



Program Evaluation

Summary

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CLEAR offers enhanced police efficiencies, increased accountability

By Jessica Ashley

The Citizen and Law Enforcement Analysis and Reporting (CLEAR) project, a state-of-the-art information technology system enabling Chicago police to quickly share crime information, promises substantial crime-fighting benefits, according to a project status report released in February 2005.

The Chicago Community Policing Evaluation Consortium, a team of researchers from the University of Illinois at Chicago and Northwestern University, prepared the status report on the Chicago Police Department CLEAR project. The project was supported by a federal Anti-Drug Abuse Act grant administered by the Authority. The report examined the CLEAR system's

impact on police management, the department, and crime-fighting strategies, as well as on the status of the expanded statewide Illinois Citizen and Law Enforcement Analysis and Reporting system, also known as I-CLEAR.

CLEAR system design and benefits

The Chicago Police Department (CPD) has been developing CLEAR in partnership with Oracle Corporation and the Police Executive Research Forum. CLEAR extracts data stored in CPD's central data warehouse, which contains its interrelated applications. The four key applications are automated incident reporting, automated arrest, personnel suite (a human resources component), and e-Track (an evidence collection tool). Each application underwent a five-step process of conceptual development, joint application development, a design/build stage, training, and implementation. By the end of 2004, all four applications had progressed significantly toward department-wide use.

Automated incident reporting application

The automated incident reporting application enables patrol officers to complete case reports at workstations in any CPD facility. In the future, officers will be able to use portable data terminals for this purpose. By the end of 2004, the automated incident reporting application was operating in several district facilities, but the use of wireless portable data terminals was limited to one pilot district. Due to the need to transmit large amounts of information via complex computer system interactions, implementation of the wireless portion of this application has been more difficult.



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Table 1
Frequency of CLEAR system component use by field officers and administrative personnel*

CLEAR system components	Field officers			Administrative personnel		
	Every day	Several times per week	Total	Every day	Several times per week	Total
Data warehouse	60%	22%	82%	36%	28%	63%
e-Track	22%	33%	55%	19%	13%	32%
Portable Data Terminals	71%	6%	77%	30%	10%	40%
LEADS	62%	22%	84%	33%	18%	51%
Criminal history	36%	29%	65%	44%	16%	60%
Mug shots	30%	33%	62%	21%	17%	38%
AFIS (fingerprints)	1%	2%	4%	9%	1%	10%

*Percentages were rounded.

Automated arrest application

The automated arrest application shifts the recording of arrest information from station personnel to the arresting officers, who are trained to enter data in the new system via computers in station interview rooms. This online data entry allows for near real-time arrest data to be made available, and is connected to CPD's digital mug shot application and automated fingerprint identification system. By the end of 2004, automated arrest was running in two Chicago area headquarters and seven district stations.

Personnel suite application

The personnel suite application automates and integrates human resource functions from five units: personnel, medical, finance, internal affairs, and CPD's Office of Professional Standards. Portions of this application remained in the development stage in early 2005. The medical function is in use and some record-keeping functions have been launched or are in final testing stages.

e-Track application

The e-Track application is composed of three phases, the first two of which have been implemented. Phase I captures information on each piece of evidence and recovered property as it enters the department. Phase II allows those working in the evidence and recovered

property section and forensics to locate property and track its movement through the chain of custody. Phase III will assist forensic services in its submission of evidence to the Illinois State Police Laboratory.

Officer use and impact of CLEAR

CLEAR assists in decision-making on officer deployment, provides information for improving management and officer accountability, and streamlines administrative functions. The system supports decision-making at all levels of the department while providing performance and problem-solving information for community policing partners. CLEAR allows the sharing of information among criminal justice agencies, furthering its goal of helping to reduce crime and increase community safety. Through community needs assessment surveys, CLEAR intends to encourage proactive community involvement and to better allocate resources.

CLEAR usage was evaluated through surveys administered to 1,486 officers between June and November 2004. In surveys taken to examine police use of and attitudes towards CLEAR applications, researchers found the majority of officers were using the automated systems available to them. Officers in pilot districts were more likely to use the data warehouse several times a week than officers in non-pilot districts (88 percent to 57 percent, respectively), and were more likely to use it daily (52 percent versus 32 percent). Field officers, those

Table 2
Frequency and type of field officer use of the CLEAR system

CLEAR use	Past week	Prior month	Total
Check a license	90%	6%	96%
Check a name or address	91%	5%	96%
Check outstanding warrants	68%	23%	91%
Communicate with other officers	67%	10%	77%
Enter evidence electronically	46%	22%	68%
Retrieve information for mission	39%	24%	63%
Check investigative reports	37%	26%	63%

assigned to patrol, tactical and gang units, detectives, and narcotics investigators, most often used the Law Enforcement Agencies Data System (LEADS), the data warehouse, and portable data terminals. Administrative officers more consistently used the data warehouse and criminal history records information system (*Table 1*).

When asked about types of CLEAR applications used in the month leading up to the survey, 96 percent of field officers reported having used CLEAR to check a license or to look up a name and address. In addition, 91 percent checked for outstanding warrants and 77 percent communicated with other officers (*Table 2*).

Organizational impact of CLEAR

Violent crime reduction

One primary goal of the department is the reduction of violent crime. CLEAR's implementation helped direct resources to locations where violence occurred or was likely to occur, and it allowed managers to monitor employees' activities and ensure the implementation of CPD directives.

Enhanced data analysis

CLEAR has the potential to expand data use, from tracking individual suspects to analyzing patterns and trends. Such analysis will enable information-sharing on crime trends, offense and victimization patterns, and environmental correlates of crime. One of CLEAR's goals

is to enable Chicago to comply with the National Incident-Based Reporting System (NIBRS), designed to replace and expand upon the traditionally used Uniform Crime Reporting program. NIBRS allows for the collection of more comprehensive and detailed national crime statistics from law enforcement. If Chicago becomes NIBRS compliant, it will be the first of the nation's large cities to do so.

Community policing

While CLEAR can assist police in identifying problems, it cannot offer innovative solutions to them. Concerns were raised that the community's role in policing might be neglected, that CLEAR might turn attention away from important goals, such as responding to the needs of residents, and that CLEAR could undervalue the importance of community policing. But the main purpose of the system is to provide CPD with data, such as the number of incidents, arrests, and calls for service in a community, that will enable police to analyze, plan, and evaluate appropriate responses for community benefit.

Business-community partnership

The business-community partnership component of CLEAR is intended to:

- Enhance the department's problem-solving capacity.
- Improve its ability to assess community needs.

- Make information-sharing easier and more convenient.
- Gather more intelligence through community sources.

The University of Illinois at Chicago and CPD launched the Chicago Internet Project to develop and field test online community surveys. The survey initiative was designed to enhance the involvement of Chicago residents in community policing and problem-solving projects. The initiative helps measure primary concerns and perceptions of residents in a specific geographic area regarding crime, disorder, anti-violence programs, community crime-prevention behaviors, police performance, and other matters.

Results of a pilot test of the project in three beats identified challenges that will need to be addressed before the surveys are implemented on a larger scale, including the public's limited knowledge of CPD's problem-solving model, and lack of computer and Internet experience.

I-CLEAR

In early 2004, Gov. Rod Blagojevich and Chicago Mayor Richard M. Daley announced their commitment to building I-CLEAR, a database that would allow police agencies in Illinois to quickly share crime information. I-CLEAR partners CPD with Illinois State Police and other criminal justice agencies to expand crime information to all police agencies across the state. The first I-CLEAR application being developed is I-Case, an adaptation of the CPD's automated incident reporting application. I-Case will consolidate all incident reports in the state and has the potential to share information with local, state and national law enforcement agencies.

To implement I-CLEAR, decision-making procedures must be agreed on for system development, and CPD must determine if it will be able to continue to provide

free access to non-CPD users. In addition, security issues will increase as more individuals are given access to electronic case information.

Conclusion

The status report suggests that the numerous substantial benefits CLEAR offers to CPD, including more efficient deployment of personnel to target crime reduction, more efficient case processing of suspects, better unit accountability, and increased clearance of crimes, could translate to statewide usage. The report also suggests numerous challenges exist in implementing a large-scale information system that is continuing to expand, including development of an effective community policing component.



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