



National Institute of Justice



Briefing to Global Advisory Committee
October 13, 2011

Information Sharing Activities at the National Institute of Justice

NIJ's information sharing activities focus on helping practitioners, especially practitioners at the scene, make informed, timely decisions. NIJ-funded research builds on the Global Reference Architecture and the National Information Exchange Model (NIEM). Some of our current activities include:

Analysis of the Criminal Justice System's Data Architecture — In coordination with BJA and BJS, NIJ posted a solicitation that sought applications to conduct a comprehensive analysis of the elements of the criminal justice system's data architecture that focuses on optimizing the use and flow of information through the system from beginning to end. This research will build on both the Global Reference Architecture (GRA) and the National Information Exchange Model (NIEM). The solicitation closed March 2011 and an award was made to SEARCH Group Inc. to conduct the research in September 2011. This is anticipated to be a 15-month effort.

Predictive Policing Demonstration and Evaluation Program-Phase II, Implementation— NIJ made two awards to police departments and their research partners in September 2011 to conduct pilots to evaluate the concept of predictive policing. Overall, this is expected to be a three-year effort. RAND Corporation is the independent evaluator.

The Chicago Police Department (CPD) received an award to implement a pilot that in part will evaluate the ability of modified pattern-matching software currently used for medical diagnostic purposes to predict crime patterns. It will also evaluate the efficacy of a software tool that quantifies and maps gang activity to predict emerging areas of gang conflict. The pilot will be evaluated in terms of accuracy of prediction, process, and impact, using randomized, retrospective, and quasi-experimental studies. CPD's research partner is the Illinois Institute of Technology (IIT's).

The Shreveport (LA) Police Department received an award to implement a pilot that will use a randomized experimental design utilizing experimental and control groups involving six of the highest crime policing districts in Shreveport. This pilot will evaluate the "broken windows" theory of policing in an operational setting and employ a predictive model using leading indicators related to that theory such as juvenile complaints, loud music, disorderly persons, suspicious activity, loitering, disputes, and prowlers. The efficacy of the pilot will be measured in terms of its ability to reduce tactical crimes such as shootings, robbery, burglary, auto break-ins, outside residential thefts, outside business thefts, and auto thefts.

License Plate Reader (LPR) – Practice, Pilot, and Standards — NIJ continues to fund a number of related projects to enhance the use of LPR technology. These include:

- With the IACP, NIJ is developing an LPR policy and operational guide to support replication and customization of LPR implementation across law enforcement agencies. The draft document is currently in IACP review.
- With the San Diego, CA Automated Regional Justice Information System (ARJIS), NIJ implemented an LPR regional server pilot, which includes web services systems integration into their officer alerting and de-confliction applications. This pilot includes use of the LPRD software developed the U.S. Navy Space and Naval Warfare System's Center with NIJ funding. LPRD, which is NIEM compliant, enables law enforcement agencies to set up a Web portal where LPR data can be aggregated and shared among authorized agencies using different LPR systems. This software is made available to law enforcement agencies free of charge.
- With IACP, NIJ is developing a LPR standard. In addition to representatives from state and local law enforcement agencies, the special technical committee writing the standard includes representatives from the DEA and from Customs and Border Protection (CBP).

Handheld Computing Devices — NIJ is funding research that will improve the ability of mobile (handheld) computing devices to process spatial and nonspatial data to deliver needed information to the officer at the scene. Current projects include:

- The Redlands (CA) Police Department is developing an iPhone-based crime mapping application to assist law enforcement officers with understanding spatial and temporal crime patterns. User interface and backend database functionality has been completed. Alpha version software testing of two implementing applications (AP) called NearMe and Field Interview are continuing. For the upcoming year, the Redlands Police Department plans to finalize AP development and to deploy and evaluate their use and effectiveness
- The University of Nebraska and Lincoln (NE) Police Department are evaluating location-based services for police patrols using GPS-enabled cell phones and laptops. An enabling AP called Police Patrol (P3i) has been developed and deployed to 75 officers on five types of mobile devices (smart phones, tablets, etc) and three different operating systems. In the upcoming year, an impact analysis as well as an evaluation of the level of acceptance of this new technology among officers will be conducted.

NIJ Points of Contact: Steve Schuetz, Physical Scientist – Information and Sensor Technologies Division / Steve.Schuetz@usdoj.gov