

Overview

• Why do social science research on forensics issues?

Highlights of past successes

• Projects on the horizon....

Role of Social Science Research

- In previous administration, the President's DNA Initiative focused over a billion dollars on improving the use of DNA in the criminal justice system.
- Initiative provided funding, training, and assistance to ensure that DNA technology reaches its full potential to solve crime, protect the innocent, and identify missing persons.
- Lack of research on the impact of these efforts triggered NIJ to begin looking at these questions more closely.
- Appropriations language changed in FY 2006 to allow us to examine all forensics.

Types of Questions We Ask

- So What?
- Are we "doing more justice" as a result of advances in forensics?
 - Catching more bad guys/girls and not prosecuting the innocent
- Is forensic evidence being utilized as effectively as possible?
- What are the potential implications of new policies and procedures?
- What is the impact on law enforcement, courts, and corrections of forensic advances?

Challenges

- Social scientists and forensic scientists do not know much about each others fields
- Advancing a new area of research takes time
- Politically charged topic
- Typical researcher versus practitioner struggles

A look at past successes

- In FY05, it all started with:
 - DNA Property Crime Field Experiment
 - Federal Casework Evaluation
- In FY06, we expanded to other forensics:
 - Role and Impact of Forensic Evidence in Criminal Justice Processes
 - And many others....

NIJ's Property Crime Experiment

- Five Sites Los Angeles, Orange County,
 Denver, Phoenix, Topeka
- Compared:
 - Investigation + DNA
 - Investigation only
- Track evidence from crime scene to prosecution
- Evaluation conducted by the Urban Institute

Natural Variation Among Sites

- Use of Demonstration Funds
 - Lab equipment and/or personnel
 - Law enforcement expenses
 - Prosecutor expenses
- Targeted Crimes
 - Residential burglary,
 - Commercial burglary, and/or
 - Theft from auto
- Who Collects the Samples
 - Responding officer
 - Crime scene technician/specialists
 - Combination

Results (2-2-2-3)

- When DNA evidence was analyzed:
 - More than **twice** as many suspects identified
 - Twice as many suspects arrested
 - More than **twice** as many cases accepted for prosecution
- Suspects identified using DNA evidence had three times as many prior felony arrests and convictions

Lessons Learned

• Change takes time, especially in government agencies

Must have clear lines of communication

Training must be repeated and reinforced

Evaluation of Federal Casework Programs

- Primary goal of the evaluation was to determine the extent to which goals and objectives from Federal Casework Programs (backlog reduction, no-suspect) were met
- Data sources:
 - Grant files
 - 3 surveys law enforcement, crime laboratories, prosecutors
 - 8 case studies

Summary: Factors Contributing to Backlog

- Increase in number of cases submitted
- Increase in number of samples per case
- Increase in submission of samples from non-violent crimes
- Implementation of more rigorous QA/QC procedures
- Training/learning curve new examiners
- Validation of new equipment
- Contextual Factors move new facilities, CO legislation, etc.

Summary: Lessons Learned

- Substantial increase in number of hits
- Backlog of violent crime appears to be leveling off somewhat and non-violent increasing
- Communication/Collaboration between labs and user agencies has significantly improved over the last several years
- There have been notable increases in lab capacity and infrastructure around DNA screening, analysis, and reporting

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Role and Impact of Forensic Evidence Projects

- It has been 25 years since there was an assessment of the effects of scientific evidence on police and courts
- An estimated \$1.5 billion is spent annually on forensic services but question remains: What are the uses and effects?
- NIJ solicited proposals in 2006 to assess the role and impact of forensic evidence on criminal justice processes

Justice

Two Parallel Projects

- Joe Peterson, California State LA
 - Los Angeles County, CA
 - Indianapolis, IN
 - State of Indiana and local jurisdictions of South Bend, Ft. Wayne, and Evansville
- Tom McEwen, Institute for Law and Justice
 - Denver, CO
 - San Diego, CA

Forensic Evidence Projects

- Specific goals of the projects:
 - estimate the percentage of crime scenes from which each type of forensic evidence is collected
 - describe and catalog the kinds of evidence collected at crime scenes
 - track the attrition of forensic evidence from crime scenes through laboratory analyses, and then through subsequent criminal justice processes
 - identify which forms of evidence contribute most frequently (relative to their availability) to successful case outcomes

Justice

Research Methods

- Prospective analysis of official record data tracking forensic evidence from the crime scene all the way through prosecution
 - Police incident, crime scene, investigator,
 laboratory, prosecutor, and court files reviewed
- Following many types of forensic evidence (excluding drug cases)
- Examining many types of major crimes

Implications for Policy and Practice

- Is 'quality of evidence' a useful measure in guiding collection/analysis of evidence?
- Is forensic evidence important in initiating and sustaining cases throughout criminal justice process?
- Does inclusion of forensic evidence increase efficiency of case adjudication?
- Do criminal justice professionals have adequate knowledge of forensic evidence?

Justice NIJ

What's on the horizon?

- Motor Vehicle Theft DNA Demonstration Program
- Study of policies and implications of collecting DNA from arrestees
- Evaluations of the DNA Unit Efficiency Program
- Hopefully, a more expansive social science research in forensics solicitation

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Motor Vehicle Theft DNA Demonstration

- Beginning October 2009
- Goal is to assess whether DNA forensics is costeffective in motor vehicle theft investigations; special emphasis on car rings and more organized forms of motor vehicle theft
- Two sites:
 - New York City (Queens and Brooklyn)
 - Dallas, TX
- Evaluation being conducted by The Urban Institute

Collecting DNA from Arrestees

- Study to begin January 2010
- Grantee is The Urban Institute
- Goal is to examine the policies, practices, and implications of expanding state and federal DNA databases to include arrestees
- Proposed Research Methods:
 - Review of laws, regulations, and case law
 - Survey of states with arrestee DNA laws about implementation experience
 - Descriptive statistics about arrestees in each state
 - Site visits to a sample of the states to provide more context

Evaluations of DNA Unit Efficiency Program

- FY 2008 projects being evaluated by The Urban Institute
- FY 2009 projects being evaluated by RTI International
- Requirement added that projects must be willing to cooperate with the evaluation
- Goal is to get beyond individual project performance measures to determine impact, best practices, and lessons learned

Next steps

- Level of funding for social science research depends somewhat on the amount of funding in appropriations
- Range of topics depends on appropriations language
- To the extent possible, NIJ will likely try to be as expansive as possible in this area in the range of topics to be examined

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Questions?

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