

**Summary of Forum Held on December 7, 2001:
Innovative Information Technology—Chicago Police Department’s
Citizen and Law Enforcement Analysis and Reporting Program**

Summary Highlights

Note: Hosted by the University of Pennsylvania’s Jerry Lee Center of Criminology, this Forum was the first of a series highlighting promising and pioneering state and local efforts to address crime.

Implications of the Chicago Police Department’s (CPD) unique Citizen and Law Enforcement Analysis and Reporting (CLEAR) program potentially reach all major urban police agencies. As emphasized in a joint presentation by CPD’s Barbara B. McDonald and Ron Huberman, documentation of the underlying conceptual work and planning for CLEAR, begun in 1995, is available for use by other jurisdictions.

CLEAR’s goals are to improve CPD management, tighten the bond between CPD and community, and forge coordinated, unified data sharing and strategies between the department and other criminal justice agencies. For example, among many other capabilities, CLEAR helps CPD “police smarter”² by:

- Providing unprecedented information for promoting and enforcing manager and officer accountability.
- Enabling deployment of officers based on predictions of when and where crime will occur.
- Giving residents access to a Web site where maps pinpoint locations of reported crime.
- Tracking offender flow through the criminal justice system to anticipate and eliminate bottlenecks.

Federal seed money was of “tremendous assistance” in the development of CLEAR. Without such funding, CLEAR would not be what it is today, the presenters said.

The 17,000-member Chicago Police Department (CPD), second largest in the country, polices 279 beats covering 228 square miles. Since 1992, CPD has taken steps to transform itself from a largely centralized agency primarily reacting to crime to a more decentralized, customer-driven department dedicated to establishing partnerships with residents and solving problems to prevent crime, not just responding after the fact. In short, CPD adopted a community policing approach, called Chicago Alternative Policing Strategy.

In 1995, as part of the department’s transformation and at the direction of Superintendent Terry G. Hillard, CPD initiated development of an integrated information system capable of replication by other police agencies. The system was to “to fundamentally change not only the way law enforcement does business but the way the criminal justice system does business.” CPD enlisted

¹The Forum summarized here was the first of a series to afford Capitol Hill staff and Executive Branch representatives, among others, an opportunity to hear the innovative perspectives of state and local frontline practitioners. Presenters were Chicago Police Department’s Barbara B. McDonald, Deputy Superintendent, Bureau of Administrative Services, and Ron Huberman, Executive Administrator in Charge, Information and Strategic Services, Bureau of Administrative Services. The Forum was held on December 7, 2001, in Washington, D.C., at the Hotel George. William D. Falcon prepared this summary.

²Quotations in this summary reflect comments by the Forum’s presenters.

extensive help from Oracle Corporation. Development efforts resulted in what is described as a unique information system: Citizen and Law Enforcement Analysis and Reporting, or CLEAR. With some facets still works in progress, CLEAR focuses on three major goals:

- Improve the effectiveness and efficiency of management of the department.
- Strengthen the bond between CPD and community members by partnering with them.
- Promote timely information sharing and unify strategies with other criminal justice agencies.

Improving Management of the Department

Some of the areas benefiting from CLEAR's management-related capabilities are investigation, resource allocation, strategic planning, and accountability.

Criminal investigations. CLEAR not only speeds investigations of crimes but also increases the likelihood of success. Key to this is CLEAR's ability to quickly search some 7 million data items stored by CPD in a "data warehouse" and pick out, or link, those items that seem related to a given case.

Example: An assault victim reports the crime occurred on the South Side by a male assailant having an eagle tattoo and driving a red Camaro. A sergeant, after reviewing the report, electronically forwards it to a detective within minutes, in contrast to 3 or 4 days required under pre-CLEAR procedures. The detective searches the CLEAR database for subjects who are linked to male, eagle tattoo, South Side, and red Camaro. Within seconds, the computer generates a list of names. The detective submits an electronic request for mug shots to show the victim, which CLEAR delivers in seconds, not the 2 to 3 weeks required previously. CLEAR may also identify other cases with similarities to the instant one. The added information may assist in solving the current and previous cases.

Resource allocation. Through predictive analysis, CLEAR enables CPD to deploy officers to specific locations where crime is expected to occur. Example: By searching its database for characteristics of recent burglaries in a beat, CLEAR predicted a relatively high likelihood that burglaries would occur in a certain one-block area of the beat between 10 a.m. and 1 p.m. Within 20 minutes of focusing on that area, officers arrested two men attempting a break-in.

Strategic planning. Among planning areas benefiting from CLEAR is antiterrorism strategy. Example: Starting in 1997, CPD conducted threat assessments at 2,500 critical facilities. Data entered into CLEAR's database included lists of chemicals and other materials stored at, and degree of risk associated with, each location. Such information is valuable for target-hardening purposes. In a terrorism alert, CLEAR can accelerate an effective response by quickly informing officers what is stored at each site and producing a map color-coded to reflect degree of site risk.

Accountability. Previously, CPD searched a large number of sources to collect performance data needed to hold personnel—commanders to patrol officers—accountable. For example, to obtain information on 32 measures indicative of whether an officer may be at risk of behaving improperly, CPD had to gather data from dozens of sources. With much of the data now in CLEAR, sources are

now four. That greatly reduces the time to collect information and thus enhances its usefulness. Goal: centralize all such data in CLEAR.

Strengthening the CPD-Community Partnership

Major CPD objectives of partnering with the community (residents, businesses, other government agencies) are to assess community needs, obtain useful intelligence, share information with the community, and enhance police-community problem-solving capacity. Among measures designed to achieve those objective are the following:

- Each beat holds monthly meetings attended by the community to discuss and prioritize chronic crime and disorder problems in the neighborhoods served and to develop strategies.
- The department is currently developing the capacity to use CLEAR to alert officers to the priority problems identified at beat meetings and list community contacts. Officers could compare those problems to crime indicators for the area generated by CLEAR and determine whether police and community are on the same page.
- Officers can handle community problems identified not as crimes but as disorder issues (e.g., trash accumulation) by sending service requests to city agencies.
- Anyone with Internet access (from home, work, school, or public library) can connect to Citizen ICAM (Information Collection for Automated Mapping) through CPD's Web home page. Maps pinpoint the location of every reported crime within an area during a specified time period. Tables and charts provide details of each crime. Officers use a more detailed ICAM version to spot key crime patterns and trends on their beats. Such information is critical to problem solving.

Under development for use by officers and residents are a problem-solving tutorial and an in-depth problem-solving database. Residents will enter information about a particular problem into the database. When officers log on to that problem with their laptops, the residents' information will automatically appear, an example of how CLEAR "pushes out" information to users.

Promoting Interagency Information Sharing

Police, prosecution, court, corrections, and other criminal justice-related agencies are often ill-equipped to share relevant information with one another, especially in a timely manner. This hinders, if not precludes, development of unified strategies to reduce crime, identification of possible future bottlenecks, a complete picture of offender activity, and increased accountability among agencies. Under way is an effort to enable CLEAR to bridge the chasm preventing one agency's information from being electronically shared by another. Among many foreseen benefits will be the following:

- Courts could anticipate and take appropriate action to neutralize a bottleneck in drug-related cases presaged by police data showing a surge in drug arrests.
- Agencies could hand off electronic "file folders" on offenders as they proceed from one criminal justice agency to another.

- Agencies could obtain one another's reports to identify who is currently on probation, on parole, due in court, in jail, and the like.

The reach of such interagency information integration extends beyond Chicago. Currently, about 110 Cook County agencies use CPD's CLEAR to manage booking of arrestees.

The Federal Role

Federal seed money was of "tremendous assistance" in ensuring the development of CLEAR. The money came either directly from the U.S. Department of Justice or by way of the state. (Corporate sources accounted for other assistance, including a major contribution of in-kind services from Oracle Corporation.)

According to the Forum's presenters, the federal role should also include a sense of partnership in terms of information flow—that is, CPD supplies law enforcement data to federal agencies but gets little information in return. In addition, the presenters noted that Washington's role should include revisiting privacy and security regulations applicable to criminal justice data to ensure they are up to date regarding electronic information systems, which can address privacy and security concerns much more effectively than do paper-based systems.

Other Observations

The 18-month impact of CLEAR on the department has been a net reduction in clerical support of over 150 positions, with 7 technical jobs added, and reassignment of 90 officers to higher priority areas. Officers throughout the department now receive information quickly ("with the speed of thought"), much of which was not previously disseminated at any speed. That is seen as contributing to Chicago's 46 percent drop in violent crime and 29 percent reduction in property crime during the 1990s, a trend that continued into 2001, except for homicides.

With potential to change how all criminal justice agencies deal with crime, CLEAR is available to other police departments. Although CLEAR is not a turnkey package, available documentation can help other agencies avoid significant up-front development costs.

For More Information...

- For general information about the Chicago Police Department, including Citizen ICAM (Information Collection for Automated Mapping), please visit the department's Web site (<http://www.ci.il.us/CommunityPolicing>).
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