backlog will be further reduced by the purchasing of equipment and consumables.
3. Provide the required continuing education for each analyst.

The FSG can expect to reduce the DNA case working backlog by 691 cases (66 in house and 625 outsourced) by the end of the grant period. The turnaround time is expected to be reduced by 20%.

FY11 Recipient Name: Anne Arundel County, Maryland
Award Number: 2011-DN-BX-K435
Award Amount: $184,709
Abstract: A grant award under the FY11 DNA Backlog Reduction Program would support ongoing capacity increases in the Forensic Biology/DNA Unit of the Anne Arundel County Police Department Crime Laboratory. Enhanced productivity (case output) and efficiency is expected to reduce the existing case backlog thereby decreasing the overall turnaround times for newly submitted Forensic Biology cases through the following objectives:

i) One year retention of the existing fulltime W-2 temporary grant-funded Biology/DNA analyst via salary funding to continue performing independent DNA casework analyses;
ii) Purchase of an upgraded genetic analyzer for increasing DNA specimen analysis capacity; and,
iii) Purchase of evidence screening and handling supplies (scissors, marking pens, etc) for analyst listed above.

First, this award would continue funding for the existing (W-2 FTE Chemist II under temporary County contract) forensic analyst to conduct in-house Biology/DNA casework. The individual, previously funded under the FY09 and FY10 DNA Backlog Reduction awards, is directly involved in the handling and analysis of forensic cases submitted to the Biology/DNA Unit. As an NDIS-participating laboratory, the individual is also responsible for the data entry and/or reviewing of eligible DNA profile data from that casework into CODIS as applicable. The scope of this position also involves peer reviewing Unit casefiles, participation in quality assurance and control duties both in the Unit and Labwide as needed, and providing expert witness testimony. Other duties as assigned may also be performed.

Secondly, an ABI 3500xl Genetic Analyzer is the next generation of capillary electrophoresis instruments for DNA profile detection and analysis using PCR technology. This purchase will replace the significantly out-of-date aging model 310 genetic analyzer currently in use which is the sole instrument shared among all analysts at this time. The increased sample analysis capacity of this new instrument will help alleviate the critical bottleneck situation now resulting from insufficient sample throughput on the existing 310 to accommodate the volume of sample input generated by all analysts working simultaneously and independently. The instrument will be purchased with installation, training, and all analytical software necessary to complete analysis and will be purchased as a sole source procurement based upon existing training and validation using the Applied Biosystems instrument platforms and the fact that Applied Biosystems is the only manufacturer of these instruments.

Lastly, some minimal benchwork supplies are needed by this analyst during the evidence screening and handling phase of DNA analysis. These items may include small tools needed for specimen sampling such as scissors or blades and marking pens, etc. for labeling evidence items and packaging which occasionally require replacement from typical wear and tear.

These requests are critical to addressing the current case submissions levels for the Unit to meet or exceed adequate turnaround times for trial date deadlines and to manage the backlog. In the absence of this analyst position coupled with significant changes to caseflow to improve sample handling capabilities, the backlog will spike severely resulting in missed court dates within a very short period of time (<6mos). The position is expected to result in more than 50% of the Unit's case output in one year (>360 cases) with additional case output anticipated later when the

new genetic analyzer is validated for casework purposes. This instrument will handle quadruple the number of samples at once thereby alleviating the current bottleneck of prepared DNA samples from four analysts consistently awaiting analysis on a single sample basis. As such, turnaround times can be expected to vastly improve over the next two years as the results of this efficiency improvement are realized.

FY11 Recipient Name: City of Baltimore (MD)
Award Number: 2011-DN-BX-K463
Award Amount: $669,143
Abstract: The Baltimore Police Department, Crime Laboratory (BPD-CL) is the agency Section that is responsible for analyzing evidentiary material associated with criminal investigations for all local law enforcement agencies within the City of Baltimore. The BPD-CL operates a forensic science laboratory in Baltimore city that performs autosomal and Y STR DNA casework analysis. The City of Baltimore is facing budgetary constraints and is facing new State licensing requirements through the Department of Health and Mental Hygiene that will be going into effect on January 1, 2012. This will increase the documentation and regulation required for all samples analyzed. The Federal funding from this award will be used for the following goals:

1. Reducing the forensic DNA case backlog through analyst overtime, additional Criminalists, and outsourcing Serology and DNA casework.
2. Increasing the capacity of the laboratory by purchasing equipment (Sperm Hyliter, freezer, Franek and Computers (with peripherals)) and by hiring three evidence technicians.
3. Providing the FBI QAS required continuing education for each analyst.

The BPD-CL can expect to reduce the DNA case backlog by at least 255 cases (187 in-house and 68 outsourced) by the end of the award period. The turnaround time for new cases is expected to be reduced, and the analyst throughput in the DNA casework sections is expected to increase 10%.

FY11 Recipient Name: Maryland State Police
Award Number: 2011-DN-BX-K452
Award Amount: $758,796
Abstract: The Maryland State Police Forensic Sciences Division (MSP-FSD) requests funds under the 2011DNA Backlog Reduction Program with the goal of analyzing DNA casework and DNA database samples while also increasing the capacity of the MSP-FSD DNA casework and DNA database laboratories all in an effort to eliminate existing backlogs and prevent future backlogs, improve turnaround time, and increase throughput.

MSP-FSD has established a long term plan to eliminate the DNA casework backlog through a multi-pronged approach which focuses on outsourcing of casework while simultaneously streamlining in-house operations. Great progress has been made in the past three years on the casework backlog as it has decreased 77% from a high of 568 in February 2008 to a low of 133 in April 2011. MSP-FSD proposes to continue with this established approach and requests funds that support the continued outsourcing of casework. Funds are also requested for capacity building items that are needed to support the in-house operations.

While an existing backlog of 23,000 DNA Database samples was eliminated in 2007, constant attention is required to ensure that a significant new backlog does not emerge. To that end MSP-FSD has transitioned from outsourcing of DNA Database samples to in-house analysis of these samples. Funds are requested to support the in-house analysis of DNA Database samples.

The reduction of backlogs, improvement of turnaround time, and the increase of throughput are all inter-related. An improvement in one area will cause improvements in the others. Therefore, it is proposed that the goal of this program can be accomplished by meeting three objectives.

- Objective #1 is to analyze casework and DNA Database samples by outsourcing 230 DNA cases, performing in-house analysis of 400 DNA cases, and performing in-house analysis of 5,074 DNA Database samples.
- Objective #2 is to develop staff abilities by providing 32 continuing education opportunities to the lab staff as well as by obtaining a forensic journal package subscription.
- Objective #3 is to develop lab capabilities by validating YSTRs as well as by purchasing various new lab equipment and software.

FY11 Recipient Name: Montgomery County (MD)
Award Number: 2011-DN-BX-K478
Award Amount: $140,798
Abstract: The Montgomery County Police Crime Laboratory, Forensic Biology Unit (MCPCL FBU) is responsible for analyzing evidential material associated with criminal investigations handled by the Montgomery County Police Department. As a courtesy, the MCPCL FBU performs the same analyses on evidential material for the following other agencies in Montgomery County: Takoma Park Police Department, Gaithersburg City Police Department, Rockville City Police Department, and Montgomery County Park Police Department.

The MCPCL FBU has been outsourcing a portion of our backlog in attempt to keep up with increasing demands for DNA analysis. The backlog is below 100 cases and this number has only been maintained by outsourcing batches of cases every three months to a private laboratory. The FBU consists of three full-time, fully trained analysts, one recently hired analyst that needs to complete a few months of training prior to starting casework analysis, a technician and Technical Leader. The FBU is also in the process of hiring another analyst who will also need serological

training prior to starting casework analysis. Currently, the FBU is extremely limited in processing samples for DNA analysis due to only having the organic microcon procedure validated for casework. In addition to this bottleneck, the FBU will no longer be outsourcing current casework by the fall of this year and this will certainly increase the cases sitting in our backlog awaiting analysis. Funding is being requested to tackle the limited processing capabilities of the FBU by improving our extraction procedure.

The Federal funding from this award will be used for the following goals:

1. Reducing the forensic DNA case backlog by increasing the capacity of the laboratory to process larger batches of samples for DNA analysis by purchasing the QIAsymphony robot. The robot can extract 24 samples in approximately one hour and up to 96 samples in a total run compared to the current procedure taking four hours for an analyst to extract 24 samples.
2. Providing the required continuing education for three analysts.

FY11 Recipient Name: Prince George's County (MD)
Award Number: 2011-DN-BX-K456
Award Amount: $369,620
Abstract: The Prince George's County Serology/DNA Laboratory is an ASCLD/LAB accredited laboratory (cert # 353) that serves the 900,000 county population. The laboratory is responsible for receiving, analyzing, reporting and storing evidence received from any submitted forensic casework in the county. Although the laboratory has seen an increase of the DNA staff over the last two and a half years, the laboratory has also been hindered by its inability to use grant funds to hire one employee to screen the backlog of cases. There has also been an increase in the number of requests for the laboratory to analyze these cases. Since the laboratory resumed operations in 2008 there has been an increase in the number of casework analysis as well as an increase need to store the extracted DNA. The laboratory is now running out of storage for DNA extracts.

The county now has a new administration at both the county and Police Department levels that appreciates and understands the importance and need for additional staff to complete the laboratory unit's goal and the goals of the county as a whole. The federal funding from this award will be used for the following goals:

1-Reduce the backlog of cases
2-Reduce the in-house analysis turnaround time
3-Increase capacity in the forensic casework laboratory
4-Provide required continuing education training for our DNA staff

Once implemented, the Prince George's County can expect to see a reduction of its backlog to just below 150 cases by the end of the award period. The turnaround time is likely to be reduced to under 125 days and analysts output is likely to be doubled.

FY11 Recipient Name: Maine State Police
Award Number: 2011-DN-BX-K433
Award Amount: $200,000
Abstract: The Maine State Police Crime Laboratory is the agency that is responsible for analyzing evidential material associated with criminal investigations for all state and local law enforcement agencies within the state of Maine. We are the only full-service laboratory in Maine. Maine State law requires our state laboratory to be responsible for conducting DNA analysis on DNA samples collected from all convicted felony and some misdemeanor offenders in the state of Maine; the Mane State Police Crime Laboratory is responsible for storing and maintaining the resultant profiles in the Maine DNA Data Bank.

The Maine State Police Crime is facing budgetary constraints and is facing new DNA database expansion legislation that proposes to collect DNA from all felony arrests. That will increase the number of DNA database samples it will have to analyze if the bill passes. We recognize the need to stabilize our current DNA casework and database backlogs before taking on more responsibilities. The Federal funding from this award will be used for the following goals:

1. Increasing the capacity of the laboratory by employing one full-time DNA analyst and one part-time DNA analyst at 28 hours per week.
2. Reducing the DNA database sample backlog through outsourcing.

The Maine State Police Crime Laboratory can expect to reduce the DNA case backlog by at least 255 cases by the end of the award period. The agency also expects to outsource at least 2000 DNA database samples using Federal funding while we conduct at least 5% QC and100% technical reviews with state-funded staff and supplies.

FY11 Recipient Name: State of Michigan
Award Number: 2011-DN-BX-K518
Award Amount: $3,308,790
Abstract: The Michigan State Police requests FY 2011 Forensic DNA Backlog Reduction Program funding to assist the Forensic Science Division (FSD) in reducing the statewide backlog of DNA casework awaiting analysis and to increase the capacity of its DNA and Database laboratories. The requested funding will be used to: (1) make overtime available for the purpose of backlog reduction; (2) continue payroll support for laboratory personnel; (3) provide

continuing education to laboratory personnel; (4) purchase DNA database collection kits; and (5) outsourcing of case work.

DNA analysis conducted under this program will be maintained pursuant to all applicable federal privacy requirements. All eligible profiles obtained with funding from this program will be entered into the Combined DNA Index System (CODIS) and uploaded to the National DNA Index System (NDIS), when applicable. Participating laboratories will follow the NDIS DNA Data Acceptance Standards for all profiles uploaded to NDIS.

FY11 Recipient Name: Hennepin County, Minnesota
Award Number: 2011-DN-BX-K494
Award Amount: $130,787
Abstract: The Hennepin County Sheriff's Office Crime Lab Unit (HCSO-CLU) provides 24/7 crime scene processing and forensic science services to over 35 local, state, and federal law enforcement agencies in Hennepin County, Minnesota (population ~1.1 million). According to FBI crime statistics from 2008 the HCSO-CLU service area constituted approximately 17% of all UCR, part 1 violent crimes in Minnesota.

In 2009 the HCSO lab was awarded an ARRA Byrne grant establishing the Hennepin Sheriff's DNA Property Crime Initiative. This award allowed the DNA lab to hire three DNA scientists, two biology screeners and two support staff. The funding for these individuals will be exhausted in March of 2012. The lab intends to use funding from the FY 2011 DNA Backlog Program to continue this program.

Differential DNA extractions continue to be a cumbersome and time consuming process. An automated liquid handling instrument with an integrated centrifuge can perform many of the routine washing steps required during this process. The lab intends to incorporate this instrument into our procedures which will give us the opportunity to evaluate and determine if additional instruments would be beneficial.

The lab is proposing to purchase three lap top computers that will provide access to the LIMS at the lab workstations and also have the ability to record the analysts' handwritten notes which can then be stored electronically. The laptops will be mounted on arms that will be able to span multiple workstations and reduce the number of computers required.

The lab expects case turnaround time reduction form ~132 days to ~90 days, a backlog reduction of and a productivity improvement of ~50 samples/analyst/month to ~55 samples/analyst/month.

FY11 Recipient Name: Minnesota Department of Public Safety
Award Number: 2011-DN-BX-K506
Award Amount: $758,263
Abstract: As in most states, the State of Minnesota has experienced several years of projected budget deficits during recent legislative sessions. This situation resulted in several years in which the lab received no increase in its operational budget and in fiscal year 2011, the lab received a cut to its base budget. Further cuts are possible pending the end of the 2011 legislative session. In the mean time, the costs of supplies continues to increase and the lab continues to see an increase in the number of cases submitted for DNA analysis. All this comes at time when law enforcement agencies and the courts are demanding faster turn-around-times for these cases.

In recent years, the BCA has used the DNA Backlog Reduction Grant program to increase the labs capacity by purchasing new instrumentation. While introducing the new technologies will have an overall positive impact on the DNA backlog, often times, the reagents needed to utilize these instruments are more expensive that reagents used previously. Implementation of new instruments also results in a short term negative impact on staffing levels, as staff must be dedicated to validation studies and all staff must receive training on the new technology.

The BCA FSS proposes to utilize the 2011 DNA Backlog Reduction Grant to supplement its overtime budget to allow DNA scientists to work on backlogged cases and provide a support position for the DNA section to allow them more time to spend on casework. The Grant would also be used to supplement the labs' supply budget in both the DNA casework and databasing sections. The BCA FSS also plans to upgrade its existing license for the STaCS DNA software, a DNA sample management system, in order to allow us to use the software for a greater number of samples. Finally, the grant will provide funding for service contracts that ensure that all instruments used for both casework and databasing are properly maintained and needed repairs will be made in a timely manner, minimizing the downtime.

FY11 Recipient Name: Missouri Board of Police Commissioners
Award Number: 2011-DN-BX-K491
Award Amount: $487,635
Abstract: The Kansas City Police Crime Laboratory (KCPCL) has experienced tremendous success with prior NIJ DNA backlog reduction grants, and is committed to continuing that success with the FY2011 *Forensic DNA Backlog Reduction Program* grant. Prior grants have focused on the identification and analysis of unsolved “cold” cases. The KCPCL has been able to maintain its work in this area as new “cold” cases are reviewed and submitted to the laboratory. However, significant backlogs still exist in the biological screening and DNA analysis of more current cases. Requests for DNA analysis of property crimes and weapons/narcotics cases continue to dramatically increase as field officers have gained training

in the collection of biological samples from these case types and how DNA can aid in these investigations. The main objective of this grant program will be to expedite the DNA analysis of all pending casework such that the overall turnaround time (request to report) as well as the number of cases pending analysis decreases. These objectives will primarily be met through the use of staffing. Five grant funded criminalists will be maintained in the Trace and DNA Sections with varying degrees of responsibility (depending on level of training) in both sections, from screening cases to performing various analytical steps in the DNA process. DNA and Trace Criminalists will also work overtime to reduce backlogs in biological screening and DNA analysis. Two additional technicians will be maintained as independent contractors who will also perform several analytical steps in the DNA process concerning known DNA standards as well as the screening of biological evidence. Capacity enhancements will be addressed to help streamline the DNA extraction efficiency of the DNA Section as well as the analysis and review of generated DNA data. Additional computer and software enhancements should serve to improve the overall efficiency and workflow of the DNA Section. Laboratory protection systems will also be procured for recently acquired instrumentation.

FY11 Recipient Name: Missouri State Highway Patrol
Award Number: 2011-DN-BX-K505
Award Amount: $790,074
Abstract: The Missouri State Highway Patrol (MSHP) Crime laboratory provides PCR-STR DNA analysis on samples from crime scene evidence without cost to all law enforcement agencies within Missouri. The need for DNA analysis continues to increase at a rate greater than present funding and resources support. Our continuing goal is to increase the capacity of our DNA testing services to improve turnaround time, decrease backlogs and increase throughput.

The MSHP Laboratory's portion of Missouri available funds for 2011for Part A. has been calculated to be $546,788. This amount is based on the Highway Patrol's portion (9,107 = 32.3%) of the State's 28,226 UCR, Part 1 violent crimes reported to the FBI in 2009. The funding is adjusted by roughly 4% to allow St. Charles County Sheriff's Department to apply for the minimum $100,000 as suggested by the solicitation and has been agreed upon by the Missouri Association of Crime Laboratory Directors. The Laboratory will use the awarded funds to purchase two 3500 Genetic Analyzers, cover our annual maintenance agreements for 14 instruments, purchase DNA reagents, supplies and amplification kits. It is expected that once implemented, these improvements will increase throughput (samples per analyst per month) by 30%, decrease backlogs by 20% and reduce average turnaround time to below 200 days.

The MSHP will also be applying for the supplemental amount of $243,286 as outlined in Part B of the solicitation as we operate a State Designated DNA database laboratory. These monies will be used to purchase DNA reagents, supplies and amplification kits for our DNA Databasing lab

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FY11 Recipient Name: Saint Charles County (MO)
Award Number: 2011-DN-BX-K504
Award Amount: $100,000
Abstract: The St. Charles County Sheriff's Department Criminalistics Laboratory (SCCSDCL) provides forensic DNA analysis services to the law enforcement community of St. Charles County Missouri. The SCCSDCL has seen an explosion of DNA cases submitted as DNA evidence continues to be more prevalent and valuable to criminal investigators. As a result, the SCCSDCL is committed to using the most efficient and accurate equipment and technologies available to analyze numerous and varied forensic DNA samples it receives. Funding analyst overtime is a proven way for the SCCSDCL to reduce its DNA backlog and improve the forensic DNA testing it provides.

The SCCSDCL will use its portion ($100,000) of the FY11 Forensic DNA Backlog Reduction Program to enhance its DNA testing capacity and reduce its DNA backlog by providing overtime for analysts and purchasing DNA testing supplies and equipment. The SCCSDCL anticipates working over 300 additional DNA cases during the program period as a result of program funding. The three major goals of this program are:

1) Reduce the DNA backlog by 20% through analyst overtime and the purchase of supplies.
2) Reduce the turnaround time to less than 100 days by funding analyst overtime.
3) Increase the capacity of the laboratory by purchasing equipment to increase the average number of DNA samples analyzed per analyst to over 50 per month.

Achievement of these goals will increase the overall productivity and efficiency of the SCCSDCL - positively impacting the investigations and prosecutions of all laboratory cases, especially those with DNA evidence. This program will also strengthen the SCCSDCL's commitment to the law enforcement agencies it serves.

FY11 Recipient Name: St. Louis County (MO)
Award Number: 2011-DN-BX-K489
Award Amount: $187,969
Abstract: An important objective of the St. Louis County Police Department Crime Laboratory is to provide more efficient processing of DNA samples and to increase the number of forensic DNA samples processed. The Laboratory serves more than one million citizens and provides services to the St. Louis County Police Department, as well as 90 municipalities, 56 of which have their own police departments.

The Biology/DNA Unit within the Crime Laboratory has seen a significant increase in the number of cases submitted for biological screening and DNA analysis each year due to the success of obtaining profiles from samples which would previously have not been submitted to the laboratory. The DNA/Biology Unit currently employs five qualified DNA analysts, two

analysts that perform biological screening analysis full-time, one part-time biological screening analyst, and one part-time DNA technician.

The two full-time and one part-time biological screening positions and the DNA technician position are all currently funded by the 2010 Forensic Casework DNA Backlog Reduction Grant. One of the full-time biological screening analysts completed her training on December 7, 2010 and the DNA technician completed her training on February 17th, 2011. By maintaining four fully trained and qualified analysts with grant funding with the 2011 Forensic DNA Backlog Reduction Grant the St. Louis County Police Crime Laboratory will be able to increase the number of samples tested significantly. The increased number of samples processed also increases the number of samples which can be entered into the CODIS database. Even with maintaining the four grant funded employees, the backlog and turn-around-time seem to increase. Despite increased efficiencies from year to year the rate of new cases continues to outpace the rate of case completion. This increase would be much greater if the Laboratory was unable to maintain these analysts through NIJ funding.
The St. Louis County Police Crime Laboratory would like to purchase some additional pipettes. These additional pipettes will be used for an additional DNA extraction area so more than one individual will be able to extract at a time.

FY11 Recipient Name: St. Louis Metropolitan Police Department (MO)
Award Number: 2011-DN-BX-K512
Award Amount: $441,533
Abstract: The St. Louis Metropolitan Police Department Crime Laboratory has a backlog of cases at the DNA analysis level that could be partially alleviated by the hiring of part and full time DNA analysts and overtime funds for department and grant funded DNA analysts. The overall goals and objectives of this program will be to reduce the number of untested forensic casework samples, to enter eligible profiles into CODIS and obtain hits, and to prosecute the suspects. This will be accomplished by hiring 1 part-time and 4 full-time grant funded employees and overtime for the department and grant funded DNA employees. By increasing throughput and creating a more efficient laboratory it is expected that 442 cases will undergo biological screening, DNA analysis where appropriate, upload of eligible profiles into CODIS when obtained, and prosecution of suspects.

FY11 Recipient Name: Mississippi Department of Public Safety
Award Number: 2011-DN-BX-K430
Award Amount: $559,464
Abstract: The Mississippi Crime Laboratory System (MCL) operates the State of Mississippi's forensic DNA laboratory and is the designated by State Statute (Mississippi Code Annotated § 45-33-37) to operate the State-Designated DNA Database Laboratory. Mississippi Crime

Laboratory System (MCL), consisting of a central full-service laboratory in Jackson and three regional laboratories, is an ASCLD accredited system that undergoes external audits once every two years. MCL is a participant in NDIS and maintains all DNA analyses under the applicable federal privacy regulations.

The Mississippi Crime Laboratory (MCL) faces the challenge of providing essential forensic services to the criminal justice system of the state in a time of reduced budgets and increasing crime. At the present time, all DNA analysis, are performed in the Jackson Laboratory. The regional laboratories receive evidence from agencies in their region and provide weekly courier service to the main lab for evidence requiring examinations not available at the branch lab. Conventional Serological Examinations have been added to the services provided by two of the three regional laboratories, the Meridian and the Batesville Laboratories. The Gulf Coast Laboratory which was completely destroyed in Hurricane Katrina could not take on these additional services because the laboratory was housed in a temporary facility and lacked the space required for a Bioscience Unit. However, a new Gulf Coast Laboratory was completed in April 2011 with sufficient space for basic Serology examination and DNA analysis. The Gulf Coast Bioscience laboratory unit will receive Bioscience cases from the agencies served by the Gulf Coast laboratory; provide proper evidence documentation, perform serological examinations, and provide DNA analysis as appropriate. When Bioscience examinations (Serology and DNA) can be carried out in the Gulf Laboratory, it will no longer be necessary to forward evidence to Jackson for these examinations. This will eliminate a bottleneck in the system and increase the efficiency and timeliness of the MCL response to requests for Bioscience examinations. Providing these services locally means that communication will be enhanced and more effective case management and coordination can be achieved.

OBJECTIVES:

The objectives of this project are to improve the MCL system's DNA laboratory infrastructure and analytical capacity and to reduce the number of DNA database samples awaiting analysis.

ACHIEVING THE OBJECTIVES:

The Mississippi Crime Laboratory intends to achieve the objectives by accomplishing the following goals:

1. Maintaining the effectiveness of the DNA Unit by funding continued employment of four individuals whose jobs would be lost at the close of existing grants,
2. Providing the required continuing education for existing DNA staff,
3. Maintaining the improved turnaround-time for DNA cases that has been achieved,
4. Increasing DNA analysis throughput,
5. Insuring continued development of the CODIS data base by supplying Buccal swab kits to the Mississippi Department of Correction (MDOC) for the collection of samples,

6. Supplying the new Gulf Coast Laboratory DNA unit with additional equipment required for the operation of the unit,
7. Reducing the number of DNA database samples awaiting analysis by outsourcing offender samples to an accredited fee-for-service laboratory and paying overtime for existing qualified laboratory employees to review the DNA database profiles produced by the vendor laboratory.

FY11 Recipient Name: Montana Department of Justice
Award Number: 2011-DN-BX-K501
Award Amount: $200,000
Abstract: The Montana Department of Justice Forensic Services Division (MT DOJ FSD) is the agency responsible for analyzing evidential material associated with criminal investigations for all state and local law enforcement agencies and medical examiners within the state of Montana. Montana Code Annotated 44-6-102 designates the MT DOJ FSD Laboratory to conduct analysis of DNA database samples collected from all convicted felons.

Federal funding from this award will be used for the following goals:

1. Increase the capacity of the laboratory by purchasing equipment and supplies (ABI 3500 genetic analyzer, Rainin 12 channel pipetters and FTA card-based convicted offender collection kits).
2. Reduce the forensic DNA case and convicted offender sample backlogs and turn-around-times and to increase sample throughput by improving the efficiency of convicted offender sample processing to the point where one analyst with scant assistance can perform the vast majority of the work. This will allow two CODIS DNA technicians (primarily serologists who also perform CODIS DNA technical work) to focus exclusively on casework production.
3. To provide continuing education for each analyst.

FY11 Recipient Name: City of Charlotte (NC)
Award Number: 2011-DN-BX-K507
Award Amount: $365,831
Abstract: The Charlotte-Mecklenburg Police Department Crime Laboratory (CMPD) seeks $365,831 in federal funding to maintain current federally funded positions and to add an additional DNA analyst.

The CMPD has a limited budget in the laboratory for personnel and without this funding would be unable to maintain and add these positions. With the success of DNA in helping to solve all cases, both violent and property crimes, the number of cases submitted to the laboratory for DNA testing has increased to a size that cannot be managed with the current number of city

allotted positions. The additional staffing and requests have put a burden on the Property Control which the Evidence Technician funded by past grants and this grant has achieved to relieve.

Funding from this grant will allow the laboratory to process an additional 400 DNA cases and an additional 100 serology cases by the end of the award period; thereby increasing the production of the section by 20% and reducing the turnaround time of all cases to 90 days. This will result in more rapid identification of individuals responsible for crime and a quicker exoneration of the innocent, which will further aid the criminal justice system. In addition, the CMPD requests funds to outsource approximately 100 DNA cases.
Funding will also provide for travel, and registration to three DNA meetings for training, and office supplies for grant funded personnel.

The CMPD Crime Laboratory is a unit of the City of Charlotte, and part of the Charlotte-Mecklenburg Police Department. It is an ASCLD-LAB accredited laboratory, undergoes external audits every two years, and uses CODIS on a daily basis to upload profiles to SDIS which are then uploaded to NDIS. All DNA analysis performed under this program will be maintained under the applicable federal privacy regulations.

FY11 Recipient Name: North Carolina Department of Justice
Award Number: 2011-DN-BX-K497
Award Amount: $2,129,891
Abstract: History: The State Crime Laboratory is part of the North Carolina State Bureau of Investigation, a division of the North Carolina Department of Justice. The laboratory is an ASCLD-LAB accredited laboratory that provides DNA testing for a population of 9,535,483. The SBI has been performing forensic DNA analyses for law enforcement agencies across the state since 1990.

As the reliability and the reputation of the use of DNA analysis for forensic means increased, so did the demand for its use. In order to reduce the in-laboratory backlog and focus the laboratory's resources on those cases most needing attention, the SBI implemented a case acceptance policy on three different occasions. The policy limited the cases worked by the crime laboratory to only those cases which contained known blood standards from all individuals associated with the crime.

In 2004, the Forensic Biology Section began accepting no-suspect rape kits and as additional staff was hired, expanded its no-suspect policy to include all cases except for misdemeanor property crimes. In 2005, the section switched from a gel based platform to a capillary platform. This new platform was determined to be much more sensitive. As a result of this new sensitivity, the section began to work "touch evidence."

As a result of the broader acceptance policy and ability to perform analysis on touch cases, the number of case submissions increased as well as the number of DNA profiles uploaded to the Combined DNA Indexing System (CODIS).

In addition to performing DNA analysis on casework, the section created a DNA database as a result of the DNA Identification Act of 1994. State legislation required that blood samples from individuals who were convicted of serious crimes, i.e., homicide, rape, sexual assault were to be submitted to the laboratory for analysis. These DNA profiles were then uploaded into a database for comparison. The North Carolina State Crime Laboratory is the designated crime laboratory that conducts analysis of DNA database samples for the state.

With the advent and maturation of CODIS, forensic DNA analysis is increasingly being used as an investigative tool. The number of requests for analysis on all types of cases consistently outpaces the laboratory's ability to work these cases. To meet this demand, the SBI has devoted, and continues to devote, additional personnel. Until December 2002, there were ten analysts in the section who were certified to perform either Body Fluid Identification or DNA analysis and five analysts certified as database analysts. In December of that year, the North Carolina Attorney General began to push for additional analysts whose primary goal was to identify and work the thousands of untested rape kits that sat on the shelves of law enforcement agencies across North Carolina. His plan was to ask the North Carolina General Assembly for six additional DNA analysts each year for the next four years. The section was immediately authorized six new positions that year. In 2003, the section was allotted two sets of increases, 1) six additional DNA analysts to work on forensic casework and 2) two additional DNA analysts and two database analysts whose job responsibility would be to assist with the increase in workload as a result of North Carolina becoming an all-felons state with regards to CODIS.

Although the section was given these increases in staff, the legislature did not provide funding for additional space. In 2004, the General Assembly approved a physical expansion of the Crime Laboratory, but due to overcrowding in the section, no additional personnel were allocated. In 2005, the section broke ground for a $5.1 million, five-story laboratory expansion and was allocated an additional six DNA analysts. In 2007, using funds from the 2005 DNA Capacity Enhancement Grant, this existing facility was renovated and equipped with hoods, telephones, casework, etc. In 2010, the North Carolina legislature approved DNA samples to be collected upon arrest for certain violent felonies. As a result of this legislation, the section was given four DNA analyst positions and three processing assistants. In total, the Forensic Biology Section has twenty-eight analysts involved in forensic casework and sixteen individuals assigned as database analysts or support personnel.

As part of National Institute of Justice (NIJ) DNA Backlog Program grants, the Section worked numerous backlogged cases and obtained CODIS hits thereby solving cases which would not

have been solved had it not been for the funds provided by these grants. In 2010, with the assistance of grant funding from NIJ, the Section completed 2,431 jobs to reduce the on-hand backlog, entered 746 suspect DNA profiles into CODIS, entered 533 forensic unknown samples into CODIS and obtained 420 CODIS hits.

A negative consequence, however, is that the DNA program has become a victim of its own success. As more cases are solved solely as a result of DNA analysis, word spreads from officer to officer and agency to agency and case submissions increase dramatically. This is particularly true with unsolved property crimes and those cases involving "touch DNA evidence". Therefore, in spite of grant funding provided by NIJ, case backlogs have increased rather than decreased over time. For calendar year 2008, there were 2,557 jobs submitted to the Forensic Biology Section. Submissions increased to 3,289 in 2009; in 2010, there were 3,191 submissions. Section job completions rose from 1,703 in 2008 to 2,530 in 2009; in 2010, the section completed 2,431 jobs.

Project goals and objectives:

1) To work an additional 1,123 cases in-house and enter those DNA profiles into CODIS which meet NDIS DNA Data Acceptance Standards.
2) To purchase six additional extraction robots, bringing the section total to 13. As these extraction robots are purchased, validated and assigned to specific pairs of analysts, it is expected these instruments will relieve these analysts of a substantial amount of hands-on work when compared to performing manual extractions. One benefit of this transition is analysts will experience sufficient time savings to enable them to conduct technical and administrative reviews of casework, currently the largest bottleneck in the section.
3) To renovate existing space into an extraction room for suspect standards.
4) To provide funding for the mandated training for analysts, maintenance contracts, supplies, overtime pay, and support of the laboratory information management system.
5) To provide funding for the purchase of arrestee/convicted offender kits.
6) To provide funding for the outsourced analysis of convicted offender and/or arrestee samples which will be reviewed by this laboratory and uploaded into CODIS. Analysis costs range from $19.49 for convicted offender samples to $26.99 for arrestee samples with a 10 day turnaround time. As a result, this funding will cover the cost of between 16,383 and 22,687 samples depending on the ratio of convicted offender samples to arrestee samples analyzed.

FY11 Recipient Name: North Dakota
Award Number: 2011-DN-BX-K511
Award Amount: $200,000
Abstract: The Office of Attorney General, Crime Laboratory Division is the agency that is responsible for analyzing evidential material associated with criminal investigations for all state

and local law enforcement agencies and medical examiner and coroners within the state of North Dakota. The North Dakota Century Code 31-13 designates the Office of Attorney General, Crime Laboratory Division as the agency responsible for conducting DNA analysis on DNA samples collected from all convicted felony and registered offenders, as well as all felony arrestees in the state of North Dakota; the Office of Attorney General, Crime Laboratory Division is responsible for storing and maintaining the resultant profiles in the North Dakota State Index System (SDIS) and uploading the qualified profiles into the National DNA Index System (NDIS).

The Federal funding from this award will be used for the following goals:

1. Reducing the DNA database sample backlog through purchasing supplies and profiling kits.
2. Increasing the capacity of the laboratory by purchasing a 3500 Genetic Analyzer.
3. Providing the required continuing education for each analyst, purchasing text books for each analyst, and purchasing a subscription to the Journal of Forensic Sciences.

The Office of Attorney General, Crime Laboratory Division is striving to attain an average 30 day DNA and database case turn-around time. The agency also expects to work at least 1,250 DNA database samples (which includes 62 QC samples) using Federal funding. The projected number will be greater than 1,250 because the laboratory has validated 1/2 reaction volumes for database samples.

FY11 Recipient Name: Nebraska State Patrol
Award Number: 2011-DN-BX-K496
Award Amount: $353,073
Abstract: The Nebraska State Patrol is a unit of state government with an existing ASCLD/LAB accredited crime laboratory. The Nebraska State Patrol Crime Laboratory undergoes annual DNA audits, including an external DNA audit every two years.

The purpose of the Nebraska State Patrol Crime Laboratory DNA Backlog Reduction program is to reduce the time required to process forensic DNA casework and database samples, to increase throughput and to reduce the number of forensic DNA casework and DNA database samples awaiting analysis. $353,073 in funding provided by the National Institute of Justice is requested to achieve this goal.

To accomplish program goals, objectives and performance measures have been established. When completed, improvements over current operations in forensic DNA casework, DNA database backlog reduction and crime laboratory capacity enhancement for DNA analysis will have occurred. The following information details the Nebraska State Patrol Crime Laboratory DNA Backlog Reduction program.

Objective 1: Improve the Crime Laboratory's DNA analysis capacity for casework.

Performance Measure: Each analyst will increase the number of samples analyzed each month from 34 to 40.

Performance Measure: Reduce the average number of days between the receipt of a forensic DNA sample and the delivery of results to the appropriate agency from 60 to 50 days.

Objective 2: Reduce the number of backlogged DNA cases.

Performance Measure: Reduce number of backlogged DNA cases from 81 to 65 cases.

Performance Measure: Increase the number of CODIS hits attributable to the forensic casework DNA analyses funded under this announcement.

Objective 3: Improve the Crime Laboratory's DNA analysis capacity for DNA analysis on DNA Database samples.

Performance Measure: The DNA database analysts will increase the number of database samples analyzed each month from 295 to 480.

Performance Measure: Reduce the average number of days between the receipt of DNA database samples and the upload of DNA profiles to CODIS from 270 to 90 days.

Objective 4: Reduce the number of backlogged convicted offender DNA database samples.

Performance Measure: Reduce the number of backlogged DNA database samples from 2,000 to 500 samples.

Performance Measure: Increase the number of CODIS hits attributable to the DNA database samples analyses funded under this announcement.

Seven tasks will be undertaken to enable the successful completion of this project. Those tasks are: 1) continue the DNA Backlog grant funding for one forensic scientist, 2) provide funding for one DNA database laboratory technician who was previously funded in the FY2010 Convicted Offender grant, 3) provide overtime to all forensic scientists, 4) purchase and validate an additional Qiagen EZ1 Advanced XL extraction robot, 5) provide staff training, 6) purchase and validate an additional AB 7500 Real Time PCR instrument for DNA quantitation, and 7) purchase copies of user licenses of the GeneMapper IDX DNA analysis software for each analyst. In addition to these tasks, a dust cover will be purchased for the Tecan robot previously purchased with the 2007 DNA Backlog Reduction grant funding. This dust cover is being purchased to reduce the effects of the air handling system on the gravimetric measurements of the Tecan robot.

When complete, the outcome of this program will be a significant improvement in the number of days between the submission of a sample to the delivery of test results, an increase in the overall DNA analyses completed, and a reduction in the Nebraska State Patrol Crime Laboratory's backlog of forensic DNA casework and DNA database samples.

FY11 Recipient Name: New Hampshire Department of Safety
Award Number: 2011-DN-BX-K413
Award Amount: $200,000
Abstract: The New Hampshire State Police Forensic Laboratory (NHSPFL) is the sole provider of forensic services in the State of New Hampshire. As such, the laboratory performs all serology and DNA analyses in association with criminal investigations in the state, and also is responsible for the analysis and entry of offender and casework samples into the CODIS database.

Like all other states, the NHSPFL is facing increased budgetary constraints coupled with a recent DNA database expansion which went into effect late last year. The Federal funding from this award will be used for the following goals:

1. Reducing the forensic DNA case backlog and maintain or improve the current turnaround times through analyst overtime and purchasing supplies.
2. Reducing the DNA database sample backlog through purchasing supplies.
3. Increasing the capacity of both the casework and CODIS laboratories by purchasing equipment (automated puncher, microscope, alternate light source, coolers).
4. Providing the required continuing education and proficiency tests for analysts, as well as maintaining licenses necessary for the laboratory's LIMS system.

It is expected that the NHSPFL will analyze a minimum of 300 DNA cases and 1,000 database samples utilizing grant funds, and maintain its compliance with the FBI's DNA Quality Assurance Standards.

FY11 Recipient Name: County of Union (NJ)
Award Number: 2011-DN-BX-K470
Award Amount: $90,000
Abstract: The Biology Section of the Union County Prosecutor's Office Forensic Laboratory offers both serological and DNA analysis to law enforcement within the county as well as other counties at the request of the Union County Prosecutor's Office. The laboratory consists of two (2) DNA analysts and the DNA Technical Leader who also conducts analysis. The DNA analysts also serve as the Quality Assurance Manager/Interim Laboratory Director and Chemical Hygiene Officer respectively and the DNA Technical Leader also serves as the CODIS Administrator. Due to budgetary constraints, the laboratory cannot hire any additional DNA analysts at this time. For over a year, the Biology Section has been working overtime to meet the needs of the current caseload as well as fulfill the responsibilities of each of the analysts' additional duties. In short, with our current staff, the laboratory is unable to allocate time to the required internal validation necessary to increase our offerings and therefore, provide the highest quality analysis to our clients and increase the number of DNA profiles searchable through CODIS.

The laboratory was accredited by ASCLD-LAB in 2008. Since that time, the laboratory has offered nuclear DNA analysis utilizing the Quantifiler™ Human DNA Quantification Kit and the AmpFlSTR® Identifiler® PCR Amplification Kit both from Life Technologies (formerly Applied Biosystems). The laboratory utilizes the following instruments for DNA analysis also from Life Technologies: 7500 Real Time PCR System, 9700 Thermal Cyclers and 3130 Capillary Electrophoresis Genetic Analyzer.

It is the goal of the Biology Section to add the following kits from Life Technologies to its offerings: Quantifiler™ Duo DNA Quantification Kit and the AmpFlSTR® Minifiler™ PCR Amplification Kit. Before these kits can be implemented validation must be completed. Presently this laboratory does not have the man power to validate new kits and maintain current casework. Therefore it is the goal of the laboratory to utilize this funding to form a contract with Life Technologies to validate both Quantifiler and Minifiler kits.

The Quantifiler™ Duo DNA Quantification Kit would be invaluable in the sexual assault cases in which no semen is detected or semen has been detected but no spermatozoa or very low numbers of spermatozoa have been observed. These types of cases may rely on the laboratory's ability to determine if male DNA is present on intimate items or the clothing from the victim which may also contain the victim's own female DNA. An example is a pair of underwear from the victim where amylase has been detected in the interior crotch. Amylase may indicate a salivary component although many other body fluids also contain this enzyme. An item such as this may provide the only probative scientific evidence and therefore, DNA analysis would be conducted. However, determining at the quantitation step whether male DNA is present or not would save time and effort to the laboratory and our clients.

The AmpFlSTR® MiniFiler™ Amplification Kit would be invaluable in cases where partial DNA profiles have been obtained with our current amplification kit. These partial profiles are more commonly encountered in our analysis of "contact" or "touch" DNA items such as steering wheels or weapon handles. Many of DNA profiles that the laboratory currently generates from this type of evidence are insufficient to be searched through CODIS.

FY11 Recipient Name: New Jersey Department of Law and Public Safety
Award Number: 2011-DN-BX-K462
Award Amount: $1,741,523
Abstract: The New Jersey State Police, Office of Forensic Sciences (OFS) maintains five forensic laboratories, which service over eight million people living in New Jersey. The system is comprised of the Hamilton Technology Complex as well as the North , East, South regional labs and the Equine laboratory. The Hamilton Technology Complex is a full service state laboratory and is responsible for analyzing evidential material associated with criminal investigations, DNA analysis of the 13 core loci, and analysis of convicted offender samples for

entry into the State and National Combined DNA Index System. The Hamilton Complex also houses the FBI Regional Mitochondrial DNA Laboratory. The three regional laboratories provide drug, toxicology and fire debris analysis services. The OFS DNA Laboratory proposes to screen and perform DNA analysis on evidence from 434 cases from its case backlog and upload the resultant DNA profiles generated into CODIS. The accomplishment of this task will provide for the analysis of potential DNA evidence and data basing of DNA profiles from a substantial number of the OFS biology/DNA backlogged cases.

The New Jersey State Police OFS CODIS database contains over 11,000 forensic unknown profiles. The funding through this DNA Backlog Reduction Program will provide the opportunity to expand that number with profiles from our most heinous cases. The lab cannot presently attain the reduction in the backlog without the use of an overtime program. Consequently, in order to analyze the estimated 434 cases it will be required that an overtime program be instituted in order to accomplish the complete analysis from preliminary screening to mailing of a final DNA report to the appropriate agencies.

The overtime program will help to reduce the current bottleneck in the screening of cases for biological evidence, which can then be further analyzed for DNA and the results uploaded into CODIS. In addition, overtime funded through the NIJ grant would allow the lab to significantly decrease its turn-around time on other cases coming in the door. All results that yield eligible profiles will be uploaded to the CODIS database.
Purchase of instrumentation and equipment will be used to replace out dated inventory and help furnish a new high sensitivity lab that is part of a renovation project being partly funded by previous NIJ awards.

FY11 Recipient Name: New Mexico Department of Public Safety
Award Number: 2011-DN-BX-K464
Award Amount: $808,675
Abstract:
The main goal of this project is to utilize grant funds to improve overall timeliness of analytical results to submitting agencies. This project can be accomplished by the following five parts: 1) Overtime for existing staff and funding for a technician position, 2) funding for two forensic scientist college interns to validate new technologies and/or methodologies, 3) Upgraded instrumentation and equipment and laboratory supplies for analysis, 4) Augmentation of continuing education and training of DNA analysts, travel expenses, and 5) associated administrative costs. The overall goal for the NM DPS Northern Forensic Laboratory DNA section is to provide DNA analysis from the time of submission to completion in six weeks or less for at least 85% of all DNA cases once the current backlog has been addressed. The current backlog of the DNA section is approximately 230 cases.
Abstract - APD

The intent of this grant program is to provide the City Of Albuquerque Police Department Criminalistics Laboratory (APDCL) DNA Unit with the resources to reduce the amount of backlogged cases that exist within the City of Albuquerque and the County of Bernalillo. The main objective of this lab is to use this grant to outsource DNA samples to an outsourcing vendor.

The APDCL has purchased the contracts of two working outsourcing vendors. These vendors accept DNA cases and now offer services that render full reports after DNA analysis at a cost that varies between $500 and $1,000 per case. So property and violent crimes that require both serology and DNA analysis can be outsourced for complete "analysis to written report" work. Property and violent crimes that require more complex work can be sent for analysis only and reports generated in the lab, or at the labs discretion, worked "in-house". It is this labs hope to complete 300 plus backlogged cases using funding from this proposed grant.
As a secondary objective, the APDCL would like to secure two trips for continued training events for an anticipated five scientists. And finally, we would like to replace an old vacuum centrifuge with an updated model as a capacity enhancement endeavor.

Abstract – NMDIS
The New Mexico DNA Identification System - Administrative Center (NMDIS), is applying for supplemental, award funding. The goal of this project is to utilize grant funds to purchase; one BSD600 Duet sample punch, and one case of Abgene 96 well, 1.2 ml deep round well block trays. Additionally, funds would be utilized to pay for contracted analysis services to our current, contracted DNA vendor, as is required, to complete the necessary validation of the BSD punch and deep well plates, on an estimated 12x plates.
The objective of the NMDIS is that through the successful validation of the BSD punch, in conjunction with DNA analysis processes utilizing the Abgene plates, that the NMDIS will be able to increase the level of quality assurance in sample preparation, decrease the potential for sample contamination and/or misidentification, decrease turn-around times for future analysis as well as allow for reductions in analysis costs. The total NMDIS backlog is less than 300 samples.

FY11 Recipient Name: Las Vegas Metropolitan Police Department (NV)
Award Number: 2011-DN-BX-K439
Award Amount: $839,498
Abstract: The City of Las Vegas and the surrounding area of Clark County, Nevada have a current population in excess of 1.9 million persons and, in 2010, hosted over 3.1 million visitors per month. The Las Vegas Metropolitan Police Department (LVMPD) Forensic Lab operates as a unit of local government providing full service forensic analysis capabilities to the southern Nevada community. In addition, it is the sole provider of forensic DNA analysis services to entire region of southern Nevada. This service area includes the adjacent Nye, Lincoln and Esmeralda Counties with an additional population of approximately 50,000 individuals. The

LVMPD Forensic Laboratory also operates and administers the Southern Nevada Combined DNA Index System (CODIS). The database is a CODIS Local installation with both casework and convicted offender responsibilities. As required by Nevada Revised Statute, ordinances were passed by Clark, Nye, Lincoln and Esmeralda county governments establishing the LVMPD Forensic Laboratory as the official DNA testing laboratory and repository for all DNA specimens collected under statute from the four southern Nevada counties.

The Biology/DNA Detail of the LVMPD has traditionally processed violent offenses and biological evidence associated with homicides, sexual assaults, robberies, attempted homicides, and kidnapping cases. However, in recent years, the LVMPD Forensic Lab recognized the impact it can make by performing DNA analysis, not only on the violent offenses occurring in our community, but also on the full range of property crimes, including burglaries and vehicle thefts in southern Nevada. It has been four years since the Biology/DNA Detail of the LVMPD started performing DNA analysis on property crimes, and case requests for DNA analysis continue to flood the laboratory creating a DNA backlog that has grown to a staggering rate in a short period of time. In just one year, the forensic DNA case backlog increased by 23% from 895 cases on December 31, 2009 to 1,103 cases on December 31, 2010.

The Nevada State CODIS database contains all DNA collections mandated and collected according to Nevada Revised Statute (NRS). Effective October 1, 2007, Nevada state law enacted "all felon" legislation requiring felons to submit a biological specimen to the database. At the onset, the legislation increased collections of DNA database samples substantially. However, in the past few years buccal swab intake has decreased as Nevada's population has slightly declined and the number of felons already collected, upon conviction, continues to increase.

The 76th Legislative Session in Nevada is currently in session and is scheduled to adjourn in June 2011 unless a special session is needed. Nevada Legislatures are expected to deliberate on genetic testing bills geared toward the collection of felony arrestees. If the law passes, the LVMPD is expected to have an intake of approximately 30,000 database samples per year, which is a marked increase from the 6,499 offender samples collected in 2010. As such, the LVMPD is making provisions to streamline database sample processing in preparation for the new law.

The LVMPD Forensic Lab is requesting funds in the amount of $839,498 to increase the capacity and efficiency of the laboratory. In 2010, the LVMPD was awarded DNA backlog funds to begin the first phase of purchasing a Laboratory Information Management System (LIMS). In addition, 2010 funds were awarded to the LVMPD for both hardware and software purchases of this system. In 2011, the Forensic Laboratory is seeking additional funds to enable the continuum of the LIMS system project through the purchase of additional hardware, software, and professional integration services to finalize the LIMS project. A LIMS system will

improve overall casework management, efficiency, and work flow throughout the laboratory, impacting the existing backlogs in forensic DNA casework, DNA database analysis, toxicology, firearms and toolmark comparisons, controlled substance analysis, latent print comparisons, document and shoeprint examinations, and trace evidence examinations. Incorporating a LIMS has many long-term benefits to include eliminating redundant data entry previously entered by other LVMPD employees during the collection and storage of evidence, capturing and transferring instrument data, minimizing administrative costs, accelerating report delivery, minimizing mistakes made by humans, and facilitating the interface between intra-lab and intra-agency requests. Furthermore, a LIMS will directly affect the DNA analysis process by reducing DNA case and database sample turn-around-time, increasing the number of forensic DNA and database samples processed each month, and reducing the LVMPD's existing DNA backlogs. A LIMS system will also be vital for tracking and managing database samples should the state of Nevada adopt any form of arrestee legislation. This DNA database system would alleviate a huge bottleneck currently being experienced through manual tracking and maintaining CODIS-entry metrics required for the National DNA Index System (NDIS).

Funds for the purchase of printers for the Biology/DNA Detail and the file room that handles case files for the Biology/DNA Detail are being requested. The purchase of a cache array, a hard drive array, forty-eight terabytes of storage server space, a multilayer director for class switches and a tape library are also being requested which will be used to assemble a storage server to house high resolution photos required for forensic documentation, electronic data, and documents such as reports and laboratory notes for the entire forensic laboratory in connection with the LIMS. A LIMS consultant company will be hired to integrate the LIMS into the current workflow processes of the Forensic Lab, enabling staff to remain focused on casework analyses.

To further the goal of DNA backlog reduction, a portion of grant funds ($116,977) will be used in the form of overtime for in-house handling, screening and analysis of at least 117 forensic DNA cases. Completing a minimum of 117 forensic DNA cases and entering eligible DNA profiles into CODIS extends above and beyond the current capabilities of the Biology/DNA Detail. Members of the Biology/Detail will travel to national meetings to maintain compliance with the Quality Assurance Standards related to continuing education requirements as follows: two members of the Biology/DNA Detail will travel to the American Academy of Forensic Sciences meeting to be held in Atlanta, GA in 2012; two members of the Biology/DNA Detail will travel to the 23rd International Symposium on Human Identification Meeting (Promega) to be held in Nashville, TN in 2012; and two members of the Biology/DNA Detail will travel to the American Academy of Forensic Sciences meeting to be held in Washington DC in 2013. State and federal guidelines will be followed for hotel and per diem rates.

Funds will also be used to purchase DNA equipment to alleviate bottlenecks such as vortexers, pipettes, centrifuges and a camera. If awarded, grant funds will be used to purchase a new

CODIS server, workstations, and associated software to facilitate the FBI's upgrade to CODIS Version 7.0. The LVMPD will also procure a semi-automated punching system for buccal cell cards which will streamline DNA database sample processing in anticipation of new arrestee legislation. Supplies such as offender collection kits and scalpels will enable the laboratory to collect and process DNA database samples. The LVMPD will also use funds to outsource the validation of Y-STR chemistry which will enhance the service capabilities of the Biology/DNA Detail.

Due to the wear and tear on pipettes, the Biology/DNA Detail is also requesting federal grant funds to enable DNA pipettes to be calibrated more frequently than once a year. The LVMPD currently only has the budget to pay for annual preventive maintenance and calibration of DNA pipettes, however it has been deemed critical to have DNA's pipettes calibrated more frequently. Pipette calibration funds from this grant will enable all of DNA's pipettes to be calibrated six months after the LVMPD pays for their annual calibration. Finally, the LVMPD is requesting funds to augment electrical and data configurations for LIMS equipment, as needed.

FY11 Recipient Name: Washoe County Sheriff's Office (NV)
Award Number: 2011-DN-BX-K460
Award Amount: $342,000
Abstract: The Washoe County Sheriff's Office (WCSO) Forensic Science Division provides full service forensic analysis, including Crime Scene Investigation, to the entire northern portion of the state of Nevada. This area encompasses borders of four states, specifically California, Oregon, Idaho, and Utah, and comprises 13 of the state's 17 counties, and includes well over 80 separate agencies. Washoe County has a current population in excess of 400,000 persons of which half reside in the city of Reno. The remaining 12 northern counties attribute an additional population base of approximately 230,000. The WCSO Forensic Science Division operates and administers the Nevada State Combined DNA Index System (CODIS); this database entails casework and convicted offender samples. As the State site for CODIS, the WCSO Forensic Science Division also has oversight responsibilities for CODIS use by the Las Vegas Metropolitan Police Department (LVMPD) Forensic Laboratory.

The Biology Unit of the WCSO Forensic Science Division is comprised of the Primary Examination, DNA, and CODIS Sections. The Biology Unit has continuously processed biological evidence from not only violent crimes, including homicide, sexual assault, assault and battery, and robbery, but from property crimes as well. With recent year's budget cuts the Biology Unit resisted discontinuing DNA analysis on property crimes, recognizing the importance of these types of cases in assisting with criminal apprehension and crime prevention.

The Nevada State CODIS database contains all DNA collections mandated and collected according to Nevada Revised Statutes (NRS). Effective October 1, 2007, Nevada legislatures

enacted “all felon” legislation requiring convicted felons to submit a biological specimen to the database. The 76th Legislative Session is currently in session and is scheduled to adjourn in June 2011. Nevada Legislatures are expected to deliberate on a genetic testing bill geared toward the collection of felony arrestees.

The WCSO Forensic Science Division is requesting funds in the amount of **$342,000** to increase the capacity and efficiency of the Biology Unit. To continue the goal of DNA backlog reduction, a portion of the funds will be used in the form of overtime and supplies for in-house handling, screening and analysis of at least 35 forensic DNA cases. Completing a minimum of 35 forensic DNA cases and entering eligible DNA profiles into CODIS extends above and beyond the current capabilities of the Biology Unit. A Forensic Technician and Public Service Intern will be hired to perform administrative and technical assistance duties for the entire Biology Unit. Currently these types of duties are shared by all Biology Unit analysts, thus limiting their casework/database duties. To maintain compliance with continuing education requirements set forth in *The Quality Assurance Standards for Forensic DNA Testing Laboratories* and *The Quality Assurance Standards for DNA Databasing Laboratories,* funds are also being requested to allow Biology Unit analysts to travel to forensic national meetings. Funds are also requested to facilitate a state DNA meeting for the purpose of information sharing and uniformity regarding DNA casework and database analysis within the state of Nevada. Approximately one-third of the grant money requested will provide funding for outsourcing 3,600 database samples, including a site visit by the State CODIS Administrator, kits for the collection, storage cabinets and boxes, overtime for DNA profile review and CODIS upload, software to upgrade to CODIS Version 7.0, and a copier/scanner for the CODIS Section to facilitate ease of clerical duties associated with the database samples. Funds will also be used to purchase a freezer for the long term storage of DNA casework samples. The Forensic Science Division’s two Evidence Technicians are sometimes unavailable for dispersing items in need of testing as they must leave their section to use a copier/scanner in the performance of their duties. Funds will be allocated for the purchase of a desktop copier/scanner that will be located within the Evidence Section. Space is quite limited in the Evidence Section for the process of evidence intake, particularly for items submitted for DNA analysis. Mobile carts and additional shelving will enlarge this working space creating efficiency in this section. The remaining funds that are being requested will be utilized for rolling shelving units that will primarily be used to store Biology Unit supplies and laboratory reports. Due to a lack of space in the storeroom bulk items cannot be purchased at a savings. Retrieval of reports for court purposes and for database hits is difficult as these reports are in several locations. Installation of rolling shelves in the storeroom will nearly double the storage space and increase the efficiency of supply and report retrieval.

FY11 Recipient Name: City of New York, Office of Chief Medical Examiner
Award Number: 2011-DN-BX-K469
Award Amount: $1,500,000

Abstract: The Department of Forensic Biology, of the Office of Chief Medical Examiner, serves as the public forensic laboratory for the City of New York and provides serology and DNA testing on thousands of case submissions every year. In 2010 a total of 28,214 DNA samples were extracted, with STR profiles generated, analyzed, and reviewed. As a result, the Department of Forensic Biology uploaded 2,516 profiles into CODIS. During the same year, 1,056 offender matches and 255 case-to-case matches were made.

Ongoing budget reductions have lowered the existing DNA criminalist head count, threatening Forensic Biology productivity and the timeliness of DNA testing results. 2011/2012 goals are to maintain the current capacity and reduce turn-around time and case backlog. The FY11 backlog reduction proposal aims to achieve this by focusing on three types of actions to be taken:

1) Increase available staff hours through weekend overtime and new hires.
2) Purchase supplies, scientific and IT equipment to avoid processing bottlenecks.
3) Provide continuing education through conference travel.

It is expected that weekend overtime will result in 960 additional assignments that can be worked. The additional employees will screen and process cases up to STR typing. Here the goal is to reduce turn around time as much as possible but due to the pending LIMS implementation, it is not possible to quantitate these expectations.

FY11 Recipient Name: County of Erie (NY)
Award Number: 2011-DN-BX-K479
Award Amount: $597,722
Abstract: and Federal law enforcement agencies of Erie County, New York (population 900,000). Additionally, we provide forensic DNA analysis for all of Niagara County and Orleans County (total population 270,000) and occasional forensic DNA analysis for law enforcement agencies from 3 neighboring counties and State and Federal agencies responsible for investigating cases in Erie County. We currently have 10 full-time DNA analysts (includes 2 section supervisors who also perform casework analyses) and one part-time DNA analyst with 1 open full time DNA analyst position. With the success of CODIS, casework requests have been steadily increasing, especially in the area of forcible sexual assault, burglary, weapons possession, robbery and assault. The weapons possession cases require a short turn around time in order to meet court mandated time constraints. Additionally, we are experiencing an increase in the number of items submitted for each case and more requests for DNA analysis on evidence associated with homicides, including cold cases. This has resulted in a significant backlog and a need to decrease the turn-around time. In order to further increase the analytical capabilities of this lab, it is necessary to perform a portion of the lab work on backlogged cases using overtime and to continue the funding for the 2 DNA analyst positions that were funded under previous NIJ grant programs. It is anticipated that the additional overtime spent on casework will result in a

decrease in the turn-around time and a decrease in the number of backlogged cases, since the analysts will be able to process more cases in a shorter period of time. The long term goal is to analyze the current backlog of cases and to then provide a 30 day turn-around time for new cases. The funding from this grant ($597,722) will result in the completion of 336 additional cases using overtime.

Additionally, a portion of the funding will be used to purchase the supplies necessary to analyze the additional cases and to train the new DNA Analysts. Funding is also allocated to renew the annual maintenance contracts for the 3 Genetic Analyzers and the RT-PCR instrument.

FY11 Recipient Name: County of Suffolk (NY)
Award Number: 2011-DN-BX-K458
Award Amount: $264,319
Abstract: The 2011 Forensic DNA Backlog Reduction program is intended for increasing the throughput and timeliness of forensic analysis of evidence submitted to the Suffolk County Crime Laboratory Biological Sciences Section. This task is to be completed in four separate ways. First, increase capacity and efficiency will be increased through the purchase of an Applied Biosystems 3500 Genetic Analyzer. This is an 8 capillary instrument which will replace our current 4 capillary 3130 instrument. Second, funds will be used for the purchase of supplies, such as capillary arrays and kits, used in DNA analysis. This replaces supplies that we will not be able to purchase due to budget cuts, allowing us to maintain our current level of service. Third, funds will also be used to outsource backlogged DNA samples to an accredited fee-for-service vendor laboratory for DNA Analysis. This will allow us to add DNA profiles to CODIS from no-suspect property crime cases that we are not able to analyze in-house due to a lack of staff. Finally, a contract employee will be hired to assist in the screening of backlogged biological evidence. This will ultimately lead to DNA analysis and CODIS entry of samples from backlogged cases that we are not able to analyze due to our manpower constraints.

FY11 Recipient Name: County of Westchester (NY)
Award Number: 2011-DN-BX-K473
Award Amount: $267,323
Abstract: Funding from this grant will go toward satisfying two ends: increasing the capacity to perform DNA analysis, and reducing the backlog created by uncompleted cases in the Forensic Science Laboratory of the Westchester County New York Division of Forensic Sciences. The accomplishment of these goals is tantamount to continuing our pledge to furnish DNA results to investigating agencies within thirty days.

Our laboratory has been online with STR DNA typing since 1999. In twelve years the demands on, and expectations of, all forensic case-working laboratories has intensified such that analytical turn-around time must be greatly reduced and the typing techniques employed must be

increasingly more sophisticated. Currently our laboratory employs nuclear STR typing and Y-STR typing techniques. In addition, the FBI Quality Assurance Standards, which took effect in July 2009, impose new requirements for casework analysis and mixture interpretation.

To maintain pace with evolving trends and national accreditation requirements for DNA analysis and to reduce our current backlog of cases to be analyzed for DNA, our laboratory will require upgrades in instrumentation and software applications, new laboratory supplies, hardware support via instrument service contracts, access to training opportunities and travel monies, and the capability to hire temporary support staff. This augmented capacity will enable us to process, record, screen, and analyze forensic DNA samples in order to further reduce the amount of time required to complete casework that has initially met our thirty day turn-around criteria. We anticipate the momentum created by this optimized workflow will preemptively reduce future bottlenecks at the examination and analytical DNA stages of casework by substantially minimizing our current backlog.

The Federal funding from this award will be used for the following goals:

1. Maintaining the trend of providing the most probative case results to requesting agencies within thirty days by hiring DNA technicians to perform necessary routine quality assurance duties to free up analysts' time
2. Increase our capacity to complete ancillary casework procedures through purchasing laboratory supplies and instrumentation
3. Reduce our backlog of “UCR Part 1 Violent Crimes” forensic casework including property crimes by expanding our capacity to handle DNA samples by purchasing new instrumentation and hiring DNA technicians to aid in handling, screening, and analyzing backlogged DNA samples
4. Providing the required continuing education for analysts through specialized training at regional and national meetings, and purchasing reference books to enhance our procedures and protocols

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FY11 Recipient Name: Monroe County (NY)
Award Number: 2011-DN-BX-K485
Award Amount: $315,381
Abstract: The Monroe County Public Safety Laboratory (MCPSL) is a regional crime lab that regularly provides forensic services for over 40 police agencies within an eight county region of New York State including Monroe, Genesee, Livingston, Ontario, Seneca, Wayne, Wyoming, and Yates Counties. In addition to these Counties, the laboratory often provides services to the New York State Police, ATF, US Attorney's Office and the New York Park Police (approximately 52 agencies). The City of Rochester is the largest city within the eight county region and accounts for approximately 75% of the cases completed by the MCPSL. The total service area represents a population of approximately 1,155,000 (U.S. Census 2000). The

MCPSL is the agency responsible for conducting DNA analysis on the DNA samples collected in the region and uploading samples into to CODIS database.

The MCPSL is facing monetary constraints severely impacting the supply, instrument purchase maintenance and travel budget allotted to the Forensic Biology section. The federal funding from this award will be used to achieve the following goals:

1. Reducing the forensic DNA case backlog by increasing the number of fully trained analysts and through purchasing necessary analytical supplies.
2. Increasing capacity of the laboratory by purchasing equipment (genetic analyzers) and upgrading DNA analysis workstations to accommodate software changes to support the new instrumentation.
3. Providing the required continuing education for each analyst.
4. Maintaining optimal instrument performance by continuing maintenance contracts on analysis instrumentation and supporting system equipment.

The MCPSL can expect to reduce the DNA case backlog by at least 120 cases by the end of the award period. The turnaround time is expected to reduce by 10% and the analyst throughput is casework is expected to increase by 10%.

FY11 Recipient Name: Nassau County (NY)
Award Number: 2011-DN-BX-K471
Award Amount: $258,312
Abstract: The objective of the proposed National Institute of Justice Forensic DNA Backlog Reduction Program for FY2011 is to reduce the overall turnaround time for the handling, screening, and analysis of forensic DNA samples, and to improve laboratory throughput in an effort to prevent future DNA forensic casework backlogs within the County of Nassau. Reduction in analysis turn-around will be achieved by reducing the time required to validate the Applied Biosystem's 3500 Genetic Analyzer, Identifiler Plus amplification system and Gene Mapper ID-X through the utilization of a vender contracted validation and training package who will be selected through a competitive bidding process. This will prevent the reallocation of several laboratory scientists to this validation project which has historically resulted in significant bottlenecks in DNA analysis, report generation, technical review and administrative review of DNA casework. This proposed method will also bring the aforementioned systems on-line sooner than the laboratory could utilize current staffing levels. Validation completion will result in more rapid development of DNA profile data due to the increased capillary number of the 3500 system. This coupled with the use of requested overtime funds to support the technical review and administrative review of backlogged DNA cases will result in the reduction of the current 117 case turn-around time to an estimated 90 days for the delivery of test results to the laboratory's user agencies.

In order to maintain the current capacity and improve the throughput of property crime related DNA analysis the laboratory is requesting the funds for the purchase of the QIAGEN QIAsymphony which will supplement the current liquid handler utilized for the extraction of DNA samples. This along with the purchase of reagents and consumables will prevent the rejection of ~300 property crime cases. This is a vital initiative to the laboratory and its users since property crimes accounted for 69% of submissions, 57% of CODIS profiles entered and 60% of CODIS hits returned in 2010.

The methods proposed for this project will be measured by the expected decrease in case turnaround time and increase in the number of CODIS eligible profiles entered into the database. Metrics will be generated by the Laboratory Information Management System report function.

FY11 Recipient Name: New York State Police
Award Number: 2011-DN-BX-K453
Award Amount: $1,542,876
Abstract: The New York State Police Crime Laboratory System provides state-of-the-art forensic Short Tandem Repeat (STR) DNA analytical capabilities for all NY State Police criminal case investigations. It also provides forensic DNA services for those state criminal justice agencies that do not have access to county/municipal crime laboratories or to medical examiners offices within the state. All forensic DNA casework for the NYSP is performed at the Forensic Investigation Center (FIC) in Albany. The NYSP FIC also maintains the state convicted offender DNA Database Unit.

The federal funding from the National Institute of Justice FY2011 DNA Backlog Reduction Grant will be used for the following goals:

1. Reduction of the current forensic DNA casework backlog by providing analyst overtime and by outsourcing of casework to a commercial genetic identity testing laboratory.
2. Increase in the analytical capacity of the forensic DNA casework laboratory by purchase of equipment (genetic analyzer), upgrading components of our information technology system (computers, network infrastructure, software development tool), acquisition of equipment for enhanced automation (96-well microplate sealer, robotic workstation), improved evidence storage (stationary evidence processing system) and removal of processing bottlenecks (centrifuges). Funds will also be applied for a consultant to serve as a Laboratory Information Management System Coordinator (LIMS Coordinator) and for consultants to perform process mapping of our existing protocols to help streamline the entire analytical process.
3. Provision of mandated continuing education for ten casework forensic scientists and for eleven forensic scientists in the databasing unit.
4. Decrease in the turn-around times for processing, analysis and CODIS entry of convicted offender DNA patterns by purchase of high-throughput equipment (genetic analyzer),

upgrading components of the database's Laboratory Information Management System (servers), validation of the Identifiler Direct amplification kit, and acquisition of equipment for enhanced automation efficiency (liquid handling system, robot enclosures).

By the end of the award period, the New York State Police Forensic Investigation Center expects to reduce the current DNA case backlog by at least 480 cases (339 through in-house testing and 148 through out-sourcing). By increasing analytical capacity, the throughput of forensic scientists performing DNA analysis in the casework unit is expected to increase by 20%. Similarly, the turn-around times for DNA casework is expected to decrease by 30 days or more. The NYSPFIC DNA database unit expects to reduce its turn-around time for development of DNA profiles from offenders convicted of qualifying offenses to below 20 days.

FY11 Recipient Name: Onondaga, County of (NY)
Award Number: 2011-DN-BX-K467
Award Amount: $180,218
Abstract: The Forensic Laboratories will utilize funds from the 2011 DNA Backlog Reduction Grant to obtain a DNA analyst and fund analyst overtime to reduce the current backlog and decrease the turn-around time for DNA cases. The laboratory will also use grant funds to provide discipline specific continuing education, ensuring that the staff remains up-to-date on new technologies. Additionally, supplies will be purchased that are necessary for casework done on overtime hours, a maintenance agreement will be acquired for service on DNA instrumentation will minimize any downtime for the section, and outdated pipettors will be replaced. Supplemental funding is requested for expenses directly related to accreditation including proficiency tests and pipette calibrations. Overall, the award will enable the laboratory to successfully implement the proposed plan increasing capacity, reducing turn-around time and the number of backlogged cases, further enhancing the services offered to the criminal justice community of New York State.

FY11 Recipient Name: City of Columbus (OH)
Award Number: 2011-DN-BX-K468
Award Amount: $272,315
Abstract: Columbus Police Crime Laboratory DNA Backlog Reduction Project 2011 seeks to enact improvements that will enable the crime laboratory to process DNA samples efficiently and effectively thereby reducing the backlog of DNA cases awaiting analysis. These improvements are critical to help the criminal justice system realize the full potential of DNA technology.

The Columbus Police Crime Laboratory is facing budgetary constraints. DNA database expansion legislation will be going into effect on July 1, 2011 and is expected to increase the

number of database hits and confirmations performed by this lab. The Federal funding from this award will be used for the following goals:

1. Reducing the forensic DNA case backlog through analyst overtime and purchasing supplies.
2. Increasing the capacity of the laboratory by purchasing equipment and software (DNA extraction robots and computer equipment).
3. Providing the required continuing education for each analyst.

The Columbus Police Crime Laboratory can expect to reduce the DNA case backlog by at least 118 cases by the end of the award period. The turnaround time is expected to be reduced to 65 days or less, and the analyst throughput in the casework sections is expected to increase 5%.

FY11 Recipient Name: City of Mansfield (OH)
Award Number: 2011-DN-BX-K446
Award Amount: $237,476
Abstract: The Mansfield Division of Police Forensic Science Section DNA Laboratory is an agency that is responsible for analyzing evidential material associated with criminal investigations for local law enforcement agencies in Mansfield, Ohio and adjoining communities. The DNA Laboratory is composed of 2 DNA Analysts and a part-time DNA Technician and has been in operation since 2001. This laboratory is also one of eight Ohio NDIS laboratory participants. CODIS operations are performed on the local level with samples being uploaded to the State of Ohio for submission to NDIS.

The Mansfield Division of Police Forensic Science Section DNA Laboratory continues to face budgetary constraints with respect to personnel. The Federal funding from this award will be used for the following goals:

1. Reducing the forensic DNA case backlog through analyst overtime.
2. Maintain a limited backlog and low turn-around times through analyst overtime.
3. Maintain CODIS participation by hiring a DNA analyst.
4. Increasing the capacity of the laboratory by hiring one DNA Analyst and a part-time DNA technician.
5. Providing the required continuing education for each analyst and purchasing DNA related literature.

The Mansfield Division of Police Forensic Science Section DNA Laboratory can expect to reduce the DNA case backlog by at least 337 cases (300 in-house and 37 utilizing overtime by the end of the award period. The turnaround time is expected to be maintained at current levels and analyst throughput in the casework sections is expected to increase as new instrumentation was purchase with previous award funding.

Lake County Crime Laboratory

1. Increasing the capacity of the laboratory by purchasing a new CODIS computer/server, backup hard drives, software, four computer workstations, a walk-in freezer and DNA instrument service agreements.

FY11 Recipient Name: Cuyahoga County Office of Medical Examiner (OH)
Award Number: 2011-DN-BX-K445
Award Amount: $123,718
Abstract: The Cuyahoga County Office of the Medical Examiner (CCOME), formerly known as the Cuyahoga County Coroner's Office, builds upon the DNA Backlog grant initiatives implemented in previous years. In prior years, funding was spent on enhancing technological capabilities and hiring contracted DNA Technicians. The focus of the DNA Backlog funding coupled with procurement of key instrumentation has enabled the Regional Forensic Science Laboratory to reduce the average length of time to process and analyze a forensic DNA case while increasing the amount of DNA samples analyzed monthly.

The focus of funding for the 2011 DNA Backlog grant will be to further enhance and build upon initiatives of past grant cycles. In order to achieve these goals, the CCOME is in the process of hiring two contracted DNA Technicians. This grant will sustain the original investment in the technicians from the previous grant year. Although there have been delays in hiring the technicians this has recently been resolved and the anticipated results once they are on board remains the same. It is anticipated that with the addition of the technicians, and after proper training, in the first six months the laboratory will reduce turnaround time for DNA Backlog cases and increase analyst turnaround time for cases by 20%.

The Technicians will be contracted employees hired to do preparatory work for the analysts. It is anticipated that the additional staff will continue to foster the reduction of the backlog assuming there is not a dramatic increase of DNA cases. All casework will continue to be tracked by the laboratory information management system.

Staff development and training is a crucial component to the expanding field of DNA analysis. As a result, it is imperative that analysts and scientists attend national conferences and training in an effort to stay abreast of current trends and practices.

5% of the grant funds will be utilized toward professional development and training. One scientist will attend the Promega Meeting in Baltimore Maryland and two scientists will attend the AAFS in Atlanta Georgia.

FY11 Recipient Name: Hamilton County (OH)
Award Number: 2011-DN-BX-K475
Award Amount: $164,543
Abstract: The primary objectives of this project are:

1. To reduce the backlog by 96 old cases. Because of the continuing impact of the economic recession in this region, public funding continues at drastically reduced levels. Grant funds will insure supplies are available to process backlogged cases. The laboratory will process these cases in-house using existing procedures and recently upgraded equipment.
2. To reduce the turnaround time by at least 5%. The laboratory is taking steps to improve its efficiency and effectiveness. Recent changes to evidence acceptance policies will help eliminate the submission of items with a low probability of producing CODIS eligible DNA profiles.

FY11 Recipient Name: Montgomery County (OH)
Award Number: 2011-DN-BX-K483
Award Amount: $298,563
Abstract: The Miami Valley Regional Crime Laboratory (MVRCL) is a full-service forensic laboratory serving the law enforcement agencies in southwest Ohio. Approximately thirty-three law enforcement agencies in Montgomery County and forty-nine located in seven other counties contract with the laboratory annually for services. Additionally, numerous other agencies will utilize the services as needed throughout the year.

The MVRCL will use funds from this grant to meet the following goals:

1. Reduce the DNA case backlog by purchasing supplies for the casework and providing overtime,
2. Providing the required continuing education for each DNA analyst.
3. Increase the capacity of the DNA laboratory by expanding automated extraction capabilities on the Tecan Freedom EVO® 200 workstation, purchasing maintenance contracts for DNA equipment, laboratory equipment and office equipment.

The turn-around-time on DNA cases is expected to decrease by 30%. This would allow us to provide DNA results on most cases within 38 days. The analyst should increase the number of samples processed by 30%. We anticipate the number of samples that an analyst can process each month to be 39.

FY11 Recipient Name: Stark, County of (OH)
Award Number: 2011-DN-BX-K438
Award Amount: $130,000

Abstract: The Canton-Stark County Crime Laboratory is a full-service forensic laboratory which serves the Stark County area in northeastern Ohio. The laboratory's mission is to provide quality forensic support to the criminal justice system in Stark County, through science and technology. In order to further this mission and to address current staffing challenges and budgetary constraints, the laboratory plans to use federal grant funds to accomplish the following goals:

1.) Increase the capacity for examinations in the DNA analysis workflow by purchasing robotic DNA extraction instrumentation and adding a grant-funded DNA position.
2.) Increase task efficiency by purchasing additional software to streamline DNA data analysis and implement equipment which will improve and replace manual procedures.

The laboratory expects that by completing the goals and objectives of this project that the number of cases awaiting biological screening and/or DNA typing as well as the overall turnaround time for such cases will decrease by as much as 10% by the end of the award period. Moreover, the laboratory expects to be able to maintain the increased productivity in future years by the investment of grant funds in instrumentation, equipment and software tools aimed at increasing the capacity and efficiency of individual staff members.

FY11 Recipient Name: State of Ohio Office of the Attorney General
Award Number: 2011-DN-BX-K481
Award Amount: $1,511,159
Abstract: The Ohio Bureau of Criminal Identification and Investigation (BCI) is responsible for analyzing evidential material associated with criminal investigations for all state and local law enforcement agencies within the state of Ohio. BCI operates three regional forensic science laboratories throughout the state. The three regional laboratories - London, Richfield, and Bowling Green - have full forensic DNA casework laboratories.

Ohio Revised Code 109.573 designates BCI as the agency responsible for conducting analysis on DNA samples collected from all convicted felony and certain misdemeanor offenders as well as all adult felony arrestees in the state of Ohio. BCI is responsible for storing and maintaining the resultant profiles in the Combined DNA Index System (CODIS). The bureau's London laboratory maintains CODIS.

BCI has undertaken an aggressive and comprehensive initiative to decrease DNA testing turnaround time, reduce sample backlogs, and increase laboratory capacity. Additionally, new state legislation requiring testing of more samples has increased the burden on the laboratory's CODIS section prompting the need for increased capacity. Therefore, the federal funding from this award will be used for the following goals:

1. Reducing the forensic DNA case backlog and decreasing the turnaround time through purchasing supplies.
2. Increasing the capacity of the DNA casework laboratory by purchasing two ABI 3500xl genetic analyzer systems.
3. Increasing the DNA database capacity through the purchase of one ABI 3730 48 Capillary Genetic Analyzer, 2 ABI 96-Well GeneAmp PCR System 9700 instruments, and 2 ABI BSD Duet Filter Paper Punches.
4. Reduce the DNA database turnaround time by implementing and validating the Genemapper ID-X for use as an expert system.

BCI expects to reduce the DNA case backlog by at least 672 cases by the end of the award period. The agency also expects to purchase two ABI 3500xl genetic analyzer systems using federal funding. Chemicals and reagents will be purchased from Applied Biosystems to validate and run backlogged casework samples on the ABI 3500xl genetic analyzer systems. The BCI turnaround time is expected to be reduced to 45 days or less, and the analyst throughput in the casework sections is expected to increase by 23%.
BCI's CODIS DNA database section expects to reduce the turnaround time of the DNA database samples by 20% by implementing the Genemapper ID-X software as an expert system once it is validated and approved by NDIS.The expected increase in analyst throughput by the end of the award period is 25% with the addition of the new CODIS DNA database equipment.

FY11 Recipient Name: City of Oklahoma City (OK)
Award Number: 2011-DN-BX-K405
Award Amount: $306,000
Abstract: The OCPD DNA Laboratory has seen explosive growth in case submissions since January 1, 2009. This growth is due to the now wide-spread application of DNA testing to property crimes occurring in the City of Oklahoma City. Previous use of DNA testing had been limited to case analysis of evidence related to violent crimes.

As a result, the DNA Laboratory is currently burdened with a backlog of approximately two hundred-fifty (250) cases composed of both violent and property crime cases. To increase the laboratory's efficiency and productivity, it is proposed federal grant funds be used to pay for upgrading the laboratory's capabilities to take advantage of recent technical advances in the field of DNA testing including:

1. Validation and use of a new and improved next-generation DNA analysis kit currently available on the market providing better quality data and improving the laboratories ability to resolve mixed samples;
2. Purchase and validation of two (2) DNA extraction robots to automate the DNA extraction process and thus increase productivity;

3. Purchase of new computers and advanced DNA analysis software for use with the laboratory's current instrumentation. Use of this software will help streamline the analysis of DNA data and improve analyst productivity.

In addition to the purchases listed above, grant funds are requested to pay for the required validation of the new equipment in our laboratory. Use of validation services currently available on the market will free OCPD Laboratory personnel to continue forensic casework while the necessary validation studies are performed.

As a result of these improvements to laboratory capacity it is expected the backlog of DNA cases awaiting analysis will be reduced by at least forty (40) cases by the end of the grant award period. This reduction will be achieved through an estimated 10% increase in casework productivity.

FY11 Recipient Name: City of Tulsa (OK)
Award Number: 2011-DN-BX-K403
Award Amount: $254,549
Abstract: The Tulsa Police Department Forensic Laboratory (TPDFL) is responsible for analyzing evidential material associated with criminal investigations for the Tulsa Police Department within the City of Tulsa. The TPDFL has a fully operational existing forensic DNA casework section that undergoes external quality assurance audits in accordance with the FBI's Quality Assurance Standards at least once every two years and is accredited under the ASCLD/LAB program.

The federal funding from this award will be used for the following goals:

1. Increasing the capacity of the laboratory by purchasing equipment (thermal cyclers, DNA extraction and purification robot, additional pipettes, computers and monitors, and tablet computers) and by hiring two forensic scientists.
2. Provide text books for each analyst in the Biology Section for continuing education.

The analyst throughput in the Biology Section is expected to increase 10% and the turnaround time is expected to be reduced to 140 days or less.

FY11 Recipient Name: Oklahoma State Bureau of Investigation
Award Number: 2011-DN-BX-K417
Award Amount: $654,135
Abstract: The OSBI seeks to improve casework productivity while decreasing the overall turnaround time and back log of cases and decrease the backlog of offender DNA samples. The increase in casework productivity and capacity for offender DNA sample processing will be

achieved by continuing to include technicians in the processing of certain steps and with the use of overtime for analysts. The increase in casework productivity and decrease in turnaround time will also be achieved using reagents and supplies which otherwise would not be able to be purchased.

The OSBI requests $439,420.50 for the purchase of supplies that will reduce sample-processing time and/or increase the number of samples processed. The Casework funding will be used to purchase amplification and quantification kits which will be used in all DNA casework performed throughout the OSBI laboratory system. The Database funding will be used to purchase supplies used throughout the profiling process which will be used in all DNA database work performed in the CODIS unit.

The OSBI also requests $214,714.50 to extend three technician positions and provide overtime funds for analysis of cases, database samples, and training. This funding request includes both salary and benefits. The technician positions will be used to aid in the handling, screening, and analysis of forensic biology evidence and processing of offender samples.

All of these improvements together will help analysts reduce the forensic biology backlog and work towards decreasing the average turn-around time to 30 days.

FY11 Recipient Name: Oregon State Police
Award Number: 2011-DN-BX-K499
Award Amount: $737,848
Abstract: PROJECT GOALS AND OBJECTIVES
The goals of this proposal are to 1) reduce the DNA casework and database sample backlog, 2) increase the efficiency and capacity of DNA casework and database screening, processing and analysis, 3) provide required training and continuing education for Forensic Biologists, and 4) assist the Forensic Services Division in converting to a paperless system. The objectives are: A) to fund two Forensic Scientists positions (one for casework and one for database analysis), purchase supplies for processing DNA backlogged cases and database samples, and to provide overtime for the analysis of backlogged DNA cases and the validation of new equipment, B) to eliminate a bottleneck and increase efficiency of DNA casework processing and analysis through equipment purchases, C) to provide training and continuing education opportunities to analysts to assist with obtaining competency or maintaining proficiency and D) to purchase software to assist with converting the Forensic Services Division to a paperless system.
PROJECT DESIGN AND METHODOLOGY
For objective A, we will provide support for 13 months to one full time CODIS analyst and one full time DNA casework analyst. One Forensic Scientist, entry level, step 3 will be retained with OSP for 13 months (Mar. 1, 2012 to Mar. 31, 2013) to process, analyze and report the DNA results from backlog DNA cases. The current funding for the DNA casework position is a FY2010 DNA Cold Case backlog grant awarded to Portland Police Bureau (PPB). Funding for

this position will be exhausted in February 2012. Funds from this grant will allow us to retain this position. If retained, this analyst will analyze any backlogged DNA cases. In 2010 we began processing all CODIS samples in-house. We have dedicated space, equipment and 2 full time CODIS analysts. One position is currently funded using the FY2010 CODIS grant which we anticipate will be expended by October 31, 2011. To continue processing all CODIS samples in-house and maintain our current capacity of ~450 samples/analyst/month, we will use FY2011 DNA grant funds to support this position for 13 months. Grant funds will provide overtime for approximately seven DNA analysts to process and analyze backlogged DNA cases and perform the necessary validation studies on new equipment. The majority of the backlogged samples are no suspect(s), property crime cases. Profiles from these cases will be entered into CODIS and subsequent hits will be reported to the police agency to aid in their investigation. The overtime will help to minimize our DNA backlog. Supplies will be purchased for the processing of DNA backlogged and database samples. In addition, we will purchase supplies for the convicted offender collection kits.
Objective B: To eliminate a bottleneck and increase efficiency of DNA casework processing and analysis we will purchase a multicapillary genetic analyzer, a real time thermal cycler and three biological evidence screening systems which include: pantographs, high intensity lights, a digital camera, wall-mounted monitors and a rail system. The screening systems will provide the Springfield, Central Point and Pendleton laboratories with an optimal evidence screening room by providing maximum lighting and enhanced evidence documentation abilities and assist with the recognition and collection of biological evidence.

For objective C, analysts will participate in various in-state and out-of-state training opportunities to fulfill training requirements for competency or to maintain proficiency. Training for any new hires may include courses in population genetics and general DNA techniques. This will assist new hires to meet their training requirements to obtain competency. Current DNA analysts will attend various professional conferences (e.g., NWAFS, AAFS, or the International Symposium on Human Identification) to maintain their proficiency and keep current with new technologies.

The Oregon State Police Forensic Services Division is moving towards a paperless system and has requested funding under the 2011 Coverdell grant to help achieve this goal. To meet objective D and assist the Forensic Services Division with the conversion to a paperless system, we will purchase ten client workstation licenses for forensic biology processing and DNA analysts.

Support of this proposal will provide support for two DNA forensic scientists, provide overtime, equipment and supplies as well as training and continuing education opportunities all of which will result in increased capacity and efficiency of evidence screening and analysis for both DNA casework and CODIS database samples. Meeting the objectives will result in maintaining a

proficient, confident workforce, will provide enhanced infrastructure for more efficient workflow for DNA sample processing and analysis, and provide resources (equipment, personnel time & supplies) to increase the efficiency of the DNA unit. The subsequent expected outcomes will be a decrease in the DNA backlog and more timely quality service to our customers (i.e., decrease in turn-around time).

FY11 Recipient Name: Allegheny County Pennsylvania
Award Number: 2011-DN-BX-K419
Award Amount: $341,929
Abstract: In recent years, the Forensic Biology section of the Allegheny County Office of the Medical Examiner (ACOME) has committed significant time and resources into developing and implementing an advanced DNA processing plan to reduce the number of backlogged cases and increase throughput. Having already acquired several state-of-the-art robotics and information technology systems, ACOME now seeks to adapt their DNA processing design to the changing and growing demands placed upon Forensic DNA analysis. Through the proposed program, the laboratory will reduce its backlog through continued capacity enhancement and improve its turnaround time through the consolidation of its data transfer procedures.

Funding from the proposed program will be used to acquire and validate a state of the art Genetic Analyzer, which will increase capacity and efficiency over the currently used out-dated models. Funding will be used to acquire and configure a new DNA laboratory information management system (LIMS), which will streamline the transfer of data through each step in the DNA casework process. ACOME FL projects a budget of $341,929 and an estimated timetable of 18 months (October 1, 2011 to March 31, 2013) for successful completion of the proposed program.

FY11 Recipient Name: City of Philadelphia (PA)
Award Number: 2011-DN-BX-K425
Award Amount: $1,146,517
Abstract: The Philadelphia PD Forensic Science Bureau Criminalistics Unit is the agency that is responsible for analyzing evidential material associated with criminal investigations for the City of Philadelphia. The Criminalistics Unit is comprised of the "DNA Laboratory" which only conducts DNA typing and the "Trace Laboratory" which screens evidence for biological material suitable for DNA analysis. The Trace Laboratory has other functions such as Arson and Gunshot Residue analysis, however these duties are separate from the biological screening duties and these areas are not the subject or recipients of any funds requested under this grant proposal.

The Philadelphia PD Forensic Science Bureau Criminalistics Unit is facing budgetary constraints. For the years 2007, 2008 and 2009, the City of Philadelphia accounted for 41%, 41% and 40% of the Violent Part 1 Crimes in the State of Pennsylvania. The demand for services to the Philadelphia Forensic Sciences Bureau DNA Laboratory is expanding while the funds

available are decreasing. Increases in the sensitivity of DNA Technology and the success of CODIS entries has resulted in increased application of DNA analysis to any evidence that is known to have been touched by the suspect. The Federal funding from this award will be used for the following goals:

1. Reducing the forensic DNA case backlog through analyst overtime and purchasing supplies.
2. To increase the efficiency of the Criminalistics Unit by redesigning the analytical and office areas to better utilize the available space and to be able to accommodate 6 additional analysts that will be funded by City of Philadelphia General Funds.
3. To send two forensic scientists to the premier meetings for forensic DNA technology. This will keep the laboratory informed about technological advances, analytical modifications, interpretation issues, and provide continuing education.

The Philadelphia PD Forensic Science Bureau Criminalistics Unit DNA laboratory can expect to reduce the DNA case backlog by at least 605 cases by the end of the award period.

FY11 Recipient Name: Pennsylvania State Police
Award Number: 2011-DN-BX-K410
Award Amount: $1,662,908
Abstract: This proposal will provide funding for overtime to enable the Pennsylvania State Police Bureau of Forensic Services to screen backlog serology cases for potential DNA analysis and to provide overtime for the analysis of the DNA backlog cases. Funds are also requested for equipment and supplies to continue to streamline techniques to maximize throughput in the analysis of casework samples. The overtime is for the serology sections in the six regional crime laboratories to screen evidence for DNA analysis and for the DNA Laboratory to complete the DNA analysis.

This proposal will provide funding for the Pennsylvania State Police DNA Laboratory to utilize overtime to perform technical and administrative reviews of their convicted offender samples analyzed in house in order to input the genetic profiles into CODIS within 30 days of analysis. The proposal also includes a request for the funding to order the supplies and biochemicals necessary to analyze the convicted offender samples.

The Pennsylvania State Police Bureau of Forensic Services is backlogged in each of the six regional laboratory's serology sections and in the DNA laboratory. Overtime will be used to control and potentially eliminate or reduce these backlogs. The Pennsylvania State Police DNA Laboratory is no different than many forensic laboratories throughout the country that experience large backlogs due to increasing casework demands and rapidly expanding laws. The continued level of case submissions coupled with resignations, time spent on validations, training and maternity/sick leaves has made it difficult to reduce turnaround time.

The Pennsylvania State Police DNA laboratory is dedicated to reducing its current average turnaround time in both screening and DNA analysis while increasing the number of cases processed per month per analyst.

FY11 Recipient Name: Instituto de Ciencias Forenses (PR)
Award Number: 2011-DN-BX-K488
Award Amount: $678,552
Abstract: The proposed goal of this effort is to continue reducing turnaround time, increasing throughput, reducing casework backlog and fostering batch work. This goal will be achieved via the execution of a series of measures/objectives which will impact various aspects of the operation. FY2011 Forensic DNA Backlog Reduction Grant Program (FDBRGP) funding will be used for retaining currently employed personnel on a transitory basis: three (3) forensic serologists and three (3) technicians; as well as for overtime pay for in-house and transitory personnel. Furthermore, 2,111 DNA analyses will be performed, 2,091 of which will be for CO/Arrestee sample outsourcing and 20 of which will be for casework backlog reduction in-house processing based on supplies and overtime funding level requested. Funds will also be used for attendance of personnel to the CODIS Meeting and the PROMEGA Conference. As part of an aggressive effort that is long overdue, funding will also be used for the acquisition of two robotic platforms for PCR Set Up, one (1) AB 3130 Genetic Analyzer, and one (1) Advanced EZ1 platform, all of which will foster batch work. Funding will also be used to provide continuity to CODIS-Consulting Services by a bona-fide CODIS user who is currently employed in a properly ASCLD-LAB/FBI accredited laboratory. Lastly, funds will also be used for acquisition of supplies with which to carry out the proposed backlog-reduction and, possibly, for the in-house validation of the new instrumentation/equipment. The Marshall's University TAP program will also be considered for validation of some of the platforms. All the cases for which genetic profiles are obtained will be carefully evaluated to ensure that prior to uploading into NDIS all case files meet the FBI NDIS Acceptance Standards.

FY11 Recipient Name: Health, Rhode Island Department of
Award Number: 2011-DN-BX-K457
Award Amount: $209,355
Abstract: The Rhode Island Department of Health Forensic Sciences Laboratory (RIDOH-FSL) serves the entire state of Rhode Island, with a population of approximately 1 million. Agencies served include state and municipal police, the Office of the State Medical Examiner, Attorney General, and other law enforcement agencies. The laboratory is divided into four sections: Drug Chemistry, Forensic Toxicology, Breath Analysis/Evidence, and Forensic Biology/CODIS. The Laboratory is the sole Forensic DNA laboratory and CODIS site in the state, and casework is submitted by more than 40 stakeholders. Database collections are carried out by RIDOH-FSL staff at the RI Adult Corrections Institution, and a separate probation collection office. The

Laboratory is accredited under ISO 17025 standards by Forensic Quality Services, Inc, and undergoes external audits every two years as required by the FBI's DNA Quality Assurance Standards.

The Federal funding from this award will help achieve the following goals:

a) Reduce the forensic DNA case backlog by continuing to fund a full time analyst dedicated to DNA casework;
b) Increase throughput of both casework and database functions by partially funding (50%) a senior laboratory technician to assist with evidence and some CODIS duties such as collection and processing for shipment;
c) Increase the capacity of the laboratory in both casework and CODIS with a semi-automated sample punching system, a camera for evidence documentation, an alternate light source, a mini centrifuge, and sample storage (freezer).
d) Ensure the integrity of robotic instrumentation through a maintenance contract
e) Provide the required continuing education for each analyst through training and travel, and purchasing a subscription to the Journal of Forensic Sciences.

The RIDOH-FSL expects to reduce the DNA case backlog by at least 100 cases and to be able to process incoming cases within a 90 day time frame, assuming no changes in staff of workload. We believe that making the long term investment in personnel will increase the overall efficiency of our laboratory, thereby reducing the backlog of DNA casework. Database backlogs are expected to be reduced to the turnaround time by the vendor laboratory.

FY11 Recipient Name: Richland County Government (SC)
Award Number: 2011-DN-BX-K404
Award Amount: $195,000
Abstract: The Richland County Sheriff's Department is currently seeking funds to enhance its capacity for DNA analysis through the DNA Backlog Reduction Program Formula Grant FY 2011. With the implementation of this grant, the following goals will be achieved; reduction of backlogged DNA cases and increase laboratory capacity with the objective of an overall reduction in violent and nonviolent crimes in Richland County through a continuation of current analyst throughput (~100 cases/month). Without the grant-funded re-employment of the full time analyst and the full time technician, laboratory case throughput will be reduced by approximately 30 percent. The project plan/method is to utilize the grant-funded full time analyst and full time technician along with the two county-funded full time DNA analysts and existing laboratory infrastructure to coordinate and process DNA backlogged cases during the grant period. Acquired instrumentation will increase the laboratory's capacity and efficiency. Annual training for the DNA Analyst and DNA Technician will allow for continuing education.

FY11 Recipient Name: South Carolina Law Enforcement Division
Award Number: 2011-DN-BX-K432
Award Amount: $1,815,233
Abstract: This application is for Federal assistance for the FY11 DNA Backlog Reduction Program. Funds are being sought to improve the analysis capacity of the SLED Forensic DNA Laboratory to increase the number of DNA samples processed. SLED proposes to maintain increased DNA staff through grant funds and to process Database samples with the supplemental funding provided by the 2011 award.

Funds are also being sought to handle, screen, and/or analyze backlogged forensic DNA casework samples. Overtime salaries for DNA personnel, the on-going support of grant-funded DNA personnel, and the outsourcing of backlogged cases to a qualifying fee-for-service laboratory will be used in accomplishing this task. The SLED DNA Laboratory is an NDIS participant lab in good standing and is eligible to upload appropriate profiles to NDIS. Therefore, the resulting evidence profiles from analysis of these cases will be entered and searched in the Combined DNA Index System (CODIS) to assist state and local agencies to ultimately solve crimes. The funds may also be used to conduct post conviction DNA testing pursuant to a court order. All DNA analyses performed at SLED using funds from this program will be maintained under the applicable federal privacy regulations.

Funds are being sought to provide external training in DNA analysis for analysts and technicians who will have recently started accepting cases, as well as providing required continuing education and training for DNA analysts. New technologies presented in these training events enhance the lab's capabilities in implementing new DNA methodologies and to increasing throughput through exposure to novel automation and techniques.

The supplemental funding provided by this award will allocate funds for the SLED DNA Database Laboratory to process 10,755 database samples that will be submitted to NDIS. The funds will be used to purchase the reagents needed for the analysis of these samples.

While many variables determine the number of backlogged cases, through the use overtime and grant funded personnel internally, and outsourcing analysis on property crimes externally; SLED expects to reduce the DNA case backlog by the end of the award period. Funding on this award will allow us to analyze 400 cases using overtime; and once trained, the analysts funded by this award will have access to overtime funds requested on this award and will work cases with federally funded supplies. Additionally, we anticipate outsourcing approximately 395 cases using these funds.

This agency also expects to work at least 10,755 DNA database samples using Federal funding for amplification kits.

No backlog of offender samples exists in the SLED DNA Database department; however 2010 statistics show a slightly higher number of offender samples analyzed than were received. This is a reflection of the completion of analysis of samples received in late 2009 during early 2010.

Twenty one analysts will attend continuing education events.

FY11 Recipient Name: South Dakota Office of the Attorney General
Award Number: 2011-DN-BX-K510
Award Amount: $200,000
Abstract: The South Dakota Forensic Laboratory (SDFL) is the only public laboratory in South Dakota capable of forensic DNA testing. With NIJ funding and authorization from the South Dakota Attorney General, the SDFL hired one additional employee to conduct serology screening. The new employee completed his serology training in spring 2011. With previous NIJ funding, the SDFL DNA examiners have been able to: 1) maintain and support the additional personnel that have increased the output of completed cases; and 2) operate at a higher efficiency by not sharing/waiting for equipment. The South Dakota Forensic Laboratory has enjoyed a 30-90 day turnaround time on DNA cases for several years now. This has largely been accomplished through the utilization of NIJ funding. This funding will allow us to continue and hopefully lower that turnaround time.

Additionally, a project objective is to continue offender DNA database sample analysis at an accredited fee-for-service (vendor) laboratory. This arrangement is the most cost effective and efficient process for the SDFL and NIJ. Currently we have 1250 samples awaiting analysis under FY2009 offender backlog funds and have FY2010 Convicted Offender and/or Arrestee DNA Backlog Reduction Program grant funds to pay for approximately 2330 more samples. We anticipate receiving (and shipping shortly thereafter) the samples by October 31, 2011. We anticipate receiving approximately 7000 samples between October 1, 2011 and March 31, 2013. Approximately 350 QC samples would be needed for a total of 7350 offender and QC samples. Based on previous experience with our current vendor lab, we would anticipate a reporting rate of between 500-1000 samples per month.

Goal #1 – With NIJ funding, the SDFL will continue general casework capacity.
- Objective #1 – send 4 DNA examiners to continuing education training.
- Objective #2 – purchase DNA supplies needed to analyze evidence for DNA and enter all eligible DNA profiles into CODIS.

Goal #2 – Continue purchasing DNA database collection kits for qualifying arrested felons and enter those profiles into CODIS.
- Objective #1 – purchase DNA database collection kits so all arrested felony offenders' DNA can be submitted to CODIS per South Dakota state statute.

Goal #3 – Continue out-source analysis of DNA database samples and enter the offender profiles into CODIS.

Objective #1 – outsource analysis of DNA database samples.
Objective #2 – conduct required site visit to vendor laboratory.

The laboratory information management system will adequately track progress on our proposed casework goals. The offender database data collection (samples tested and hits received) is ongoing and is made through a combination of a spreadsheet listing the samples that were shipped for testing, which of those have had results reported, and the date the profile data was entered in CODIS as well as the CODIS Match Manager software showing the hits (both in-state and inter-state) for the samples that were tested. Once the funding is received, the plan will be to begin expending those funds after our remaining funds from our previous (FY09 and FY10) awards (casework and offender) are expended.

FY11 Recipient Name: Tennessee Bureau of Investigations
Award Number: 2011-DN-BX-K459
Award Amount: $2,346,924
Abstract: The Tennessee Bureau of Investigation, Forensic Services Division is the agency that is responsible for analyzing evidentiary material associated with criminal investigations for all state and local law enforcement agencies within the state of Tennessee. The TBI Forensic Services Division is composed of three crime laboratories located at headquarters in Nashville and two regional laboratories in Knoxville and Memphis. The TBI is an approved NDIS participating laboratory, which allows for the upload of acceptable state offender DNA profiles into the FBI CODIS database. In addition, the TBI also collects samples from all convicted felons, registered sex offenders and individuals arrested for certain violent felony offenses.

The TBI is facing continuing budgetary constraints, which affect not only the ability to analyze casework, but also to analyze all convicted felon, sex offender registry and arrestee samples collected across the state. Funding from this award will be used for the following goals:

1. Maintain or decrease the current backlog of casework samples through analyst overtime and purchasing supplies.
2. Maintain the employment of contracted employees in each of the state laboratories, used for the screening of evidence and also aid in, or conduct, validations of new techniques or tests to allow analysts to concentrate on casework.
3. Provide the required continuing education for each analyst through travel to conferences, workshops and symposiums.
4. Continue to maintain current instrumentation by way of maintenance contracts. Also maintain the existing document control system and video conference system purchased under the no-suspect grant (2003).
5. Reduce the anticipated CODIS backlog by continuing to outsource both convicted offender and arrestee samples to Orchid Cellmark Dallas, a previously selected vendor

laboratory, and provide overtime funds for the in-house review of profiles prior to submission to NDIS.

The TBI can expect to maintain our current turnaround time of approximately 60 days, while seeing an increase in the number of DNA samples worked per analyst per month. The current number of samples worked per analyst per month is 78. The TBI also expects to be able to outsource 16,000 Convicted Offender and 16,000 Arrestee samples for processing, with at least 20,000 reviewed using overtime funds prior to upload to NDIS.

FY11 Recipient Name: City of Austin (TX)
Award Number: 2011-DN-BX-K409
Award Amount: $240,532
Abstract: The City of Austin is a home-rule municipality situated in Travis, Williamson, and Hays Counties of Texas. The City of Austin Police Department Forensic Science Division Crime Laboratory provides forensic and investigative services to over 777,953 persons residing within 296 square miles.

In 2004, the city opened a state-of-the-art forensic facility and in 2005, received ASCLD/LAB Legacy Accreditation in the areas of biology, toxicology, controlled substances, firearms, latent print, and crime scene. In April 2010, the APD Crime Lab underwent successful ASCLD/LAB Legacy and FBI DNA external audits. The laboratory is preparing for ASCLD/LAB ISO accreditation, which is estimated to be complete in 2012.

With this application, the City of Austin requests $240,532 in grant funding from the U.S. Department of Justice, Office of Justice Programs, National Institute of Justice FY 2010 Forensic DNA Backlog Reduction Program for a proposed project period of October 1, 2011 – March 31, 2013. The goals of this program are to reduce DNA casework backlogs, to improve the throughput of the DNA Section, and to provide required continuing education for existing city-funded forensic DNA analysts. If funding is awarded, the program anticipates improvements in the APD Crime Lab DNA Section by purposing funds for overtime, personnel, supplies, and training. The City of Austin requests grant funding in the amount of $112,731 to allow existing laboratory employees to work on an overtime basis; $48,701 to continue the grant-funded salary of an evidence technician; $70,000 to purchase essential supplies; and, $9,100 to send the five DNA Section laboratory analysts to training.

The impact of funding from the National Institute of Justice would be significant and would include: a reduction in DNA casework backlogs by 275 cases; a 10% increase in DNA Section throughput; and, the completion of required training for all DNA Section analysts.

FY11 Recipient Name: City of Houston Police Department (TX)
Award Number: 2011-DN-BX-K427
Award Amount: $1,532,118
Abstract: The Houston Police Department Crime Lab is responsible for analyzing evidential material associated with criminal investigations for the Houston Police Department. The Houston Police Department is the largest police department in the state of Texas. The Houston PD Crime Lab is primarily responsible for analyzing violent offenses and a much smaller number of non-violent cases such as burglaries using DNA technology.

The HPD Crime Lab is facing budgetary constraints including hiring freezes and furloughs and is facing potential new DNA legislation requiring that all Sexual Assault Kits be tested. The Federal funding from this award will be used for the following goals:

1. Reducing the forensic DNA case backlog through outsourcing.
2. Reducing the number of sexual assault kits stored in the Property Room and Crime Lab untested.

The HPD Crime Lab can expect to reduce the DNA case backlog by at least 441 cases through outsourcing by the end of the award period. The HPD Crime Lab also expects to work at least 3,500 sexual assault kits with federal funding by hiring contract screeners. The turnaround time is expected to be reduced by 25% pending workload increases or decreases.

FY11 Recipient Name: County of Bexar (TX)
Award Number: 2011-DN-BX-K412
Award Amount: $335,751
Abstract: As part of our ongoing effort to advance the workload capacity and reduce the backlog of pending forensic Serology/DNA casework at the Bexar County Criminal Investigation Laboratory (BCCIL), an ASCLD/LAB accredited laboratory since 1998 (ISO 17025 accredited as of January 2009), and to better serve our community, we propose continuing the development and implementation of a DNA backlog reduction program through the purchase, validation, and evaluation of an ABI 3500 eight (8) Genetic Analyzer for Human Identification with associated GeneMapper ID-X software, foster + freeman ML-2 alternative light sources), through digitizing paper case files for incorporation into the new LIMS (purchased through award 2009-DN-BX-K095), the purchase of the QA/QC module for the new LIMS, and new technologies for handling digital documents. The new equipment and software will enhance the efficiency of total case request turnover and increase the output capacity of Serology/DNA case samples to meet our primary goal of reducing the amount of time a sample requires for genetic analysis. Currently, there are about 13 forensic Serology/DNA cases that require examination for the presence of biological fluids (blood, semen and saliva) and/or DNA

analysis. The resulting DNA casework backlog represents approximately a 1 month waiting period for our client law enforcement agencies.

We will accomplish this project goal by purchasing, validating, evaluating, and, if sufficient for our requirements, implementing an ABI 3500 Genetic Analyzer system into our casework workflow. Although this will be a Sole Source purchase, the most cost effective methods, as required by authorized Bexar County policy, will be used to purchase all necessary equipment and software.

As an additional goal for the project, due to local budget cuts, grant funds will assist the BCCIL in meeting accreditation standards as outlined in the DNA Audit Document for the Continuing Education (CE) of DNA analysts. We will accomplish this goal by sending staff to sufficient local and national training in required forensic DNA related areas to satisfy the requirements of the current version of the Quality Assurance Standards for Forensic DNA Testing Laboratories.

The Assistant Crime Laboratory Director (ACLD) will manage and monitor this capacity enhancement program. The ACLD, acting as the Grant Manager and Point of Contact, will compile and send all necessary progress reports to the appropriate agencies.

FY11 Recipient Name: Dallas County (TX)
Award Number: 2011-DN-BX-K415
Award Amount: $849,881
Abstract: The project will address the need for improved DNA testing capabilities in a local forensic DNA laboratory. The goal of the project is to increase testing capacity in both evidence screening and in DNA analysis. As a consequence of increased testing capacity it is expected that the turnaround time for testing will be reduced. As part of the project, two grant-funded analysts will be hired and trained to perform evidence screening and serological analysis. This will both increase the laboratory's testing capacity in evidence screening and allow several regular staff members to complete training in DNA analysis. Additionally, instruments will be purchased and validated for DNA casework: a capillary electrophoresis instrument for the high-throughput analysis of amplified DNA and a robotic liquid handling platform for the extraction of samples and the setup of quantitation and amplification reactions. These instruments will alleviate process bottlenecks, and will automate certain processes that are currently done manually by DNA analysts. By both increasing the number of analysts performing DNA testing, and by increasing the instrumental capacity of the laboratory, it is expected that the overall testing capacity of the laboratory will be increased appreciably. The expected results of this project are to reduce the backlog of cases awaiting DNA testing by 10% and to reduce the turnaround time for DNA testing by 10%.

FY11 Recipient Name: Harris County (TX)
Award Number: 2011-DN-BX-K422
Award Amount: $690,850
Abstract: The goal of this proposed project is to reduce our current case turnaround time of 60 days and to improve case documentation. The implementation of this program will enhance the efficiency, capability, and capacity of the HCIFS Genetics laboratory and improve the laboratory's ability to assist in criminal and death investigations.

The Harris County Institute of Forensic Sciences (HCIFS) Forensic Genetics Laboratory had approximately 500 cases in process, roughly two months of incoming casework, as of December 31, 2010. The eradication of our case backlog to only two months of current cases was a direct result of previous NIJ funding which increased our capacity to process cases. With funds requested through this grant, we plan to continue to meet casework demands and to decrease turnaround time and improve efficiency. Additionally, we will continue the implementation of processes begun in the current project year that will improve our efficiency and increase the number of samples that can be completed per analyst. We estimate we will be able to analyze 25% more DNA cases within the upcoming grant period than is possible currently, while reducing our 55 – 60 day turnaround time to 45 days.

To maintain and to increase our capacity, we plan to continue to employ contract personnel, add additional contract personnel as needed, and to purchase DNA testing supplies not provided by our in-house budget. Funds from this award will also be used to send DNA Analysts to annual scientific meetings and to purchase equipment.

FY11 Recipient Name: State of Texas
Award Number: 2011-DN-BX-K407
Award Amount: $3,304,246
Abstract: The Texas Department of Public Safety is the state law enforcement agency in Texas, and it operates a system of Crime Laboratories under the Law Enforcement Support Division. Of the thirteen ASCLD/LAB accredited forensic laboratories in the system, eight laboratories perform forensic DNA testing. This work is provided to city, county, state, and federal law enforcement agencies, at no cost to the outside agencies. Texas DPS also operate the state's offender DNA testing laboratory at its Austin location.

The FY 2011 Forensic DNA and DNA Database Backlog Reduction project will have the objective of using federal funds to augment the state's program of DNA analysis on criminal evidence and offender samples, with the objective of both reducing backlogs as well as to shorten the time it takes to complete forensic DNA cases. With the federal funds, twelve persons will be employed, most of whom will screen forensic DNA cases, then existing trained DNA analysts will work overtime to enhance the production of forensic DNA casework. It is expected that 2,000 forensic DNA cases will be analyzed, in-house, along with 40,000 offender samples

being examined in-house by CODIS Analysts, seven of whom will work overtime on this project.

In addition, funds will be used to provide continuing education to fifty of the Department's one hundred DNA analysts in both the forensic DNA labs as well as the offender database lab. This training will meet requirements of the FBI quality assurance requirements.

Capacity of the laboratories will be enhanced by the acquisition of new equipment which is listed in the Program Narrative.

FY11 Recipient Name: Tarrant County (TX)
Award Number: 2011-DN-BX-K406
Award Amount: $314,879
Abstract: The Tarrant County Medical Examiner's (TCME) Office is a regional medical examiner's facility located in Fort Worth, Texas that provides services to Tarrant, Parker, Denton, and Johnson Counties. These counties represent a core population of approximately 2.5 million citizens. The Medical Examiner's Office operates a multi-discipline crime laboratory that offers Forensic Biology and DNA analysis. The Forensic Biology/DNA laboratory not only serves the Medical Examiner, District Attorney, and other Tarrant County agencies, but also provides analysis, on a fee for service basis, to law enforcement agencies throughout the four counties served, as well as many other agencies throughout North Central Texas and the rest of the United States. In 2010, a total of 96 agencies submitted requests to the Forensic Biology/DNA laboratory resulting in a total of 814 submissions for evidence screening and/or DNA analysis. Based on data reported to the Department of Public Safety Uniform Crime Reporting Bureau indicated that the percentage of the Texas UCR Part 1 Violent Crimes represented by the core counties (Tarrant, Johnson, Denton, and Parker) was 4.48% in 2009.

The National Institute of Justice (NIJ) has allocated $7,288,859 for the state of Texas and the TCME Crime Laboratory has been offered $314,879 as its share of the formula grant. The Federal funding from this award will be used for the following goals:

1. Increase capacity, decrease the DNA backlog, and decrease the DNA case turnaround time by purchasing, implementing, and supporting a commercial LIMS system. Also, to purchase software and equipment to allow analysts to analyze DNA data, perform technical reviews, and access LIMS from their personal workstation. Equipment will be purchased to expedite evidence examination by implementing an electronic procedure.
2. Providing the required continuing education for three analysts.

The TCME expects that a new LIMS system will have a major positive effect on the TCME Crime Laboratory's efforts to decrease the DNA case turnaround and the backlog as well as the increase the lab's capacity. It was determined that a new LIMS system will save each analyst

approximately 10 hours a month. Also, introducing an automated process for evidence examination and allowing analysts to work and print from anywhere in the laboratory will help to accomplish the laboratory's goals. Just with the new LIMS system, GMIDX licenses, and new equipment for the evidence examination, the TCME DNA laboratory is expecting to reduce the case turnaround time by approximately 10% and increase the number of samples per analyst per month by 10%.

FY11 Recipient Name: University of North Texas Health Science Center at Fort Worth
Award Number: 2011-DN-BX-K408
Award Amount: $654,539
Abstract: The University of North Texas Center for Human Identification (UNTCHI) is a forensic laboratory accredited under the requirements of ISO 17025 and the DNA National Standards for DNA Analysis by Forensic Quality Services - International. UNTCHI provides serological testing, STR (autosomal and Y) and mtDNA testing to law enforcement agencies throughout the State of Texas.

With funding provided through NIJ, UNTCHI has been responsible for screening and analyzing backlogged criminal forensic casework from the City of Fort Worth and other law enforcement agencies throughout the State of Texas. Approximately 58% of the cases submitted to UNTCHI come from counties outside of Fort Worth/Tarrant County. All DNA testing is performed at no cost to Texas law enforcement agencies. UNTCHI also functions as an adjunct laboratory for the Texas Department of Public Safety (TXDPS) Crime Laboratory providing the analysis of casework samples requiring traditional STR testing as well as mtDNA, Y STR analysis, MiniFiler™, and cases requiring familial/kinship analysis.

The federal funding provided through this award will be used to accomplish the following goals:

- Improve the throughput of forensic casework.
- Reduce the turn-around times for forensic casework.
- Reduce the number of backlogged forensic DNA cases.

In collaboration with the TXDPS, UNTCHI is eligible for $654,539.00 of the available funding allotted to the State of Texas. UNTCHI does not receive any State funds for conducting DNA Forensic Casework testing. Funding provided through this program will allow UNTCHI to pay the salaries of four forensic analysts including the Technical Leader, one forensic technologist and 50% of an evidence custodian's salary. Funding will also be utilized to provide continuing education for analysts and the purchase of reagents and supplies required to analyze forensic cases submitted to UNTCHI.

With continued process improvements, we anticipate that these funds will allow UNTCHI to eliminate the current DNA casework backlog as well as screen and complete the DNA analysis

on a minimum of 756 cases. By the end of the award period each analyst will complete an average of 12 cases per month. UNTCHI expects to complete approximately 2,500 DNA casework samples with this funding. This translates to 40 samples per analyst per month with an anticipated turn-around time of 51 days or less per case. All eligible forensic DNA profiles are currently entered into CODIS (SDIS) by the TXDPS and uploaded into NDIS where applicable.

FY11 Recipient Name: Utah Department of Public Safety
Award Number: 2011-DN-BX-K455
Award Amount: $417,873
Abstract: The mission of the Utah Department of Public Safety - Bureau of Forensic Services is to provide a safe and secure environment for the citizens of Utah through the application of forensic science. The goal of the forensic biology section is to use DNA technology to help agencies achieve case closure. The laboratory provides accurate and sound science during forensic serology and DNA analysis, while striving to maintain a rapid response to analysis requests.

The Utah Bureau of Forensic Services (UBFS) maintains three laboratories throughout the state of Utah: Northern, Southern and Central laboratories. The forensic biology section is located in the Central laboratory and is responsible for analyzing and processing all forensic DNA samples as well as storing, processing, and maintaining all forensic DNA database samples. The UBFS continues to see an increase in case submissions for DNA analysis as well as an increase in the number of samples per case and a continual demand for timely results and reports. Additionally, legislation passed in Utah this year requires that all felony arrestees be included in the CODIS database. The Federal funding from this award will be used for the following goals:

1. Reduce the forensic DNA case backlog and decrease case turnaround times by retaining on staff the Forensic Scientist hired with 2010 award funds.
2. Increase the capacity of the Utah Bureau of Forensic Services by purchasing supplies, equipment and service agreements.
3. Provide the required continuing education by funding the training opportunities for DNA analysts.
4. Decrease/maintain CODIS backlog through outsourcing of offender samples.

UBFS anticipates reducing our DNA case backlog by 150 cases by the end of the award period. The laboratory also expects to process at least 5,599 database samples using Federal funding. Turnaround time is expected to decrease to 45 days or less, while sample throughput for serology/DNA will increase by 10%.

FY11 Recipient Name: Virginia Department of Forensic Science
Award Number: 2011-DN-BX-K421
Award Amount: $1,447,358
Abstract: The Virginia Department of Forensic Science (DFS), an Executive Branch agency, is exclusively responsible for analyzing evidential material associated with criminal investigations for all state and local law enforcement agencies and medical examiners within the Commonwealth of Virginia. DFS maintains four regional laboratories - the Central Laboratory in Richmond, the Eastern Laboratory in Norfolk, the Western Laboratory in Roanoke, and the Northern Laboratory in Manassas. As required by statute, DFS is also solely responsible for receiving and analyzing DNA samples collected from Virginia's convicted felons and certain arrestees for inclusion, storage and maintenance in the Virginia DNA data bank. Beginning July 1, 2011, state law will also require DNA sample collection from individuals convicted of certain misdemeanor sex offenses. Most activities related to the DNA data bank are managed by the DNA Database Unit, which is located at the Department's Central Laboratory.

DFS is requesting funding under this program to reduce the forensic DNA case backlog and for capacity enhancement in its four Forensic Biology Sections. DFS is not requesting funding at this time for the DNA Database Unit, as there is currently no backlog of data bank samples. The goals of this grant project are as follows:

1. To reduce the forensic DNA case backlog through forensic scientist overtime and purchase of supplies,
2. To increase the capacity of the laboratory system by purchasing equipment, such as a DNA extraction robot, and expert systems software and by hiring three fully-qualified forensic scientists and one full-time forensic laboratory specialist, and
3. To provide the required continuing education for each forensic scientist.

DFS expects to reduce the forensic case backlog by at least 432 cases by the end of the grant period. DFS also projects that the increased capacity gained through the grant funded examiners will result in the completion of approximately 432 additional cases. It is also anticipated that a change in robotic platforms will decrease current turnaround times. The expert system software will be used by the casework examiner as a tool in DNA mixture analysis, which is also expected to have a positive effect on the Forensic Biology Section's turnaround time.

FY11 Recipient Name: Vermont Department of Public Safety
Award Number: 2011-DN-BX-K515
Award Amount: $200,000
Abstract: Ensuring an efficient processing, DNA testing and upload of appropriate samples to the DNA database, CODIS, is the goal of the biology/DNA section of the Vermont Forensic Laboratory (VFL). Previous NIJ grant programs have allowed the VFL to enhance casework

capacity through funding for an additional employee to assist in serology casework and to aid DNA analysts in determining and documenting DNA cases for CODIS eligibility and in the DNA database program by funding supplies to type convicted offender samples and to overtime for staff to review profiles prior to upload. Our goal is to continue to make progress in reducing our casework backlog by applying the grant funds from the 2011 DNA Backlog Reduction Program into areas which have had success, notably the continued use of additional personnel, overtime for existing staff and funding to allow the purchase of adequate supplies to conduct the necessary casework analyses. The additional individual hired under an NIJ grant will continue to assist in reducing the backlog of casework samples by performing serological analyses and contacting officers or prosecuting attorneys to screen the active from the non-active cases and to obtain needed information for CODIS eligibility documentation. Overtime money for serologists and DNA personnel will allow more time to process the backlog samples and in DNA to validate a new single amplification kit. We will also use the funding to allow us to purchase adequate supplies to continue to process a wide range of cases including property crime cases and to fund the contracts for maintenance of the capillary electrophoresis instrument, and for calibration of pipettes. Funding requested for the DNA database program will provide supplies for testing and validation of methods for use in the future that will enhance capacity by reducing extraction and sample handling time. This combination of efforts will assist our laboratory meet the needs of the Vermont Criminal Justice System.

Request for funding for the Duet punch is intended to speed the processing of Convicted Offender samples. Currently an analyst manually punches each sample. The Duet will make this a faster part of the process, which is currently one of the more significant time investments of the analyst. This will allow us to prepare plates of samples quickly for processing.
The repeater pipette will be used by the casework analysts to set up plates of samples. We have purchased a Genetic Analyzer 3500 and will be changing our work flow to move to large batching to ensure the most cost effective use of the instrument. The repeater pipette will allow more rapid processing of samples in a plate format.

FY11 Recipient Name: Washington State Patrol
Award Number: 2011-DN-BX-K513
Award Amount: $1,548,332
Abstract: The Washington State Patrol through the Crime Laboratory Division is responsible for analyzing evidential material associated with criminal investigations for all state and local law enforcement agencies and medical examiners within the state. Under state law (RCW 43.43.756) the Washington State Patrol Crime Laboratory Division (WSPCLD) is the established public provider of Forensic DNA services in Washington State . There are 5 casework DNA laboratories located throughout the state: Seattle, Tacoma, Marysville, Vancouver and Spokane. The CODIS database lab is also located in the same Seattle facility as the Crime Lab.

Despite an average increase in throughput of 14% in 2010 there is an ever increasing demand for more and faster DNA service with an average 20% increase in submissions at the end of 2010. Due to budgetary constraints there was a loss of 5 DNA analysts who resigned and their positions were not filled for a 12% decrease in DNA staffing. There were 2 DNA analysts on maternity leave which also reduced staffing levels. The backlog of cases has increased 16% in 2010 and is currently at 1,140 requests. The federal funding from this award will be used for the following goals:

1) Reducing the forensic case backlog thorough 1,500 hours of overtime funds.
2) Increasing the capacity of the laboratories for casework by purchasing new equipment (3500 CE instruments, laptops, a 9700 thermal cycler, microcentrifuges, a temperature monitor, vortexes and a UPS power supply) and by the continued hiring of the DNA IT employee to maintain and add new instruments and forensic scientist laptops into the state-wide DNA laboratory instrument network. This person would also work on the conversion of the DNA electronic forms from Excel to a database program to allow for more autofill features.
3) Increasing the capacity of the CODIS laboratory for database sample analysis by purchasing new equipment (3500xl CE instruments, DBS puncher, a workbench set and protective storage cabinets for CODIS submissions) and performing minor renovations on the CODIS submission storage area and the post-amplification room.
4) Providing the required continuing education for each analyst including the purchasing of the newest Forensic DNA text books for each laboratory.

The WSPCLD expects to reduce the backlog of DNA case requests by 200 before the end of the award period. The mean turnaround time is expected to be reduced to 90 days or less, and the analyst throughput in the casework sections is expected to increase 10%. The WSPCLD expects to reduce to 30 days the mean turnaround time from receipt of CODIS submission to upload and CODIS analyst throughput is expected to increase 10%.

FY11 Recipient Name: Wisconsin Department of Justice
Award Number: 2011-DN-BX-K514
Award Amount: $1,036,095
Abstract: Wisconsin State law requires the State Crime Laboratory to provide DNA forensic services to process evidence involving a potential felony charge. Reasonable projections of future case load combined with necessary hiring and training periods indicate that the DNA backlog will continue to grow. The increase in receipts plus the current inability of existing State Crime Laboratory resources to handle current case load indicate the compounding nature of the problem. At the present time almost all of the analyses are performed on cases with suspects and court dates/orders.

The department realizes that the DNA backlog cannot be eliminated in its entirety. No case is turned around immediately, and if every case were on the bench, some analysts would have nothing to do. The better approach is to target a manageable pending case load. The goal is to have every new case assigned to analysts within 60 days of receipt and completed within 30 days of assignment. This approach maximizes resources in that it attempts to match the number of staff with the expected case submissions.

The DOJ-LES is facing budgetary constraints and is facing new DNA database expansion legislation that is pending, if passed that will increase the number of DNA database samples it will have to analyze. The Federal funding from this award will be used for the following goals:

1. Reducing the forensic DNA case backlog through analyst overtime and purchasing supplies.
2. Reducing the DNA database sample backlog through analyst overtime, outsourcing and purchasing supplies.
3. Increasing the capacity of the laboratory by purchasing/replacing aging equipment (upgrade laptops, hardwire DNA labs, digital cameras, printers, scanners & label printers, an alternative light source, bench top centrifuges and desktop PC's), continue funding of three DNA technicians.
4. Providing the required continuing education/training for DNA analysts.

The DOJ-LES can expect to reduce the DNA case backlog by at least 380 cases by the end of the award period. The agency also expects to outsource at least 6926 DNA database samples (which includes 346 QC samples) using Federal funding. The turnaround time is expected to be reduced to 60 days or less, and the analyst throughput in the casework sections is expected to increase 10%.

FY11 Recipient Name: West Virginia State Police
Award Number: 2011-DN-BX-K449
Award Amount: $373,262
Abstract: The West Virginia State Police Forensic Laboratory (WVSPFL) is the agency that is responsible for analyzing evidential material associated with criminal investigations for all state and local enforcement agencies within the state of West Virginia. The WVSPFL is a centrally located laboratory in South Charleston, WV. The Code of West Virginia designates the WVSPFL as the agency responsible for maintaining DNA profiles from samples collected from all convicted felony and misdemeanor offenders in the state of West Virginia; The WVSPFL is the State designated CODIS Laboratory. The WVSPFL uses Marshall University Forensic Science Center for the analysis of DNA database samples.

The WVSPFL is facing budgetary constraints for the purchase of new equipment, funding overtime for analysts, hiring more technicians to assist with casework and QC of database samples, and funding continued education for its DNA analysts. The Federal funding from this award will be used for the following goals:

1- Reducing the forensic DNA case backlog through analyst overtime.
2- Reducing the DNA database sample backlog for upload through analyst overtime.
3- Increasing the capacity of the laboratory by purchasing equipment (upgrading a genetic analyzer to higher capacity, a thermal cycler, two DNA extraction robots, a microscope, a refrigerator, desktops, tube writer), by hiring two evidence technicians, and by acquiring a quality assurance/management software.
4- Reducing contamination issues and therefore avoiding repeat analysis by purchasing equipment (stools, sterilizer, autoclave, and UV crosslinker). By reducing repeat analysis, analysts would increase their case output.
5-Providing the required continuing education for four analysts by attendance to a conference and workshops.

The WVSPFL can expect to reduce the DNA case backlog by at least 15 cases by the end of the award period. The agency also expects to review and upload at least 1,000 DNA database samples (which includes 100 QC samples) using Federal funding. The turnaround time is expected to be reduced to 380 days or less, and the analyst throughput in the casework sections is expected to increase by 30%

FY11 Recipient Name: Wyoming Office of the Attorney General
Award Number: 2011-DN-BX-K502
Award Amount: $200,000
Abstract: The Wyoming State Crime laboratory (WSCL) is the agency that is responsible for analyzing evidential material associated with criminal investigations for all state and local law enforcement agencies and medical examiners within the state of Wyoming. Wyoming State Statute designates the WSCL as the agency responsible for conducting DNA analysis on DNA samples collected from all convicted felony offenders and qualifying sex offenders in the State of Wyoming. The WSCL is responsible for storing and maintaining the resultant profiles in the Wyoming State DNA Database.

The WSCL Biology Unit is in the process of validating new methodologies for both DNA casework and Offender sample analysis. Offender samples will be processed using Identifiler plus chemistry directly amplified from sample punches without extraction. The DNA casework laboratory is planning on moving to single amplification Identifler Plus chemistry as well, from our current two kit Profiler / Cofiler chemistry now in use. The Federal funding from this award will be used for projects with the following goals:

1. Reducing or maintaining the current forensic DNA case backlog through analyst overtime and supply purchases while allowing for both the new methodologies to be validated and the staff to be trained on the new methods.
2. Reducing the DNA database sample backlog through analyst overtime and supply purchases while allowing for both the new methodologies to be validated and the staff to be trained on the new methods.
3. Increasing the capacity of the laboratory by purchasing supplies for validation, funding analyst overtime for validation purposes and by hiring on e contract technician to assist analysts in both the casework and database laboratories.
4. Providing education opportunities to develop a depth of staff necessary to ensure continued laboratory operation in the case of personnel losses or turnover.
5. Providing education opportunities to develop a depth of staff necessary to ensure continued laboratory operation in the case of personnel losses or turnover.

The WSCL can expect to reduce or maintain the DNA case backlog by the end of the award period while still allowing completion of the proposed method validation. The agency also expects to work at least 1632 offender samples and 90 cases with monies from this solicitation. The WSCL expects to enhance the efficiency of the DNA laboratory by validating the single amplification methodologies.