New Perspectives in Policing

MARCH 2011

HARVARD Kennedy School
Program in Criminal Justice Policy and Management

NIJ
National Institute of Justice

Moving the Work of Criminal Investigators Towards Crime Control

Anthony A. Braga, Edward A. Flynn, George L. Kelling and Christine M. Cole

Executive Session on Policing and Public Safety

This is one in a series of papers that will be published as a result of the Executive Session on Policing and Public Safety.

Harvard's Executive Sessions are a convening of individuals of independent standing who take joint responsibility for rethinking and improving society's responses to an issue. Members are selected based on their experiences, their reputation for thoughtfulness and their potential for helping to disseminate the work of the Session.

In the early 1980s, an Executive Session on Policing helped resolve many law enforcement issues of the day. It produced a number of papers and concepts that revolutionized policing. Thirty years later, law enforcement has changed and NIJ and Harvard's Kennedy School of Government are again collaborating to help resolve law enforcement issues of the day.

Learn more about the Executive Session on Policing and Public Safety at:

NIJ's website: http://www.ojp.usdoj.gov/nij/topics/law-enforcement/executive-sessions/welcome.htm

Harvard's website: http://www.hks.harvard.edu/criminaljustice/executive_sessions/policing.htm

In many fundamental respects, the investigation process, though showing some advances, seems to have been relatively uninfluenced by significant changes in policing, the crime problem and technological advances made in the past thirty years. In the main, it is our view that progress in police criminal investigation efforts remains largely isolated from broader police efforts to respond more effectively, more efficiently, and more resolutely to the crime problem in general.

— Horvath, Meesig and Lee,
National Survey of Police Policies and Practices Regarding the Criminal Investigations Process: Twenty-Five Years After Rand (2001:5).

Introduction

Over the last three decades, policing has gone through a period of significant change and innovation. In what is a relatively short historical time frame, the police have reconsidered their fundamental mission, the nature of core strategies of policing, and the character of their relationships with the communities they serve. This reconsideration is now broadly conceived of as community and problem-oriented

policing. Within the community and problem-oriented policing paradigm shift, many innovations have developed, including broken windows, hot spots, pulling levers, Compstat and other policing approaches (Weisburd and Braga, 2006). These changes and innovations grew out of concern that core policing tactics, such as preventive patrol, rapid response to calls for service and follow-up investigations, did not produce significant impacts on crime and disorder. There is now a growing consensus that the police can control crime when they are focused on identifiable risks, such as crime hot spots, repeat victims and very active offenders, and when they use a range of tactics to address these ongoing problems (Braga, 2001, 2008a; Skogan and Frydl, 2004; Weisburd and Eck, 2004). In the United States, these police innovations have been largely implemented by uniformed patrol officers rather than criminal investigators.

While Anglo-Saxon policing — the basis of American policing — originated during the early 19th century, criminal investigation is largely a 20th-century phenomenon. During the first stages of Anglo-Saxon policing — at least until the beginning of the 20th century — detective work remained largely in the private sector, although small detective units developed in the United States, England and France. In the United States, detectives were generally viewed as low-status operators, as much given to bringing trouble and corruption into police departments as solving community problems. Their status and mystique were enhanced when J. Edgar Hoover took over the corrupt Bureau of Investigation during the 1920s and through a variety of measures, ranging from strict behavioral standards for investigators to shrewd publications programs, created what was considered an incorruptible and proficient Federal Bureau of Investigation (FBI) (Reppetto, 1978). Hoover's and the FBI's status were so high that urban police departments modeled their overall strategy and the role of criminal investigators on the FBI model. The question of the "fit" between a federal law enforcement model and an urban police model aside, the impact of J. Edgar Hoover and the FBI on local police departments and their strategies should not be underestimated, even today.

The basic work of the criminal investigator has changed little since the "standard" model of policing (also known as the "professional" or "reform" model) popularized during the 1950s, although forensic technology has evolved considerably. In terms of controlling crime, investigators essentially conduct ad-hoc reactive investigations to hold offenders accountable for crimes in the hopes of generating deterrence through making arrests. Criminal investigators clearly play an important role in delivering justice to crime victims. However, in their investigation of cases, they gain intimate knowledge of repeat victims, high-rate offenders and locations that generate a disproportionate amount of criminal incidents. Investigators hold valuable information on recurring crime problems and could occupy a central role in developing creative responses to stop the next crime instead of responding to it. Unfortunately, few police departments have been successful in their attempts to reorient the work of criminal investigators more broadly towards crime control.

It is our belief that criminal investigators are more valuable to police crime-control operations than

most police executives realize. In most police departments, the "fruit" of an investigation is the arrest and subsequent conviction of a criminal offender. Indeed, the work of criminal investigators in apprehending serious offenders can be incredibly creative, involve dogged persistence and include acts of heroism. We believe that the fruit of their labor can be the investigative results as well as the incorporation of investigative knowledge and actions into crime-control strategies. Relative to other police department staff, criminal investigators have special expertise in the following areas:

- Interviewing skills (for interviewing victims, witnesses and offenders).
- Developing and managing of informants.
- Conducting covert surveillance, including the use of advanced surveillance technologies.
- Identifying and locating potential witnesses and sources of intelligence.
- Preserving and developing evidence.
- Preparing cases for prosecution and liaising with prosecutors in the lead-up to, and conduct of, a trial.
- Protecting, managing and preparing witnesses for trial.
- Sequencing of investigative steps in an inquiry, so as to optimize chances of success.
- Maintaining knowledge of, and in some cases relationships with, criminals and criminal groups.

Apart from the last one, all these skills are generally much more concentrated among investigators than uniformed patrol officers. For the last one, the investigators' crime "knowledge" tends to be more offender-centric, whereas patrol officers' knowledge is more naturally place-centric, victim-centric and crime-type-centric.

Many of the skills listed above contribute to the ability of investigators to handle a case from start (crime incident report) to finish (conviction), which patrol officers usually cannot do except in really simple cases, because the structure and schedule of normal patrol operations generally do not allow it. With their special knowledge and skill set, investigators can advise uniformed patrol officers on the nature of local crime problems and supplement their crime-control efforts with their expertise in conducting surveillances, doing undercover work, and interviewing victims and offenders. Investigators can also collaborate with analysts to develop in-depth descriptions of recurring crime problems. Our point is that criminal investigators are not being fully utilized by most police departments in their management of recurring crime problems. In essence, the "crime control loop" is not complete without the participation of criminal investigators in the problem-solving process (Sparrow, 2008).

In this paper, we develop an argument that police departments need to engage in a critical examination of the work of their investigators and recognize their importance in understanding and controlling recurring crime problems. Police departments and managers need to inspire a spirit of innovation and creativity among investigators in responding

to crime that goes beyond simply managing their caseloads and making arrests. As with uniformed patrol operations in the 1970s, 1980s and 1990s, it is time for a period of innovation in the work of criminal investigators that develops their potential for controlling crime rather than handling only the cases that come their way. Throughout this paper, we use the broad term "criminal investigators" rather than more specific terms such as "detectives" or "inspectors" to represent sworn police personnel who are charged with completing follow-up investigations of crimes that are not solved by patrol officers. Follow-up investigations include *primary* activities such as interviewing victims and checking the crime scene, *secondary* activities such as collecting physical evidence and canvassing for and interviewing witnesses, and *tertiary* activities such as interviewing suspects and informants, discussing the case with other police personnel, checking departmental records, and conducting stakeouts (Eck, 1983).[1]

We begin by briefly reviewing the implications of key research studies on the work of criminal investigators and acknowledging the limits of existing practices for effective crime control. We then consider the relevant ideas from newer approaches to crime prevention and control — such as problem-oriented policing and intelligence-led policing — that are helpful in reorienting investigators to address ongoing crime problems. We then survey the experiences of several large police departments in the United States, United Kingdom and Australia in implementing strategic changes to the operations of their criminal investigations bureaus. We conclude by offering some broad, guiding principles for police executives and policymakers to consider in moving the work of criminal investigators towards crime control in their jurisdictions.

Research on the Effectiveness of Criminal Investigators

Within police departments, criminal investigators are smaller in number, have an elite status, and benefit from special perks such as promotions, not wearing uniforms, earning higher salary or increasing overtime opportunities, and enjoying considerable discretion of their use of time. Criminal investigators have a more clearly defined mission than patrol officers: to arrest the criminal (Walker, 1992). Success in this mission can have great moral significance to the investigator, just as arresting a serious criminal gives the officer a tangible sense of protecting the community. Investigators also enjoy a romanticized reputation as being effective crime fighters in books, movies, and television. These factors lead to an investigator culture that privileges their crime-fighting efforts as superior to patrol-based strategies and, at least partially, separates them from the rest of the department.

The bulk of criminal investigation work, however, is not as exciting or as successful as it is portrayed in the media or by the police themselves. As Herman Goldstein (1977: 55-56) suggests in his classic work *Policing a Free Society:*

> It borders on heresy to point out that, in fact, much of what detectives do consists of very routine and rather elementary chores, including much paper processing;

> that a good deal of their work is not only not exciting, it is downright boring; that the situations they confront are often less challenging and less demanding than those handled by patrolling police officers; that it is arguable whether special skills and knowledge are required for detective work; that a considerable amount of detective work is actually taken on a hit-or-miss basis; and that the capacity of detectives to solve crimes is greatly exaggerated.

Goldstein's observations were supported by a series of research studies in the 1970s and early 1980s that debunked the mythology of criminal investigators (Greenwood, Chaiken and Petersilia, 1977; Ericson, 1982; Royal Commission on Criminal Procedure, 1981). Exhibit 1 summarizes the key research findings of three well-known research studies on the work of criminal investigators (Bayley, 1998).

It is important to recognize that it is difficult to apply general characterizations based on these research studies to the work of all criminal investigators within and across police agencies. The work of particular investigators, such as those involved in dealing with terrorism, organized crime and homicide, can be far from the routine

Exhibit 1. Findings of Seminal Research Studies on Police Investigation of Serious Crimes

1. The vast majority of crime that police investigate is brought to their attention by the public. Police discover very little crime on their own. Except for a few proactive investigations into corruption, vice, and organized crime, most criminal investigations involve crimes that have been committed, not those in progress or not yet committed.

2. The essential ingredient in solving almost every crime is the identification of the suspect by the public. If the offender is not caught on the spot, success depends on the victim or witnesses providing information that specifically identifies the likely suspect, such as a name, address, license plate number, or relation to the victim. If an offender has not been identified by the public for detectives, the chances of solving any crime fall to about 10 percent.

3. Contrary to fictional portrayals, detectives do not work from facts to identification of suspects; they work from identification of suspects back to facts that are necessary to prosecute and convict them. The primary job of detectives is not to find unknown suspects, but to collect evidence required for a successful prosecution of known suspects. Although fictional detectives are constantly warning against the danger of forming a hypothesis too early, that is precisely what real detectives do most of the time. For all the drama of novels, movies and television, the fact is that criminal investigation is largely a matter of processing paperwork. This does not make it easy. Knowledge of the law and of people is critically important. But it is work that does not rely on the skills of Kojak or Dirty Harry. Instead, it requires the steady discipline and persistence of an accountant or bank examiner.

4. More crimes are solved through information provided by arrested or convicted offenders — called "secondary clearances" — than are solved by the original work of the police. Indeed, the major opportunity for raising clearance rates — the ratio of solved crimes to reported crimes — lies in having the police work more systematically to encourage criminals to confess to previous criminal acts.

5. Detectives generally have more information about particular crimes than they can assimilate and use. Furthermore, physical or forensic evidence makes only a small contribution to either detection or prosecution.

6. Neither the way in which criminal investigation is organized nor caseloads of detectives affect the success police have in solving crimes.

Sources: Greenwood, Chaiken and Petersilia (1977), Ericson (1982), Royal Commission on Criminal Procedure (1981) and as summarized by Bayley (1998: 72-73).

work summarized here. Nevertheless, volume crimes, such as burglary, larceny, assault and robbery, drive the bulk of investigative activity in police departments. The vast majority of these volume crime investigations can be regarded as matters of routine detective work.

The landmark Rand Corporation study is generally recognized as the most influential of these studies, as it directly observed detective operations in 25 police agencies and surveyed detective practices in an additional 156 police departments (Greenwood and Petersilia, 1975). The major findings of the Rand study include: the most serious crimes are solved by the responding patrol officer through information obtained from the victim or victims, rather than leads developed by investigators; in more than half of the cases solved, the suspect's identity is known or easily determined at the time the crime is reported to police; an investigator's time is largely consumed reviewing reports, documenting files, and attempting to locate and interview victims on cases that experience has shown are unlikely to be solved; and many investigations are conducted without any hope of developing leads, but simply to satisfy victims' expectations (Greenwood, Chaiken and Petersilia, 1977).

Certainly, the issues raised by the Rand study were informed by earlier critical examinations of the nature of police work. For instance, the U.S. President's Commission on Law Enforcement and Administration of Justice Task Force on the Police (1967) questioned the principles underlying investigator deployments and lamented the poor coordination between patrol and detective divisions. Systematic observation work by Albert Reiss, Jr. (1971) revealed that 87 percent of all arrests observed were made by patrol officers who were the first to respond to the crime scene and immediately obtained the eyewitness testimony of victims and witnesses. Reiss and Bordua (1967:43) suggested that most crimes "solve themselves in the sense that the violator is 'known' to the complainant or to the police at the time the crime initially comes to the attention of the police." Coupled with data from the FBI on the low probability of arrest for Index crimes,[2] these studies collectively raised questions about the effectiveness of criminal investigators in holding offenders accountable for their crimes.

This body of research suggests that investigative results, such as arrests, are beyond the control of the investigator. According to this circumstance-result hypothesis (Eck, 1992), random circumstances — such as the presence of a witness, whether the victim marked his or her stolen property, and the presence of physical evidence — determine case outcomes. In contrast, the effort-result hypothesis suggests that the work of criminal investigators, such as interviewing victims, cultivating informants and checking records, increases the likelihood that the crime might be solved. While this idea has been perpetuated mainly through mythology, there is some research evidence to support the position that investigative effort matters (Ward, 1971; Folk, 1971).

In 1979, the Police Executive Research Forum (PERF) examined logs completed by patrol officers and detectives, official reports, and observations of investigators at work to describe the investigative process in DeKalb County, Ga.; St. Petersburg, Fla.; and Wichita, Kan. (Eck, 1983). The PERF research suggested that both circumstance-result

and effort-result hypotheses had some validity. Based on the PERF study, Eck (1992: 31-32) argued that the investigative process implicitly works to divide cases into three groups:

1. Cases that *cannot be solved* with a reasonable amount of investigative effort.

2. Cases *solved by circumstances,* which only requires that the suspects be arrested, booked and interrogated, and a prosecutable case prepared.

3. Cases that *may be solved* if a reasonable level of investigative effort is applied to them, but will not be solved otherwise.

These findings suggest that robust case-screening procedures and effective management interventions could improve the functioning of investigative units. During the 1970s and early 1980s some departments attempted to develop better case-screening procedures to ensure that criminal investigators were investing their efforts in those cases that were most likely to generate an arrest rather than spending time on cases that were not. In the management realm, an experiment in Rochester, N.Y., found that varying factors, such as including patrol officers in investigations and engaging a team approach to unsolved incidents, could improve the likelihood of making an arrest (Bloch and Bell, 1976). Another review of investigative best practices in six police departments concluded that strategic management principles and practices could influence clearance rates (Bloch and Weidman, 1975). The issues that influenced the "solvability factors" associated with investigative work included: budgeting and allocating resources; improving relationships with the prosecutor; interacting with the public, especially victims and witnesses; improving relationships between investigators and patrol officers; decentralizing detective assignments, particularly in neighborhood team policing approaches; using civilian employees for investigative tasks; assigning personnel; supervising and training investigative personnel; improving investigative procedures; and conducting investigative activities not related to specific cases.

Unfortunately, positive research findings that clearance rates could be influenced by case-screening procedures and varying investigative resource-allocation schemes were often countered by research that reported largely negative findings. For instance, Greenwood (1970) found no relationship between arrests and cases per detectives for burglaries and found a negative relationship for assaults. Indeed, even the PERF study observed that investigations seemed to be a low-payoff endeavor under even the best circumstances (Eck, 1983). Eck (1992:33) later concluded that "it is unlikely that improvements in the way investigations are conducted or managed will have a dramatic effect on crime or criminal justice."

Today, in spite of the evidence available through both research and practice, very few U.S. police departments are experimenting with new approaches to the management of criminal investigators and their work. A recent National Institute of Justice-sponsored survey

of investigative practices in 1,746 U.S. law enforcement agencies concluded that there was little meaningful change in the basic work of criminal investigators (Horvath, Meesig and Lee, 2001). As will be discussed later in this paper, this stands in stark contrast to the trajectory of criminal investigation practice in other countries, most notably the United Kingdom (Neyroud and Disley, 2007; Tilley, Robinson and Burrows, 2007).

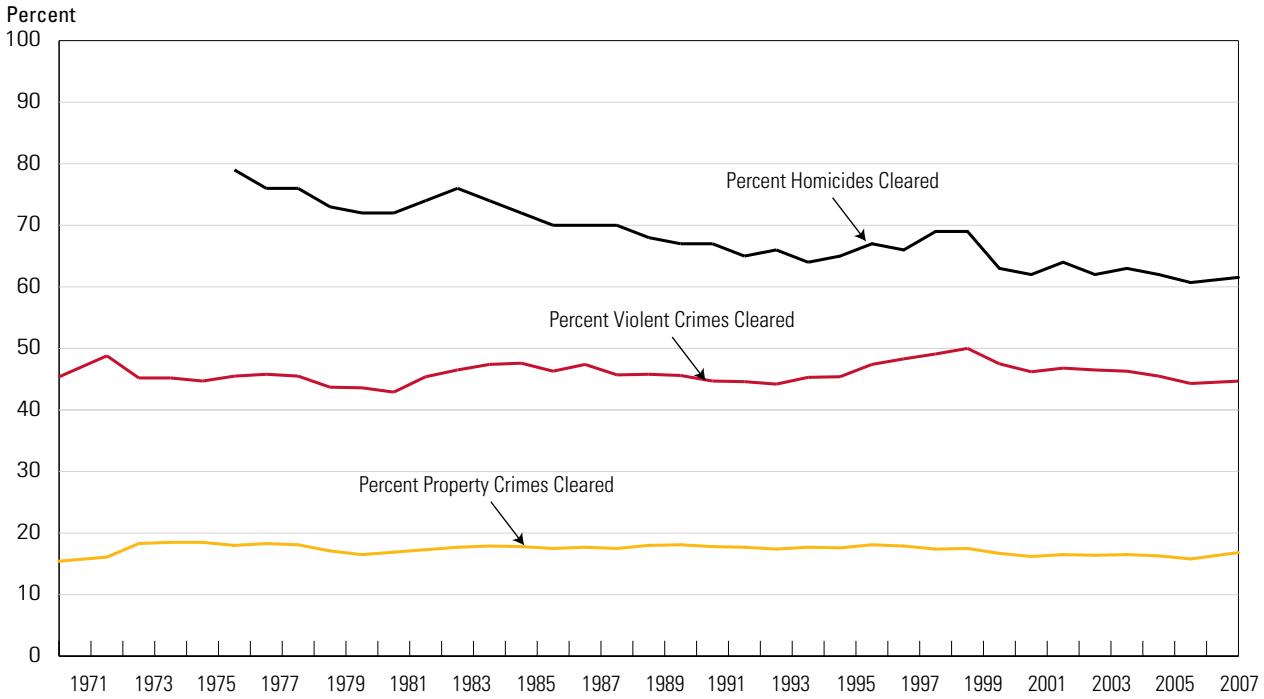
Of course, over the last 30 years, there have been noteworthy improvements in specific investigative practices, such as the development of more effective and just ways of interviewing victims, witnesses and suspects; the implementation of proper methods of conducting perpetrator lineups; and the handling of physical evidence. Forensic technology available to investigators has vastly improved their ability to make links between crimes and offenders. For instance, a recent National Institute of Justice-sponsored experiment using DNA to solve property crime found that the collection and analysis of physical evidence at crime scenes improves the ability of investigators to identify, arrest and prosecute criminal offenders (Ritter, 2008). Another evaluation found that the addition of ballistics imaging technology to the Boston Police Department's Ballistics Unit significantly increased their ability to link gun crimes committed with the same firearm (Braga and Pierce, 2004).

While this paper is not a review of the effects of improved investigative techniques and forensic technology on investigator performance, we believe that it is important to note that, despite these improvements, clearance rates have remained relatively stable over the last 35 years in the United States. As figure 1 shows, the probability of arrest for violent crimes and property crimes has hovered around 46 percent and 17 percent, respectively, between 1971 and 2007. The clearance rate for homicide, the most thoroughly investigated crime, decreased from 79 percent in 1976 to 61 percent in 2007.

While improved investigative techniques and technology have arguably improved the likelihood that the "right" people are being arrested for their crimes, these advances do not seem to translate into an increased probability of arrest for offenders. If one of the assumed crime-control tenets of the standard model of policing involves investigators trying to prevent future crimes by generating deterrence through arrests (Skogan and Frydl, 2004), their ability to do so today does not seem meaningfully different from the past. These innovations represent enhancements to the same basic investigative process rather than strategic changes to prevent crimes from happening in the first place.

This is not to say that criminal investigators have no value. In a noteworthy number of cases, good investigative work results in the identification and apprehension of serious criminals. The persistent determination and resourcefulness of some investigators in apprehending perpetrators is extremely impressive. However, when the totality of police operations is considered, the cases solved by criminal investigators account for a very small part of police business (Goldstein, 1977). And if police departments are serious about crime control, the work of the criminal investigator clearly needs to

Figure 1. Clearance Rates for Homicide, Violent Crime and Property Crime in the United States



Sources: U.S. Bureau of Justice Statistics, Homicide Trends in the United States, http://bjs.ojp.usdoj.gov/content/homicide/cleared.cfm, U.S. Bureau of Justice Statistics, Sourcebook of Criminal Justice Statistics online, http://www.albany.edu/sourcebook/pdf/t4202007.pdf, Federal Bureau of Investigation, Uniform Crime Reports, http://www.fbi.gov/ucr/ucr.htm. Accessed June 10, 2009

be adjusted to go beyond arresting offenders in the hopes of generating a deterrent effect.

Developing a Crime-Control Orientation

Since the 1980s, police departments have been experimenting with a much broader idea of crime control and prevention. Proactive efforts to control crime were advanced by the publication of Herman Goldstein's seminal article on problem-oriented policing (Goldstein, 1979). He argued that police departments were much too focused on how they were organized to do their work rather than on the crime problems they needed to solve. Goldstein (1979, 1990) further suggested that greater operational effectiveness could be accomplished through detailed analyses of crime problems and the development of appropriate solutions, rather than by effecting improvements in organization and management. The problem-solving process requires "identifying these problems in more precise terms, researching each problem, documenting the nature of the current police response, assessing the adequacy of existing authority and resources, engaging in a broad exploration of alternatives to present responses, weighing the merits of these alternatives, and choosing from among them" (Goldstein, 1979:236). Since Goldstein's article many police departments have experimented with this problem-oriented approach, and the available

evaluation research suggests that problem-oriented policing is effective in dealing with a wide range of crime problems (Braga, 2008a; Skogan and Frydl, 2004; Weisburd and Eck, 2004; Weisburd et al., 2010).

Although Goldstein envisioned the problem-oriented approach as a departmentwide activity, it has largely been implemented by uniformed patrol officers.[3] Similar to uniformed patrol officers responding to repeated 911 calls for service, the work of most criminal investigators can also be thought of as "incident-driven policing" (Eck and Spelman, 1987). Investigators respond to recurring incidents, attempt to gather enough information to generate a warrant or make an arrest, and rarely look for the underlying conditions that may be causing like groups of incidents. Like Goldstein, we believe criminal investigators should go further than responding to case after case, that they search for solutions to recurring problems that generate the repeated incidents. Investigating unsolved incidents is an important task and still must be done, but criminal investigators should respond systematically to recurring crimes arising from the same problem. In order for criminal investigators to be more efficient and effective, they must gather information about incidents and design an appropriate response based on the nature of the underlying conditions that cause the problem(s). A data-driven analytic approach, led and supported by investigators, would best position police departments to deal with recurring problems that generate the bulk of their cities' crime.

Criminal investigators, like patrol officers handling emergency calls for service, are constantly being called upon to deal with new crimes as they occur. Police executives will need to develop new case-management practices and provide analytic support to criminal investigators in ways that parallel the changes to patrol operations when problem-oriented policing approaches were being implemented in the 1980s and 1990s. These administrative arrangements will position investigators to manage their caseloads and work on crime-control strategies. If appropriate control strategies are implemented, there should be a net reduction in investigator caseloads through the effective management of recurring crime problems.

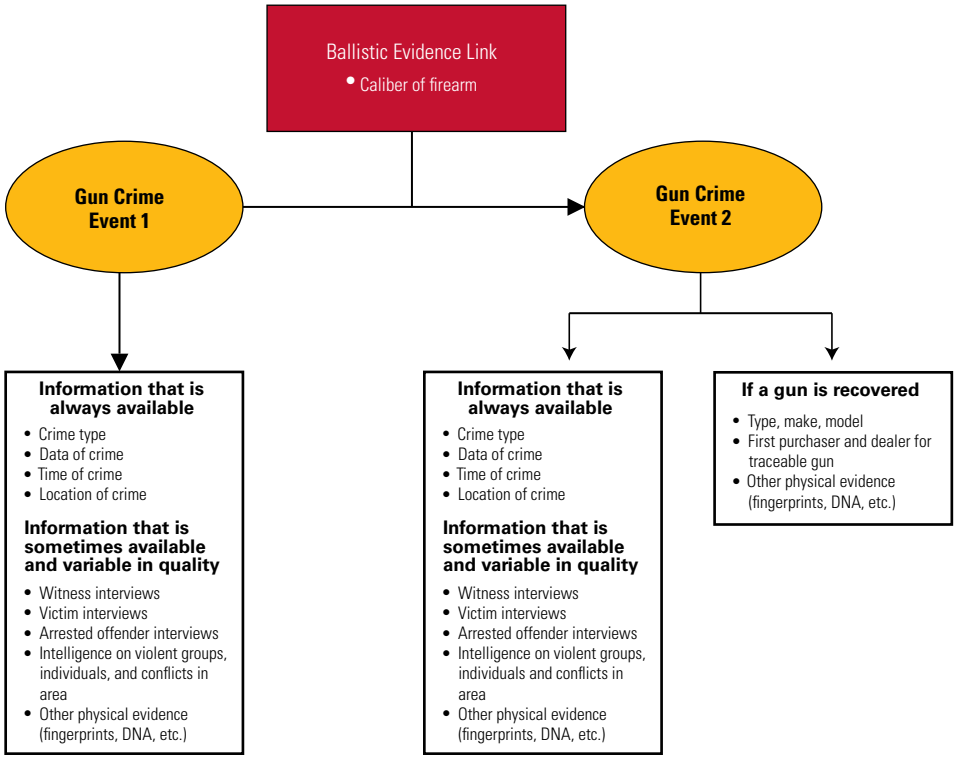
With their working knowledge of victims, offenders and locations, criminal investigators are well positioned to contribute valuable information on the nature of crime problems. Figure 2 provides an example of some of the insightful data that investigators may connect between crime events when two gun crimes are linked through ballistics imaging technology.

Research suggests that crime tends to cluster among a few problem places, offenders and victims (Braga, 2008a). For instance, Spelman and Eck (1989) examined several U.S. studies and estimated that 10 percent of the victims in the U.S. are involved in 40 percent of victimizations, 10 percent of offenders are involved in more than 50 percent of serious crimes, and 10 percent of places are the sites of about 60 percent of calls for service. For certain crimes, such as gun violence, these concentrations can be much higher. A 2006 analysis of serious gun violence in Boston found that only 1 percent of the city's youth ages 15 to 24 participated in gangs but gang violence accounted for 50 percent of all homicides in the city (Braga, Hureau and Winship, 2008).

More recently, Braga, Papachristos and Hureau (2010) revealed that less than 5 percent of street block faces and street corners accounted for 74 percent of all gun assault incidents in Boston between 1980 and 2008.

Criminal investigators, if properly oriented and managed, could be very useful in controlling crime by addressing these identifiable risks. Criminal investigators are occasionally involved in specific initiatives, such as Boston's well-known Operation Ceasefire, as important contributors to an effective preventive crime-control and prevention strategy (Kennedy, Piehl and Braga, 1996). The working knowledge and experiences of the Boston Police Department's Youth Violence Strike Force detectives informed the strategic problem analysis of youth violence and led to the development of an innovation response to gang violence in Boston (Kennedy, Braga and Piehl, 1997). Boston Police detectives also played a central operational role in implementing the Ceasefire strategy that was associated with a near two-thirds reduction in youth homicide in Boston (Braga et al., 2001). Boston Police detectives continuously developed actionable intelligence on latent and active gang disputes, worked with federal law enforcement partners to identify and

Figure 2. Type of Investigative Information Linked by Ballstics Imaging Matches



Source: Braga (2008b:296).

shut down pipelines of illegal guns to gang members, and supported community-based and social service agencies in their efforts to provide services and opportunities to gang members who wanted them.

There are obviously other examples of investigators leading innovative crime control and prevention efforts. For instance, detectives in the Mesa (Ariz.) Police Department assumed primary responsibility for the Crime Free Multi-Housing Program, convened meetings with residents and property owners, and implemented crime prevention through environmental design measures to address crime and quality-of-life problems (Cosgrove and Wycoff, 1999). These efforts were associated with a reported 70- to 80-percent reduction in calls for service (Cosgrove and Wycoff, 1999). In the Kirkholt Burglary Prevention Project in Rochdale, England, inspectors collaborated with probation officers and Home Office Crime Prevention Unit researchers to understand the nature of repeated burglary victimization in a public housing estate. Analysis revealed that once a home was burglarized, it was four times as likely to experience a repeat burglary relative to homes that had not been burglarized. The team then designed an innovative response to the problem that included the development of small neighborhood watches (called "cocooning") around victimized apartments and the removal of coin-fed gas meters from victimized apartments that were attractive to burglars (Forrester, Chatterton and Pease 1988; Forrester et al., 1990). The intervention resulted in a 75-percent reduction for the entire Kirkholt estate, not just in the protected homes.

While there has been growth and development in problem-oriented policing as an idea and a policing movement, its emergence has been slow. In 2000, Michael Scott, the Director of the Center for Problem-Oriented Policing, reflected on 20 years of accumulated experience in problem-oriented policing and observed that the approach was still in its infancy and did not occupy a central role in many police departments (Scott, 2000). More recently, Weisburd and his colleagues (2010) lamented the lack of evaluation research on the crime-prevention benefits associated with problem-oriented policing. Nonetheless, the prominence of the concept has been influential in educating police executives and line-level officers on the possibilities of using analysis to form operational strategies and deal with ongoing crime problems.

The rapid emergence of Compstat, a management accountability structure intended to focus police efforts to control crime through the relentless measurement of crime trends and patterns (Bratton, 1998; Silverman, 1999), has pushed many police departments towards data-driven strategies to identify recurring crime problems. While Compstat would seem like an ideal platform to engage departmentwide problem-solving, its implementation and execution have been inconsistent. At its best, Compstat is a powerful analytic and administrative tool. However, a recent Police Foundation survey found that the Compstat process can often stifle creative problem-solving approaches through its stiff reinforcement of traditional top-down management structures and tendency to generate responses that do not go much beyond concentrating police resources at the locations of

problems (Weisburd et al., 2003). To facilitate creativity, Compstat meetings need to be oriented towards deeper analyses of crime problems and actively encourage the implementation of alternative approaches to the standard time and place deployments used by many departments to deal with crime issues.[4] Obviously, to move the work of criminal investigators towards crime control and prevention, police departments would also need to explicitly incorporate their work with the expanded focus of prevention into the Compstat process.

Criminal investigators have also been driven towards prevention through the continuing development of what has been called "intelligence-led policing." According to Jerry Ratcliffe (2008:89), the intelligence-led model is "a business model and managerial philosophy where data analysis and crime intelligence are pivotal to an objective, decision-making framework that facilitates crime and problem reduction, disruption and prevention through both strategic management and effective enforcement strategies that target prolific and serious offenders." In practice, the intelligence-led approach has renewed a perspective that assumes crime can be controlled through a police focus on active offenders via more sophisticated analytical and tracking capabilities.

The adoption of this model has been accelerated by post-9/11 challenges of homeland security and the inclusion of local police departments in operations emanating from the 9/11 attacks and other violent terrorist actions across the globe.[5] Expanding transnational criminal networks have also challenged law enforcement agencies to improve their collection and analysis of criminal intelligence. While there are acknowledged similarities with the problem-oriented policing approach in the collection and analysis of data to drive innovative crime reduction strategies, the intelligence-led model focuses more exclusively on prolific offenders, criminally active groups and networks; engages a business model more allied with traditional hierarchical command models; and places a greater emphasis on detection and enforcement (Ratcliffe, 2008).

To varying degrees, problem-oriented and intelligence-led approaches and Compstat have guided police departments towards strategic crime prevention based on timely data and intelligence collection, analysis and tailored responses. Coupled with strong public expectations that police can control crime (a demand perpetuated by the police themselves), ongoing crime problems and new homeland security responsibilities, some police departments have taken up the challenge of reorienting the role of criminal investigators towards crime control.

Moving Investigators Towards Crime Control in the U.S., Australia and the U.K.

While the work of criminal investigators in many U.S. police departments has changed little since the 1950s, we believe that the policing field is beginning to make steady strides towards revolutionary changes in the orientation of criminal investigators. Like the seminal ideas on dealing

with crime in communities (Goldstein, 1979; Wilson and Kelling, 1982) and case studies documenting early community policing efforts (Sherman, Milton, and Kelly, 1973; Skolnick and Bayley, 1986) that preceded Harvard's first Executive Session on Policing, there is a growing body of practical experience that suggests certain police departments have started to recognize the importance of criminal investigators in controlling crime rather than simply responding to unresolved incidents. In this section, we present descriptions of selected key elements of practical experiences in the United States, Australia and the United Kingdom that represent varying dimensions of the movement towards crime control.

Milwaukee Police Department[6]

The Milwaukee (Wis.) Police Department serves a city of 600,000 residents. Milwaukee is the 22nd-largest city in the United States, with the seventh-highest poverty rate in the nation. The Milwaukee Police Department (MPD) employs 2,000 sworn officers and 700 nonsworn personnel. Its Criminal Investigation Bureau (CIB) has an authorized strength of 243 detectives and 38 supervisors.

The MPD is characterized by at least two historical trends. First, beginning in the 1960s, it isolated itself from both the professional police community and from any form of community accountability. Partially as a consequence of this isolation, it has evolved into the 21st century as a police department stuck in mid-20th-century police thinking. When, for example, Edward A. Flynn was sworn in as police chief on January 7, 2008, he was only the second chief hired from outside the organization in its 154-year history. Second, from the 1960s on, the MPD has been dominated by a detective culture and strategy that further isolated it from professional development and Milwaukee communities. While the former is not central in this summary, a few comments about it will help readers to understand the complexity of the issues.

During the 1940s and early 1950s, the MPD was a leader in the development of community relations programs, aspects of which were fundamental to the later development of community policing. The MPD not only developed one of the most highly touted community relations programs of the era, it developed training materials that were used by cities and police departments throughout the country. This orientation was fully abandoned, however, during the reign of Chief Harold Breier (1964-84), who rose to the top of the MPD through the detective bureau. His policies completely reversed the earlier trends. Breier led the adoption of programs and practices that isolated the MPD from the community. His reforms most powerfully affected the work of the detectives as they became isolated within the department and almost completely disconnected from the community they were supposed to be serving. The detectives became a power unto themselves, answerable only to themselves.

Much needed to be done to bring the MPD into the 21st century. As recently as 2008, the MPD had no functioning system for producing reliable crime data in a timely manner and no effective crime analysis function. Two measures mattered: response time and clearance rates for violent crime. Crime meetings were held with senior commanders

infrequently and using old data. The seven police districts were responsible for handling calls for service, taking crime reports and dealing with community problems. A mix of special uniformed units and the CIB targeted crime.

In 2008, the MPD committed to fixing these problems and reorienting itself around its newly articulated mission of "reducing crime, fear and disorder." The goal of the department was reformulated. It now was to create and support neighborhoods capable of sustaining civic life. This meant the MPD would be built around the newly christened Neighborhood Patrol Bureau consisting of the seven districts and the Neighborhood Task Force, which was an amalgamation of several specialty units under one commander. Its mission was to function in support of district-based anticrime initiatives. Patrol was strengthened in a variety of ways. District commanders were empowered. The Information Technology Division started producing accurate and timely crime data. The Crime Analysis Unit was expanded. Foot patrols were reinstituted. "Light duty" officers handled calls for minor offenses. Crime numbers started to decrease. Interestingly, even as the number of citizen contacts resulting from car stops and field interviews tripled, the number of citizen complaints declined.

Daily crime briefings were held via conference call and webcam. At the table were the chief, his assistant chiefs and, in a first for MPD, the detective division commanders. Using conference call, the district commanders and the detective commanders, for the first time in the department's history, talked to each other every day about the past 24 hours' crime as well as emerging patterns and trends. It was, for CIB, the beginning of changes that many would experience as wrenching.

Reforming CIB so that crime prevention would be part of its mission started with the personnel changes. Chief Flynn promoted a respected career investigator and appointed him to command the Neighborhood Patrol Bureau. He also promoted a district commander who had spent his career in uniformed patrol to lead CIB. With these changes, interbureau collaboration would begin and be modeled by commanders at the top.

The new assistant chief was charged with making CIB part of the Milwaukee Police Department again and getting CIB to accept its role in crime control and prevention. The rationale that drove reconsidering the basic functioning of investigators was that detectives, in the course of their many investigations, accumulate vast amounts of information about victims, offenders, criminal networks, and the methods of operation of various criminal undertakings. Detectives also get a sense of the geographic distribution of criminals and their enterprises. The problem was this information was not shared with those who could use it to develop crime-prevention strategies: crime analysis and patrol. If detectives were considered intelligence officers, then part of their core mission would be to inform the deployments of patrol resources and to improve the skills of those officers in writing crime reports and

canvassing neighborhoods. In this view, the relationship between CIB and the Neighborhood Patrol Bureau would need to be virtually seamless, with detectives being responsible for the effectiveness of patrol operations in the control and prevention of those crimes about which they have learned so much in the course of prior investigations.

Articulating a vision is far easier than implementing one. The greatest barrier to reform in CIB was a dysfunctional detective subculture. For instance, a major belief, deeply rooted in the cultural identity of CIB, was that patrol operated subordinate to CIB. It was often a very challenging exercise to reorient a proud and suspicious group of investigators towards crime prevention and intelligence functions and convince them that the reduction of crime, fear and disorder was every bit as much a part of their core function as it was for the uniformed members of the Neighborhood Patrol Bureau.

Before CIB could be changed, the bureau first needed to be better managed. Several key management initiatives were established to better focus the CIB management team on top priorities. These management initiatives were designed to address a bureau that was rife with antiquated processes and procedures, lacked technology systems, paid little attention to performance measures, and lacked quality financial oversight. For instance, accounting for the expenditure of overtime funds was virtually nonexistent; grants frequently went unspent or were spent down in a hurry without careful planning near the end of budgetary cycles. In response to these financial management problems, an Investigation Management Division was created where the management of overtime, grants, clerical operations, budgets, personnel and resources were centralized. This has resulted in a much better managed CIB. Operational divisions now concentrate on their respective missions and the management division concentrates on CIB's finances.

Property crimes have large negative impacts on the economic stability of the city and the quality of life in neighborhoods. CIB upgraded the status of the investigation of property crime by assigning high-performing detectives to the property crimes division and mandating urgency in the investigation of these crimes. The name of the Crimes Against Property Division was changed to the Neighborhood Investigations Division to reflect the reality that people are the actual victims of property crimes and these events affect feelings of safety and security across affected neighborhoods. This new division was also the testing ground for an innovative decentralization pilot project that would eventually lead to the next phase of reforms in CIB. Rather than specializing in particular property crime types across large geographic areas, detectives were assigned to investigate all property crimes occurring in specific neighborhoods. The detectives were also required to work in close partnership with patrol officers to develop innovative problem-oriented solutions to address recurring crime problems such as hot spot locations, repeat victims and high-rate offenders.

All of the CIB divisions have, for many years, been located at the Police Administration Building in the downtown section of the city. The decentralization

pilot project assigned one detective lieutenant and eight detectives to the Third District, an area with high rates of violent and property crime. In addition to their criminal investigation, intelligence development and problem-solving responsibilities, the pilot project detectives had staff development duties. They acted as team leaders for groups of patrol officers who were assigned to the same geographic areas. The detectives worked on improving the report writing and field interview skills of "their" officers. Detectives were, for the first time, "embedded" in the day-to-day operations of patrol personnel. Detectives became familiar with district neighborhoods and the crime problems in those neighborhoods. The skill sets of the police officers assigned to the district were enhanced as well. The pilot program was not without its challenges. The district detectives felt isolated from their downtown counterparts and there were challenges with sharing information fluidly across district and CIB lines. Nevertheless, as detectives and officers continued to work together and share information, the MPD command staff considered the pilot program to be a success and an important step forward in the development of a geographically based structure of the CIB.

The Vice Control Division and the Intelligence Division (which focused on gangs, primarily) were two high-performing units, if the measure was arrest activity. A careful examination of their work, however, revealed much redundancy. Both were characterized by high numbers of street- level drug arrests and both tended to be "informant-driven" rather than data-driven. The goal was to focus their efforts where they would have the greatest impact on crime and neighborhood stabilization. Therefore both divisions have been combined into the Organized Crime Division (OCD). This division works closely with the Intelligence Fusion Center to ensure its deployments and investigatory priorities are aligned with actionable intelligence information.

Another very important reorganization was the creation of a Violent Crimes Division (VCD), which brought together the Homicide Division and those divisions responsible for robberies and aggravated assaults. Separating these units, each with its own commander, once again retarded information exchange. Homicide was totally closed off to the other units, reinforcing its elite status but stalling the crime prevention potential of focusing on the same offenders across crimes. Today's victim of an aggravated assault with a firearm is often tomorrow's homicide suspect. But in practice, homicide detectives shared information on a "need-to-know" basis and they determined need. The new configuration had one captain commanding all the units' investigation of violent crimes. Briefings that were once reserved for homicide unit members were now open to all in both VCD and OCD, once again enhancing information flow and the potential for crime control.

The reform process continued with the eventual merger of the Neighborhood Investigations Division and portions of the Violent Crimes Division to create three geographically based divisions. The new geographic divisions, each

headed by a captain, are designed to replicate the early work of the pilot project, with one major exception — the detectives operate out of police headquarters. Each geographic division is responsible for two or three district areas. These divisions are designed to provide a one-stop shop for district commanders, who now have a single point of contact within CIB with whom they will coordinate their investigative support needs. The design also creates a peer-to-peer network that provides lieutenants and detectives the opportunity to work directly with their district counterparts on the day-to-day crime problems in neighborhoods for which they share geographic accountability. The peer-to-peer network replaces a bureaucratic command center structure that operated as a clearinghouse for incoming felony investigations, with little thought being put into coordination, ownership or geographic accountability.

The ability to move forward with the reforms at a rather rapid pace was enhanced by the implementation of several technology systems. CIB revolutionized criminal investigation information sharing with the districts through the use of a Microsoft SharePoint platform designed for collaboration. District commanders, supervisors and officers now have the ability to seek data on demand. The CIB's SharePoint information-sharing platform has been so successful that each district and many other department divisions have developed robust SharePoint sites as well. Information now flows across bureau, district and division lines flawlessly. Not only has SharePoint successfully changed how information is exchanged, but the CIB worked with the Information Technology Division to develop an electronic case management system to replace an antiquated paper and pen system. The department's Tiburon Records Management System had a built-in case management module that had never been activated due to outright resistance. The electronic case management system allows supervisors to monitor caseloads, ensure the completion of follow-up activities and hold their subordinates accountable.

Since 2008, when the reform efforts in the MPD were commenced in both the patrol and investigations divisions, overall violent crime has declined by 31 percent while property crimes have decreased by 16 percent. Homicides declined 32 percent the first year and have remained steadily below the prior 20-year average. Furthermore, UCR clearance rates have improved. The clearance rates for homicide, rape, robbery, burglary and theft all exceed national standards for cities the size of Milwaukee and are improvements over prior years. Change has been experienced as stressful by some but it has clearly not interfered with achieving the agency's mission.

If one were to grade the Milwaukee experience of rethinking and reformulating the detective function, the grade would be an "incomplete." The initiative is still unfolding. The MPD does deserve credit for seeking to address existing shortcomings of the traditional criminal-investigations process highlighted in existing academic research. In addition, the notion of including an "intelligence" component in the daily work of detectives is imaginative, consistent with the emerging philosophy of intelligence-led policing and responsive to issues

related to police agencies' approach to their homeland security responsibilities.

It is important to recognize that the MPD tackled the difficult task of dealing with and changing distinct police subcultures. Certainly the feel and culture of a patrol squad room in a district station has similarities to the squad area of a detective unit. But there are strong and distinct differences between the subcultures of uniformed and non-uniformed policing. In Milwaukee, the selection and promotion process has historically strengthened a predictably strong detective subculture by giving criminal investigators preferential treatment in promotions to executive management positions in the department. Milwaukee senior leaders are to be commended for taking on the challenge of the changing subculture, as well as pursuing institutional reforms. The progress that has been made in both arenas in a relatively short period of time, while still incomplete, could be regarded as an "incomplete plus."

New York Police Department

Since Commissioner Raymond W. Kelly was selected to lead the organization for a second time, the New York City Police Department (NYPD) has made a sustained effort to re-orient its investigative elements towards a nontraditional mission of prevention.[7] With New York City having more than 8.3 million residents, the NYPD deals with a very large volume of crime. In 2008, the NYPD responded to 48,430 violent Index crimes and 149,989 property Index crimes.[8] Its many investigations are managed and supported by the Detective Bureau, the Organized Crime Control Bureau and the Real Time Crime Center (RTCC). The Organized Crime Control Bureau includes the Narcotics and Gang divisions that focus investigative resources on gang and drug problems (e.g., observation arrests, buy-and-bust operations and major case investigations). In addition to normal investigations, the Detective Bureau manages the NYPD Forensic Evidence Initiative and Cell Phone Theft Reduction Initiative. The Forensic Evidence Initiative focuses on optimizing the collection and analysis of DNA, fingerprint and ballistic evidence to reduce crime. The Cell Phone Theft Reduction Initiative focuses on the expeditious electronic tracking of stolen cell phones and the utilization of cell phone calling records to reduce cell phone theft.

Commissioner Kelly recognized that the ability of the NYPD to control crime could be further enhanced by improving the ability of the organization to collect and manage crime and intelligence data and support investigative work through real-time crime analysis and strategic information products. Over the course of 2004, the NYPD Real Time Crime Center was established to track, analyze and respond to emerging crime trends, provide immediate investigative support, and facilitate strategic deployments of investigative resources. RTCC provides detectives with a wide range of NYPD, New York state, federal and open-source data; a conduit to Regional Intelligence Support Center data (New York/New Jersey High Intensity Drug Trafficking Area); and real-time support for homicides, shootings and other serious crimes. RTCC was designed to put relevant investigative information into the hands

of detectives before they leave the squad room, at crime scenes and over the entire course of the investigation (including phone information, victim and suspect information, pattern analysis and mapping analysis). RTCC Investigative Response Vans respond directly to the scenes of homicides, shootings and other major crimes and provide critical real-time investigative and intelligence support to the detectives in the field. RTCC also warehouses investigative data for future use and has specialized databases for investigators, including parolee, probationer, summons and pawn shop databases.

The NYPD also developed the Detective Bureau's computerized Enterprise Case Management System (ECMS) that functions as a records management, case management, intelligence storage, quality assurance and performance measurement system. ECMS helps to identify gaps in the investigative process by tracking a wide range of activities such as canvases for witnesses and videos, interviews and interrogations, prisoner debriefings, computer queries, intelligence gathering and dissemination, physical evidence collection and analysis, electronic surveillance, identification procedures, investigative records acquisition, prevention tactics, and case-closing results and justifications. ECMS provides Detective Bureau supervisors and executives with critical information regarding arrest, investigative and intelligence activity for individual detectives as well as entire detective squads. This enables the NYPD to hold detective managers and individual detectives accountable for the quality of their work, the results of their investigations and their overall performance. When issues arise in the quality of detective work, the NYPD addresses them through formal centralized and decentralized training regarding investigative techniques and prevention tactics as well as individual supervisor-to-detective quality assurance and performance conferrals.

Compstat still serves as the NYPD's central management and accountability structure to ensure that the department's executives and middle managers are doing their jobs in controlling crime. Compstat, however, has evolved to include the review of precinct-based investigative activities that are designed to prevent crime from occurring. The Deputy Commissioner of Operations and Chief of Detectives review data regarding crime conditions and detective activity, and hold all Detective Bureau executives and supervisors accountable for their understanding of crime problems, use of resources, and development of strategies and tactics to prevent the next crime from occurring. To support the Compstat process, the Organized Crime Control Bureau and Detective Bureau conduct smaller scale versions of Compstat.

In general, the Detective Bureau's reorientation towards prevention involves intelligence collection and analysis to identify and understand repeat offenders, gangs, criminally active groups as well as persons, conditions and locations that cause ongoing crime problems. Precinct-based detective squads have geographic responsibility for investigating as well as preventing felonies and serious misdemeanors. The Detective Bureau conducts focused criminal investigations and criminal enterprise dismantlement operations to prevent identified high-rate offenders from committing

additional crimes. A premium is placed on using post-arrest investigative tactics to ensure successful prosecutions of offenders. Detectives are encouraged to collaborate with patrol personnel to utilize alternative crime-prevention tactics such as pretext interviews, confidential informant operations and overt surveillance to address criminal recidivists. When patterns are detected, individual investigations will be aggregated into a pattern and transferred to centralized investigative units for further focused action. For example, the NYPD established a Central Robbery Division to deal with ongoing robbery problems by employing both traditional and alternative investigative techniques with the goal of preventing the next robbery from occurring.

The NYPD approach requires extensive collaboration and coordination within the organization and with its external partners. Emphasis is placed on training and having a well-developed set of procedures regarding basic investigative techniques, required computer queries, proper methods of collecting physical evidence, intelligence analysis, identification procedures, electronic surveillance and best practices in developing alternative problem-solving strategies. The NYPD also officially recognizes exemplary investigative prevention efforts to encourage other detectives to engage similar work.

Victoria Police, Australia

The Victoria Police provides police services to the citizens of Victoria State, Australia.[9] With a population of some 5.3 million residents in a mix of urban, suburban and rural communities, Victoria is the second largest state in Australia. In 2007-08, the Victoria Police responded to 42,947 crimes against the person and 281,184 property crimes.[10] The organization of the Victoria Police is reflective of its large size; the agency has some 11,100 sworn personnel with 2,400 civilian staff spread across 339 police stations. The force is spread across a vast area of nearly 92,000 square miles with some central departments and five regional divisions. A centrally based division, the Crime Department is responsible for "major crimes" (e.g., homicide and organized crime) while "volume crimes" (e.g., burglary and theft) are usually handled by investigators in one of the five regional divisions of the Victoria Police.

In 2005, under the leadership of then Chief Commissioner Christine Nixon, the Victoria Police initiated a review of the existing structure and practices of the Crime Department. Over the next several years, the Victoria Police implemented sweeping changes to the Crime Department so it would be better positioned to prevent, detect, and prosecute major crimes. The new model was designed according to the following principles (Boston Consulting Group, 2005:4):

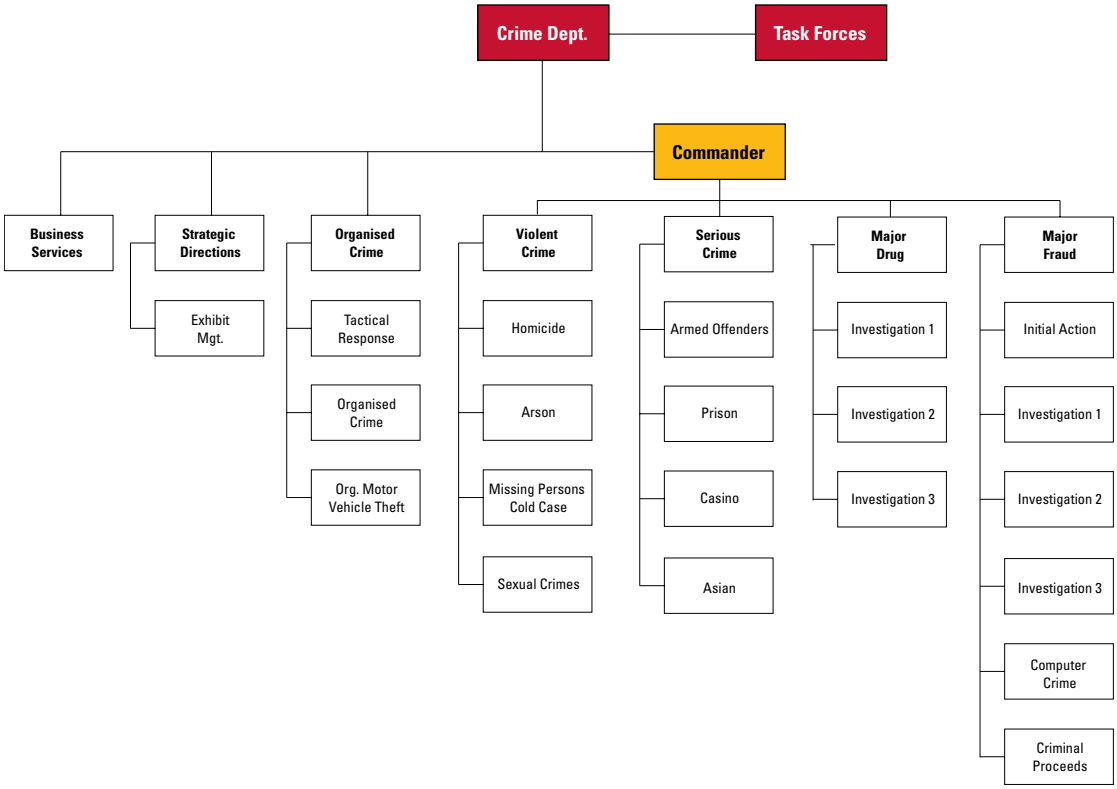
- **Strategic** because modern policing is as much about staying ahead of criminals as it is about catching up with them.
- **Dynamic** because the ability of the police to prevent, investigate and prosecute crime must evolve at least as quickly as criminals' ability to find new or more effective ways to profit from it.

- **Collaborative** because the magnitude of the challenge is such that investigators need to be able to draw on capabilities from across the force, as well as from partners outside it.
- **Developmental** because the model must provide the means to continuously improve the skills and processes needed to anticipate and meet evolving challenges.

While the implementation of a new major crime-management model required many innovations, two elements are particularly relevant for our broader discussion on the work of criminal investigators: (1) the restructuring of the Crime Department so investigators' work would be more appropriately focused on dealing with crime problems, and (2) the development of a new performance measure to better manage the work of investigators. In this section, we briefly review these two innovations.

Figure 3 shows the areas of responsibility and the focus of the work undertaken by each of the investigative squads under the configuration of the Victoria Police Crime Department prior to the implementation of the new major crime management model.

Figure 3. Former Configuration of the Victoria Police Crime Department



Source: Boston Consulting Group (2005:9)

Within their areas, the squads were largely autonomous in determining their investigative priorities. As described in the Boston Consulting Group (2005) report, squad personnel determined how the squad's resources — people, technologies and other assets — were deployed in responding to crimes. Since investigators tend to stay in a squad for long periods of time, they tend to build very deep expertise in investigating and prosecuting particular types of crimes. Periodically, cross-force, multidisciplinary task forces were formed to deal with specific, high-priority matters. While this model served the Victoria Police well, it was considered too static to deal with new crime challenges and not well-suited to preventing crimes. As the Boston Consulting Group (2005: 9-10) observed:

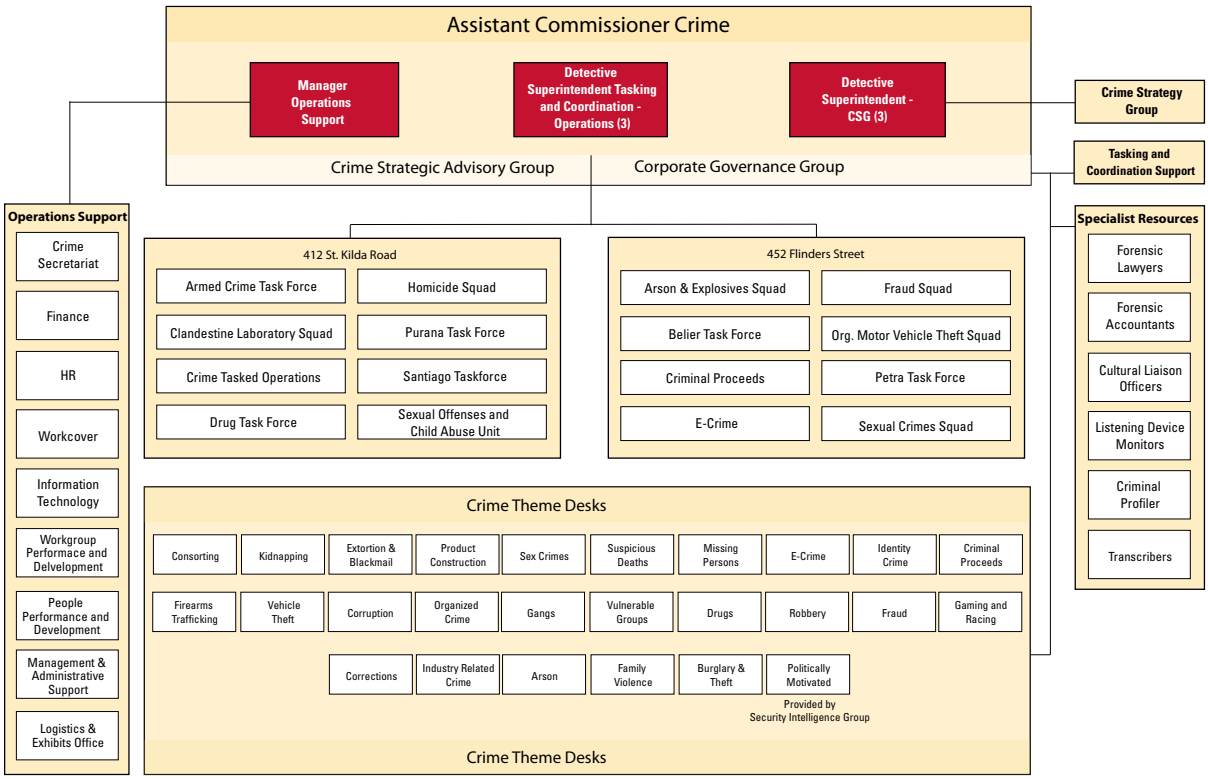
> Aside from the formally established taskforces, there is little joint work across the squads, or between the squads and investigators in the Regions. Resources — human and other — tend to be 'siloed' in particular areas. Because decisions on priorities and the allocation of resources are made inside the squads and divisions, it is difficult to 'scramble' a high calibre, cross-functional, properly resourced team to deal with an immediate or emerging threat that falls outside the squads' charters or cuts across several of them. The squads, working within set budgets and still accountable for their ongoing workloads and business-as-usual objectives, can understandably resist losing skilled personnel and other resources to taskforces or joint operations. And, because there is no clear, force-wide understanding on how resources are deployed and priorities set, there is no shared view on whether these arrangements are the best the force can muster to deal with specific incidents or threats.

Figure 4 presents the configuration of the Victoria Police Crime Department under the new crime-management model. Given the design principles noted above, several features of the model should be noted in changing the work of investigators. Investigative work is managed through 16 sections of criminal investigators responsible for substantive crime areas and working in established crime task forces. While the staffing of the 16 sections is relatively stable, the new model allows for easy movement of investigators across sections based on need or new investigative connections across substantive areas. The assignment of personnel is flexible and facilitates the rapid development of new work groups should a new crime challenge be uncovered. Crime theme desks, composed of nonsworn analysts and sworn personnel, are charged with examining intelligence and crime data to monitor existing trends for new problems and persistent issues in 26 specific areas. The crime theme desks work with the investigative sections and any new work groups to better understand the dynamics, situations, and relationships generating crime problems through more in-depth analysis. The information products produced by the crime theme desks are shared with the Crime Strategic Advisory

Group and Corporate Governance Group that work directly under the Assistant Commissioner that commands the Crime Department. These data are used to set investigative priorities, make decisions about personnel and resources in particular crime areas, and measure performance of particular work groups in controlling crime.

The Victoria Police also developed a new performance measure for investigative work to help senior managers hold line-level investigators accountable for addressing and resolving priority crime problems — weekly time attribution. When investigators submit their time sheets, they now report information on the work performed — proactive or reactive and case type — along with the hours worked. These data enable managers to look at the number of investigative hours invested in particular crime themes and the types of investigative actions taken by work groups and investigators. Coupled with crime data and a case management database that documents specific actions within particular investigations, the time attribution performance measure allows senior managers to ensure that the work undertaken fits departmental priorities. These data also help managers assess whether investigations are being handled properly and whether existing resource investments are having the desired crime control impacts.

Figure 4. Current Configuration of the Victoria Police Crime Department



United Kingdom Police Agencies

Over the last 30 years, criminal investigators in the U.K. have been pushed towards engaging crime control as a central part of their work through the adoption of professional standards that represented a new philosophy of partnership and innovation.[11] A series of crises resulted in the establishment of several national commissions and critical reviews of past practices. These assessments made strong recommendations for sweeping changes to the work of criminal investigators and provided an important opportunity to advance a reform agenda. In our discussion of strategic crime-control work in the U.K., we highlight the importance of embracing a professional development model, clear business practices, and the institutionalization of standards and training as methods of changing both the culture and work of criminal investigators.

The effort and commitment of a number of professional organizations such as Centrex, the National Centre for Policing Excellence, the Association of Chief Police Officers (ACPO) and today's National Police Improvement Agency (NPIA) deserve much credit in stimulating change and enhancing the quality and breadth of investigative work in 43 police agencies in England and Wales. These organizations continue to drive the adoption of innovative practices through the production and dissemination of practical guides and the delivery of high-quality professional development opportunities for investigators.

Investigators in the U.K. police forces operate very differently today when compared to their predecessors from the 1970s. This transformation did not occur quickly and without anguish. Particular commissions in the 1980s and early 1990s, such as the Royal Commission on Criminal Procedure (RCCP), the Byford Commission and the Royal Commission on Criminal Justice (RCCJ) that reviewed police activities of the previous decades, served as central catalysts for reform in policing in the U.K. In particular high-profile cases,[12] the Commissions suggested that, at times, the ends — arrest and conviction — justified some very problematic means — ignoring exculpatory evidence or operating outside the law. These reviews brought scandal to U.K. police forces and exposed some concerning patterns of corruption. In particular, concerns were raised over appropriate confinement and confession procedures for suspects and the noteworthy absence of sound technology and science in investigations. As a result of these miscarriages of justice at the hands of criminal investigators, the management of investigators became far more structured and standardized. Key management elements now include commitments to individual and organizational professional development, adhering to routine performance review and measurement, and engaging a philosophy of managing risk and minimizing harm.

Standards and Professional Development. Both the RCCP and RCCJ strongly suggested that U.K. police investigators needed to become more professional and better trained (Home Office, 1993; RCCP, 1981). Historically, investigators were trained on the job by more senior officers who themselves had received little more

than on-the-job training. Now, in addition to other competencies, every investigator completes the Management of Serious Crime Course before beginning work as an investigator. There are levels of investigators, and demonstration of success in each level is required for advancement to the next. The Professionalizing Investigation Programme (PIP), a joint program of NPIA and ACPO, aims to "improve the professional competence of all police officers and staff who are tasked with conducting investigations."[13] PIP provides development opportunities not just for new investigators but also offers an array of training and development offerings across three levels to maintain proficiency throughout a career. The Senior Investigative Officer (SIO) is a PIP level three with status designating the investigator as being certified and credentialed to investigate homicides. SIOs must have national accreditation that requires annual reaccreditation based on evidence of continual professional development. The SIO is the most accomplished of the investigators. PIP endeavors to improve the management of all aspects of the investigative process and includes training and assessment (Neyroud and Disley, 2007; Stelfox, 2007).

There are also initiatives in the U.K. to develop values-based leadership and management training. For example, the Core Leadership Development Programme exposes all ranks to the qualities of leadership and supervision and devises standards for training and accreditation of those who manage and supervise investigations. The establishment of the NPIA and its very mission signals the commitment to fostering a "culture of continuous improvement" (Neyroud and Disley, 2007:556). Examination of the NPIA website reveals a number courses, professional development opportunities, and training on and description of standards.[14]

The National Intelligence Model (NIM), created by the Police Reform Act of 2002, is the operational business model for law enforcement, adopted by ACPO and implemented across police forces in England and Wales (Association of Chief Police Officers, 2005, 2007). Among several ambitions, NIM strives to push police officers and investigators away from simply responding to crime incidents towards the control and prevention of recurring crime problems. NIM ensures that the operational disciplines and resources within a local command unit (many are the size of a medium-sized U.S. police agency) are deployed and coordinated effectively. NIM also introduces standard national intelligence-led approaches to dealing with identified crime problems through three core components — prevention, intelligence and enforcement — and draws upon a menu of suggested tactics (Association of Chief Police Officers, 2005). When compared to past practices, NIM represents an important new model for deploying investigative resources based on data collection and analysis in a proactive manner, enhancing standards in the investigative process, and making professional development central to improving the work of criminal investigators. Its business model demonstrates a commitment to a new order for U.K. investigators via its clearly articulated standards and intentional push towards problem-solving and strategic partnerships in investigative work.

Inspection and Accountability. U.K. police services are now routinely subjected to internal and

external review and inspection through a variety of mechanisms. These mechanisms range from the individual investigators' professional development review (PDR) to force comparisons on performance by Her Majesty's Inspectorate of Constabulary (HMIC). Investigators prepare their own PDR to provide "examples and evidence of good performance and competence" as well as to set forth areas for professional development that are aligned with their force (Neyroud and Disley, 2007). PDRs are reviewed with supervisors and serve as a benchmark and a roadmap for personal professional development. PDRs are utilized and considered at times of promotion and job change.

The continuous public monitoring of police force performance is required by Parliament and facilitated by HMIC and ACPO.[15] The HMIC website provides access to the HMIC Report Card, a comprehensive comparison of force performance. The website includes a tool that allows the viewer to select and compare individual forces with one another. A common minimum standard comparing a variety of policing processes (including investigative work) is used to benchmark and rank each force in England and Wales. The website also includes detailed information on the value produced by monetary expenditures. These are, of course, not the only methods of review and accountability in the U.K. There are local criminal justice review boards and individual police force websites that provide data to the public on detection and other police activities.

Management of Risk and Minimizing Harm. In accordance with the strategic business plan set forth by NIM, other strategic initiatives and specific operations illustrate the new emphasis on crime control and strategic partnerships. Multi-Agency Public Protection Arrangement (MAPPA) is a national strategy that is implemented locally and managed by criminal investigators. MAPPA requires the cooperative work of three "Responsible Authorities" (police, probation and prison services) in their joint management of high-risk individuals to prevent new crimes from happening.[16] Traditional investigative activities are employed by the coordinating team as necessary; however, their primary role is to prevent crimes by likely offenders through the analysis and sharing of crime and intelligence data and coordinated action by partnering agencies.

Operation Haul, completed in 2008, represents an application of the NIM business model that illustrates how criminal investigators have shifted their work towards crime control in the U.K. Operation Haul, and other major investigations, was composed of teams that focused on integrating the key NIM elements of prevention, intelligence and enforcement as means to investigate a string of crime incidents to apprehend offenders and to prevent additional crimes from occurring. Operation Haul was a multiyear investigation that encompassed five regional police agencies and resulted in the arrest and conviction of a criminal network responsible for thefts in country homes, businesses and banks over several years.[17] The investigation involved a blend of traditional activities, higher level interdiction efforts and innovative crime control actions.

Strategic crime control and prevention efforts by investigators can be seen in many aspects of Operation Haul. Efforts of the regional crime group (a selected team of officers drawn from five forces to create a large working group) included a proactive arm within the enforcement team. That group was charged with using intelligence and analysis to prevent the targeted criminal network from committing new crimes. The Operation used frustration and disruption techniques and other police activity to prevent offenses from occurring. These activities included using heightened uniform patrol in areas where intelligence analysis suggested new crimes were likely to occur. In these areas, the criminal network was targeted for minor offenses, such as traffic violations; and when possible, the officers made arrests of, and executed warrants on, network members who committed low-level crimes.

Operation Haul also focused tightly on trying to prevent repeat victimization by dealing with the repeat theft of cash at particular Automatic Teller Machine (ATM) locations, and the repeated burglary and robbery of antiques and other property at country estates. In an effort to reduce the criminal network's success with ATMs, the inspector contacted the British Banking Association to seek funding and support to target-harden ATMs that were regularly being ripped out of walls using industrial backhoes. The British Banking Association was appreciative of the team's outreach efforts and enthusiastically cooperated. The investigators then collaborated with the Arts and Antiques Register to limit the criminals' ability to make profits through the subsequent sales of stolen goods. The partnership with the Arts and Antiques Register was designed to make the resale of stolen goods very difficult and to facilitate the recovery of stolen property being sold in antique sales markets. Finally, in an effort to engage citizens living in or caring for large manor homes, investigators and crime prevention officers worked with the National Trust Country House Owners Association to create Manor Watch — a neighborhood watch group networked around large country estates. Manor Watch distributed crime-prevention advice that included warnings from previous victims, enabled target-hardening efforts by crime prevention officers, and facilitated the flow of intelligence from community members to investigators.

Setting up productive communications with citizen groups and private businesses required securing support from key stakeholders across several force jurisdictions (similar in size to U.S. counties) such as the county high sheriffs, area members of parliament and other locally elected officials. Information sharing included personal briefings to these groups to explain the nature of recurring crime problems and the steps being taken by the police to address these issues. While these briefings were controlled in what sensitive information was distributed, the detailed dialogue on a live investigation was an extremely unusual move for U.K. investigators (the audience of victims and their elected bodies were unaccustomed to dealing with the police in these matters). Nevertheless, the work of investigators to secure these community partnerships was highly productive. The Manor Watch partnership produced actionable intelligence that furthered the law enforcement goals of Operation Haul while challenging victims to deal with their own security

issues that were causing them to be attractive targets for the criminal network.[18]

Conclusion

Criminal investigators were at the forward edge of the reform/professional strategy of policing that dominated police thinking and practice from the 1930s to the 1970s. Despite the evolution of community and problem-oriented policing during more recent decades, the functioning, status and organizational role of criminal investigators have changed little. Nevertheless, a small number of police departments in the United States and Australia, and police departments in the United Kingdom, have recognized that the work of criminal investigators needs to be expanded from a sole focus on traditional investigative activities towards a broader strategic crime-control orientation. It is important to note that none of the police departments discussed here has abandoned the important investigative task of holding offenders accountable for their crimes. This remains a central function of criminal investigators. However, these police departments have recognized that investigators can generate tremendous value when involved in strategic crime-control efforts. Many investigators have rich insights on recurring crime problems and can be used much more creatively in dealing with the underlying conditions, situations and dynamics that cause crime problems to persist.

The change efforts described here can be viewed as bringing criminal investigations into line with community policing by incorporating some of the basic principles of problem-oriented policing into their work. Goldstein's (1979, 1990) influential framework of problem identification, problem analysis, creative response development and ongoing assessment undergirds the varying approaches used in Milwaukee, New York City, Victoria and across the United Kingdom to move criminal investigators towards controlling crime. Research has found this analytic approach to addressing recurring crime problems to be an effective way for police departments to control crime (Braga, 2008a; Weisburd et al., 2010). Spreading these ideas from uniformed patrol to criminal investigators seems like a promising way to orient them towards crime control that is well-rooted in a growing base of scientific evidence on its crime-prevention benefits.

There were other common strategic change themes that arose from the efforts of these selected departments to move the work of criminal investigators towards crime control. Some of the key ideas included improving crime and intelligence data collection and analysis, implementing appropriate internal management accountability structures, developing professional standards and relevant performance measures, and integrating a wide range of partners into the process. In this paper, we have focused mainly on making the linkages between case investigation and crime control. This leads to an important and nontrivial organizational problem: how should the various responsibilities for proactive and problem-solving work be allocated between criminal investigators and

patrol officers? There are varying ways this division of labor may be accomplished:

- Assign detectives to patrol units, and work with those units.
- Expect detectives to provide intelligence, but leave problem-solving responsibilities with patrol groups.
- Hold detectives responsible for specific crime-control projects.
- Utilize detectives (with their special skills) as a deployable central resource upon which other units can draw at will.

Clearly, this list is not intended to be exhaustive and we believe that police organizations need to engage a thoughtful planning process to make the organizational changes that best suit their operational environment. The experiences in Milwaukee, New York, Victoria and the United Kingdom provide some guidance on how these changes might be implemented in varying organizations and settings.

In moving criminal investigators towards a more active role in crime control, police executives are forced to confront the powerful culture of criminal investigators and the associated mythology that surrounds their work. Obviously, changing police organizations and their cultures is very difficult work. As Dorothy Guyot (1979) famously described, creating change in police departments can be like "bending granite." The process will take considerable political will and persistence by the chief executive and other true believers in the department. However, as the reform work described in Milwaukee suggests, changing the deep-rooted detective culture is by no means insurmountable. Based on our review, we certainly believe that it is a process that is well worth engaging and has great potential to improve public safety.

Endnotes

1. In many U.S. police departments, patrol officers play a central role in primary investigative activities, and also participate in secondary and tertiary investigative activities. In the United Kingdom, partly empowered civilians handle primary investigative activities.

2. Generally, about 21 percent of Index crimes were cleared by arrest during the 1970s, according to the FBI's Uniform Crime Reporting program. An offense is "cleared by arrest" or solved for crime reporting purposes when at least one person is: (1) arrested; (2) charged with the commission of the offense; and (3) turned over to the court for prosecution. An offense is also counted as cleared by arrest if certain "exceptional" conditions pertain, including suicide of the offender; double murder; deathbed confession; offender killed by police or citizen; confession by offender already in custody; extradition denied; victim refuses to cooperate in prosecution; warrant is outstanding for felon but prior to arrest the offender dies of natural causes or as a result of an accident, or is killed in the commission of another offense; or, handling of a juvenile offender either orally or by written notice to parents in instances involving minor offenses where no referral to juvenile court is customarily made. Source: U.S. Bureau of Justice Statistics, Sourcebook of Criminal Justice Statistics Online, http://www.

albany.edu/sourcebook/pdf/t4202007.pdf (accessed June 10, 2009).

3. For instance, Cordner and Biebel (2005) reviewed the problem-oriented policing activities of the San Diego Police Department, an agency internationally known for its departmentwide commitment to the approach, and found that only 13 percent of detectives were involved in active problem-solving efforts. The Police Executive Research Forum (PERF) surveyed 547 police agencies and reported that only 12.4 percent of departments had implemented community policing and instituted some major changes, such as geographic decentralization of detectives to specific areas, to the structure of the investigative function (Cosgrove and Wycoff, 1999). The PERF report authors further noted that the problem-solving function was still primarily assigned to the patrol division and in only a handful of departments were detectives expected to assist in problem solving.

4. However, we should not forget that "shallow problem solving" (Braga and Weisburd, 2006) that is often characteristic of Compstat and other similar analytic efforts, assists many departments to deal with routine and minor matters for which full-blown analysis is unnecessary or redundant — given the circumstances.

5. It can be argued that the 9/11 attacks and the need to prevent such attacks in the future contributed to the current reconsideration of detective work. The desperate need for intelligence about future attacks gave evidence that the investigation of past events for the purpose of prosecution, while certainly appropriate in the pursuit of justice, was insufficient for stopping the next terrorist attack. Moreover, as the parallels between common crime and terroristic crime became more apparent, the same issues began to surface about criminal investigation in general. "Asking the next question" — i.e., pursuing the problem that gave rise to the case — appears to be relevant to routine urban police work.

6. The material in this section is based on the professional experiences of authors Chief Edward A. Flynn and Professor George L. Kelling in working with the Milwaukee Police Department to reform the work of their detectives.

7. We would like to thank Commissioner Raymond Kelly, Chief of Detectives Phil T. Pulaski (formerly Deputy Commissioner Operations) and Deputy Commissioner Michael Farrell for arranging a one-day site visit that included presentations by key investigative personnel and focus group discussions (September 30, 2008). This brief description of the New York Police Department's efforts to reform the work of their detectives is drawn from materials and qualitative insights provided during that site visit.

8. For more information, see http://www2.fbi.gov/ucr/cius2008/index.html (accessed November 14, 2010).

9. We would like to thank former Chief Commissioner Christine Nixon and current Chief Commissioner Simon Overland for arranging a two-day site visit that included presentations by key investigative personnel and focus group

discussions (March 16-17, 2009). We particularly would like to thank Superintendent Craig Howard for his helpful presentation and in-depth discussion of changes to the Crime Department. This brief description of the Victoria Police Department's efforts to reform the work of their investigators is drawn from materials and qualitative insights provided during that site visit. Interested readers should also consult a recent report by the Boston Consulting Group (2005) on the development of a new model for the work of criminal investigators.

10. The property crime rate in Victoria includes all offenses relating to property including stolen and damaged property (such as graffiti and other forms of vandalism). The inclusion of these offenses in the property crime category explains the relatively high, by U.S. UCR standards, property crime rate in Victoria. *Victoria Police Annual Report, 2007-2008,* http://www.police.vic.gov.au/content.asp?Document_ID=49 (accessed June 30, 2009).

11. We would like to thank a number of police executives for time spent in discussion that led to greater insight and enhanced understanding of the U.K. experience of criminal investigators. The in-depth conversation and consultation combined with the sharing of written materials by Chief Constable and Chief Executive Peter Neyroud of the National Police Improvement Agency contributed to the understanding of the professional development scheme in U.K. policing and its contribution to culture change (March 17, 2010). Appreciation is also extended to Detective Superintendent Mark Warwick, Thames Valley Police, Counter Terrorism Intelligence Unit South East, for several telephone communications (March and May 2010) that facilitated understanding of Operation Haul and the various applications of the National Intelligence Model to the work of investigators.

12. Revelations of specific cases — the Confait case (a homicide), and the Guilford Four and McGuire Seven (both involving terrorism and the IRA) — prompted the formation of the RCCP and later the RCCJ as well as the Police and Criminal Evidence Act (1984). In these cases, suspects were convicted and served a number of years in prison before the detective work was exposed as fraudulent. The review commissions uncovered the concerning common problem across these cases that the responsible detectives had little training, management and supervision. There have been several public examinations of policing in the U.K. and a number of standing bodies and commissions that provide oversight. Those referenced here are small in number and are meant to be illustrative and not exhaustive.

13. See http://www.npia.police.uk/en/10093.htm (accessed May 8, 2010).

14. For additional information, see http://www.npia.police.uk/en/5237.htm for courses in investigative skills, core programmes, specialist programmes, and further links to PIP and SIO (accessed November 14, 2010).

15. Her Majesty's Inspectorate of Constabulary's (HMIC's) tagline on the website is "inspecting policing in the public interest." http://www.hmic.gov.uk/Pages/home.aspx (accessed May 8, 2010).

16. See http://www.npia.police.uk/en/10510.htm (accessed May 8, 2010).

17. Operation Haul was activated in November 2005 and culminated in 2008 with the arrest and later conviction of multiple members of the criminal network known as the Johnson Clan. It is difficult to account with specificity the actual amount of cash and antiques that was stolen but it is estimated to be in excess of £30 million and possibly £80 million which is in accordance with court records and other public accounts. Interested readers should consult "Operation Haul" in the *Investigative Practice Journal,* September 25, 2008.

18. Many of the procedures utilized in Operation Haul such as managing victims and witnesses, managing investigations and more are described in *Practice Advice for the Implementation of a Volume Crime Management Model* (National Centre for Policing Excellence, 2004). This is an excellent resource for further reading.

References

Association of Chief Police Officers. 2005. *Guidance on the National Intelligence Model*. Bedford, England: National Centre for Policing Excellence.

Association of Chief Police Officers. 2007. *Practice Advice on Resources and the People Assets of the National Intelligence Model.* London: National Policing Improvement Agency.

Bayley, David (ed.). 1998. *What Works in Policing.* New York: Oxford University Press.

Bloch, Peter, and David Bell. 1976. *Managing Criminal Investigations: The Rochester System*. Washington, DC: The Police Foundation.

Bloch, Peter, and Donald Weidman. 1975. *Managing Criminal Investigations: Prescriptive Package.* Washington, DC: U.S. Government Printing Office.

Boston Consulting Group. 2005. *A Major Crime Management Model for the Victoria Police.* Final report to the Victoria Police.

Braga, Anthony A. 2001. "The Effects of Hot Spots Policing on Crime." *Annals of the American Academy of Political and Social Science,* 578: 104-125.

Braga, Anthony A. 2008a. *Problem-Oriented Policing and Crime Prevention.* Second edition. Monsey, NY: Criminal Justice Press.

Braga, Anthony A. 2008b. "Gun Enforcement and Ballistics Imaging Technology in Boston." In *Ballistics Imaging,* edited by Daniel L. Cork, John E. Rolph, Eugene S. Meieran, and Carol V. Petrie. National Research Council and National Academy of Engineering. Washington, DC: The National Academies Press.

Braga, Anthony A., David Hureau, and Christopher Winship. 2008. "Losing Faith? Police, Black Churches, and the Resurgence of Youth

Violence in Boston." *Ohio State Journal of Criminal Law,* 6 (1): 141-172.

Braga, Anthony A., David M. Kennedy, Elin J. Waring, and Anne M. Piehl. 2001. "Problem-Oriented Policing, Deterrence, and Youth Violence: An Evaluation of Boston's Operation Ceasefire." *Journal of Research in Crime and Delinquency,* 38 (3): 195-225.

Braga, Anthony A., Andrew V. Papachristos, and David Hureau. 2010. "The Concentration and Stability of Gun Violence at Micro Places in Boston, 1980-2008." *Journal of Quantitative Criminology,* 26 (1): 33-53.

Braga, Anthony A., and Glenn L. Pierce. 2004. "Linking Gun Crimes: The Impact of Ballistics Imaging Technology on the Productivity of the Boston Police Department's Ballistics Unit." *Journal of Forensic Sciences,* 46 (4): 701-706.

Braga, Anthony A., and David L. Weisburd. 2006. "Problem-Oriented Policing: The Disconnect Between Principles and Practice." In *Police Innovation: Contrasting Perspectives,* edited by David L. Weisburd and Anthony A. Braga. New York: Cambridge University Press.

Bratton, William. 1998. *Turnaround: How America's Top Cop Reversed the Crime Epidemic.* New York: Random House.

Cordner, Gary, and Elizabeth P. Biebel. 2005. "Problem-Oriented Policing in Practice." *Criminology & Public Policy,* 4 (2): 155-180.

Cosgrove, Colleen, and Mary Ann Wycoff. 1999. "Investigations in the Community Policing Context." Washington, DC: Police Executive Research Forum, unpublished paper.

Eck, John E. 1983. *Solving Crimes: The Investigation of Burglary and Robbery.* Washington, DC: Police Executive Research Forum.

Eck, John E. 1992. "Criminal Investigation." In *What Works in Policing? Operations and Administration Examined,* edited by Gary W. Cordner and Donna C. Hale. Cincinnati, OH: Anderson Publishing Co.

Eck, John E., and William Spelman. 1987. *Problem-Solving: Problem-Oriented Policing in Newport News.* Washington, DC: Police Executive Research Forum.

Ericson, Richard. 1982. *Reproducing Order.* Toronto, Ontario: University of Toronto Press.

Folk, J.F. 1971. "Municipal Detective Systems — A Quantitative Approach." Technical Report Number 55. Operations Research Center. Cambridge, MA: Massachusetts Institute of Technology.

Forrester, David, Michael Chatterton, and Ken Pease. 1988. *The Kirkholt Burglary Prevention Project.* (Home Office Crime Prevention Unit Paper 13.) London: Home Office.

Forrester, David, Samantha Frenz, Martin O'Connell, and Ken Pease. 1990. *The Kirkholt Burglary Prevention Project: Phase II.* (Home Office Crime Prevention Unit Paper 23.) London: Home Office.

Goldstein, Herman. 1977. *Policing a Free Society.* Cambridge, MA: Ballinger.

Goldstein, Herman. 1979. "Improving Policing: A Problem-Oriented Approach." *Crime & Delinquency,* 25: 236-258.

Goldstein, Herman. 1990. *Problem-Oriented Policing.* Philadelphia, PA: Temple University Press.

Greenwood, Peter. 1970. *An Analysis of the Apprehension Activities of the New York City Police Department.* New York: Rand Institute.

Greenwood, Peter, and Joan Petersilia. 1975. *The Criminal Investigation Process — Volume I: Summary and Policy Implications.* Santa Monica, CA: Rand Corporation.

Greenwood, Peter, Jan Chaiken, and Joan Petersilia. 1977. *The Investigation Process.* Lexington, MA: Lexington Books.

Guyot, Dorothy. 1979. "Bending Granite: Attempts to Change the Rank Structure of American Police Departments." *Journal of Police Science and Administration,* 7: 253-284.

Horvath, Frank, Robert Meesig, and Yung H. Lee. 2001. *National Survey of Police Policies and Practices Regarding the Criminal Investigations Process: Twenty-Five Years After Rand.* Final Report (NCJRS 202902). Washington, DC: U.S. Department of Justice, Office of Justice Programs, National Institute of Justice.

Home Office. 1993. *Report of the Royal Commission on Criminal Justice.* London: Home Office.

Kennedy, David M., Anthony A. Braga, and Anne M. Piehl. 1997. "The (Un)Known Universe: Mapping Gangs and Gang Violence in Boston." In *Crime Mapping and Crime Prevention,* edited by David L. Weisburd and J. Thomas McEwen. *Crime Prevention Studies,* Volume 8. Monsey, NY: Criminal Justice Press.

Kennedy, David M., Anne M. Piehl, and Anthony A. Braga. 1996. "Youth Violence in Boston: Gun Markets, Serious Youth Offenders, and a Use-Reduction Strategy." *Law and Contemporary Problems,* 59 (1): 147-196.

National Centre for Policing Excellence. 2004. Management of Volume Crime. *Practice Advice for the Implementation of a Volume Crime Management Model.* Wyboston, Bedfordshire.

Neyroud, Peter, and Emma Disley. 2007. "The Management, Supervision, and Oversight of Criminal Investigations." In *The Handbook of Criminal Investigation,* edited by Tim Newburn, Tom Williamson, and Alan Wright. Devon, England: Willan Publishing.

Ratcliffe, Jerry. 2008. *Intelligence-Led Policing.* Portland, OR: Willan Publishing.

Reiss, Albert, Jr. 1971. *The Police and the Public.* New Haven, CT: Yale University Press.

Reiss, Albert, Jr., and David J. Bordua. 1967. "Environment and Organization: A Perspective on the Police." In *The Police: Six Sociological Essays*, edited by David J. Bordua. New York: John Wiley.

Repetto, Thomas. 1978. *The Blue Parade*. New York: Free Press.

Ritter, Nancy. 2008. "DNA Solves Property Crimes (But Are We Ready for That?)" *NIJ Journal,* 261: 2.

Royal Commission on Criminal Procedure. 1981. Research Study 17. London, England: Her Majesty's Stationery Office.

Scott, Michael. 2000. *Problem-Oriented Policing: Reflections on the First 20 Years*. Washington, DC: U.S. Department of Justice, Office of Community Oriented Policing Services.

Silverman, Eli B. 1999. NYPD *Battles Crime: Innovative Strategies in Policing*. Boston, MA: Northeastern University Press.

Sherman, Lawrence, Catherine Milton, and Thomas Kelly. 1973. *Team Policing: Seven Case Studies*. Washington, DC: Police Foundation.

Skogan, Wesley, and Kathleen Frydl (eds.). 2004. *Fairness and Effectiveness in Policing: The Evidence*. Committee to Review Research on Police Policy and Practices, Committee on Law and Justice, Division of Behavioral and Social Sciences and Education. Washington, DC: The National Academies Press.

Skolnick, Jerome, and David Bayley. 1986. *The New Blue Line: Police Innovation in Six American Cities*. New York: Free Press.

Sparrow, Malcolm. 2008. *The Character of Harms: Operational Challenges in Control*. New York: Cambridge University Press.

Spelman, William, and John Eck. 1989. "Sitting Ducks, Ravenous Wolves, and Helping Hands: New Approaches to Urban Policing." *Public Affairs Comment*, 35 (2): 1-9.

Stelfox, Peter. 2007. "Professionalizing Criminal Investigation." In *The Handbook of Criminal Investigation* edited by Tim Newburn, Tom Williamson, and Alan Wright. Devon, England: Willan Publishing.

Tilley, Nick, Amanda Robinson, and John Burrows. 2007. "The Investigation of Volume Crime." In *The Handbook of Criminal Investigation* edited by Tim Newburn, Tom Williamson, and Alan Wright. Devon, England: Willan Publishing.

U.S. President's Commission on Law Enforcement and Administration of Justice. 1967. *Task Force Report: The Police*. Washington, DC: U.S. Government Printing Office.

Walker, Samuel. 1992. *The Police in America*. New York: McGraw Hill.

Ward, R.H. 1971. *The Investigative Function: Criminal Investigation in the United States*. Doctoral dissertation. Berkeley, CA: University of California.

Weisburd, David L., and Anthony A. Braga (eds.). 2006. Police Innovation: Contrasting Perspectives. New York: Cambridge University Press.

Weisburd, David, and John Eck. 2004. "What Can Police Do to Reduce Crime, Disorder, and Fear?" *Annals of the American Academy of Political and Social Science,* 593: 42-65.

Weisburd, David, Stephen Mastrofski, Anne Marie McNally, Roseann Greenspan, and James Willis. 2003. "Reforming to Preserve: Compstat and Strategic Problem Solving in American Policing." *Criminology & Public Policy,* 2: 421-457.

Weisburd, David, Cody W. Telep, Joshua C. Hinkle, and John Eck. 2010. "The Effects of Problem-Oriented Policing on Crime and Disorder." *Criminology & Public Policy,* 9: 139-172.

Wilson, James Q., and George Kelling. 1982. "Broken Windows: The Police and Neighborhood Safety." *Atlantic Monthly,* (March): 29-38.

Author Note

Anthony A. Braga is a Professor in the School of Criminal Justice at Rutgers University and a Senior Research Fellow in the Program in Criminal Justice Policy and Management at Harvard University. Edward A. Flynn is Chief of the Milwaukee Police Department. George L. Kelling is Professor Emeritus in the School of Criminal Justice at Rutgers University. Christine M. Cole is the Executive Director of the Program in Criminal Justice Policy and Management at Harvard University.

The authors would like to thank Darrel Stephens, Malcolm Sparrow and Peter Neyroud for their thoughtful comments on earlier versions of this paper.

Findings and conclusions in this publication are those of the authors and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

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

Washington, DC 20531

Official Business
Penalty for Private Use $300

PRESORTED STANDARD
POSTAGE & FEES PAID
DOJ/NIJ
PERMIT NO. G–91

Members of the Executive Session on Policing and Public Safety

Chief Anthony Batts, Oakland Police Department

Professor David Bayley, Distinguished Professor, School of Criminal Justice, State University of New York at Albany

Dr. Anthony Braga, Senior Research Associate, Lecturer in Public Policy, Program in Criminal Justice Policy and Management, Kennedy School of Government, Harvard University

Chief William J. Bratton, Los Angeles Police Department

Chief Ella Bully-Cummings, Detroit Police Department (retired)

Ms. Christine Cole (Facilitator), Executive Director, Program in Criminal Justice Policy and Management, Kennedy School of Government, Harvard University

Commissioner Edward Davis, Boston Police Department

Chief Ronald Davis, East Palo Alto Police Department

Chief Edward Flynn, Milwaukee Police Department

Colonel Rick Fuentes, Superintendent, New Jersey State Police

Chief George Gascón, San Francisco Police Department

Mr. Gil Kerlikowske, Director, Office of National Drug Control Policy

Chief Cathy Lanier, Washington, D.C. Metropolitan Police Department

Dr. John H. Laub, Director, National Institute of Justice

Ms. Adrian Nicole LeBlanc, Visiting Scholar, New York University

Professor Tracey Meares, Walton Hale Hamilton Professor of Law, Yale Law School

Chief Constable Peter Neyroud, Chief Executive, National Policing Improvement Agency (U.K.)

Ms. Christine Nixon, Chair, Victorian Bushfire Reconstruction and Recovery Authority (Australia)

Chief Richard Pennington, Atlanta Police Department

Mayor Jerry Sanders, City of San Diego

Professor David Sklansky, Professor of Law, Faculty Co-Chair of the Berkeley Center for Criminal Justice, University of California, Berkeley, School of Law

Mr. Sean Smoot, Director and Chief Legal Counsel, Police Benevolent and Protective Association of Illinois

Professor Malcolm Sparrow, Professor of Practice of Public Management, Kennedy School of Government, Harvard University

Chief Darrel Stephens, Charlotte-Mecklenburg Police Department (retired)

Professor Christopher Stone, Guggenheim Professor of the Practice of Criminal Justice, Kennedy School of Government, Harvard University

Mr. Jeremy Travis, President, John Jay College of Criminal Justice

Mr. Rick VanHouten, President, Fort Worth Police Association

Professor David Weisburd, Walter E. Meyer Professor of Law and Criminal Justice; Director, Institute of Criminology, Faculty of Law, The Hebrew University; and Distinguished Professor, Department of Criminology, Law and Society, George Mason University

Dr. Chuck Wexler, Executive Director, Police Executive Research Forum

Learn more about the Executive Session at:

NIJ's website: http://www.ojp.usdoj.gov/nij/topics/law-enforcement/executive-sessions/welcome.htm
Harvard's website: http://www.hks.harvard.edu/criminaljustice/executive_sessions/policing.htm

NCJ 232994