

INTELLIGENCE-LED POLICING

Jerry H. Ratcliffe

Draft of a forthcoming book chapter in edited book from Richard Wortley, Lorraine Mazerolle, and Sasha Rombouts. Suggested citation:

Ratcliffe, JH (in press) "Intelligence-led policing". In; Wortley, R, Mazerolle, L, and Rombouts, S (Eds) *Environmental Criminology and Crime Analysis* (Willan Publishing: Cullompton, Devon).

However, please do not cite without permission of the author. Contact at jhr@temple.edu.

INTRODUCTION

The word *intelligence* seems to summon up the wrong image in just about everyone. To the public it can suggest subterfuge, a clandestine and covert activity conducted by officers of a shady disposition and involving a degree of moral ambiguity. To patrol officers, it's a peripheral activity that seems to have little relevance to their daily job and is mainly used by specialised units employing wiretaps and surveillance. To senior police officers, it is of tangential value, a tool for investigative case support that has little influence over strategic decision-making. But to crime intelligence analysts, it represents a rare objective voice that understands the criminal environment, a lone whisper that is maligned, misunderstood or simply ignored by an institutional milieu yet to come to terms with policing in the post-9/11, information-rich world. Misuse of the term *intelligence-led policing* can further increase confusion by reinforcing preconceived notions (such as those mentioned above), encumbering this new conceptual framework and business model for policing with all of the characteristics embodied by however the individual originally viewed *intelligence*.

Wardlaw and Boughton argue that 'the concept of intelligence-led policing is now widely espoused by police services as a fundamental part of the way they do business. But for such a widely talked about concept, there is remarkably little clarity about its definition and fundamental concepts' (2006: 134). This chapter therefore aims to wade through the conceptual fog by outlining the origins of intelligence-led policing and from this move towards clarifying its central tenets and how they differ from other models of policing.

ORIGINS

It is claimed by some in law enforcement that they have been doing intelligence-led policing for ages however for much of the history of policing criminal intelligence was utilised in a haphazard and inconsequential manner (see Christopher 2004 and Grieve 2004). As such, intelligence played little role in a 'standard' model of policing that favoured a reactive and investigative approach to crime, rather than a preventative one (Weisburd & Eck 2004). Prior to the 1990s, criminal

intelligence was rarely used in any coordinated, proactive sense but was used on a case-by-case basis to gather evidence to support prosecutions. In many respects, this was worse than 'policing-led intelligence' (Cope 2004) and was really a 150-year illustration of *investigation-led intelligence*, a demotion that pushed criminal intelligence and the analytical process into the wilderness of the law enforcement world and subverted it to the role of case support: a minor adjunct to investigations.

So how did the use of crime analysis and criminal intelligence emerge from a peripheral activity employed by specialised police units, into the pivotal position at the heart of the business model that intelligence-led policing has become today? The exact path from investigation-led intelligence to intelligence-led policing is a little unclear however it does have some signposts and one or two significant milestones (Gill 1998). Signposts include;

- The demand gap and the failure of traditional policing

The standard model of reactive, investigative policing was unable to contain the huge spike in crime that hit the US starting in the mid 1960s and manifesting itself in a failure of the criminal justice system in the 1970s (Weisburd & Eck 2004). Similarly in the mid-1970s, the UK experienced a demand gap that saw requests for police attention and assistance far outstrip any corresponding increases in police resources or personnel (Flood 2004). These challenging times provided the impetus for problem-oriented policing, community policing, team policing and a host of other attempts to be more effective with existing resources.

- Improvements in information technology

The period since the mid-1970s saw police departments slowly adopting greater technological solutions for their information management needs. While originally spurred to collect statistics for governmental purposes and to manage the information needs of agencies outside policing (Chainey & Ratcliffe 2005, Ericson & Haggerty 1997), it became apparent to innovators within law enforcement that the vast volumes of data collected internally could be used to influence police decision-making. Crime analysts (often separate from intelligence officers) began cropping up in police departments as a group adept at using this 'new knowledge' (Ratcliffe in press) to provide tactical support for mid-level commanders and create a strategic picture of crime for senior management.

- Pressure for greater managerial professionalisation

The demand gap coincided with, and was related to, greater calls on the police for effectiveness and efficiency. The growth in the UK of the 'new public management' movement saw government take an active interest in the day-to-day business of policing for the first time (Crawford 1997). Police executives fell under far more scrutiny than ever before, such that decisions had to be tempered by a risk management assessment of likely fallout to the police service. This need to manage risk required greater access to information and drove significant changes in the business of policing (Ericson & Haggerty 1997). As Flood notes, 'in the face of an established social trend that seems to disallow honest mistakes, apports blame and makes

sure that someone “pays” whenever misfortune strikes, it is nothing more than common sense to ensure that police actions should be based, wherever possible, on rigorously evaluated intelligence of known provenance rather than on intuition, even where the latter may have its roots in long experience’ (Flood 2004: 43).

- The growth of serious and organized crime

The breakdown of national boundaries at the end of the last century coupled with the end of the Cold War led to rapid changes on an international level. Greater internationalism of illicit commodities, the rise of globalisation, the creation of electronic financial transactions and the Internet, all facilitated an increase in transnational crime. No longer could police departments remain isolated from their colleagues in other jurisdictions. The resultant move to a more collaborative approach to serious and organized crime has left police departments contemplating organizational restructuring as well as seeking out new models of policing as a conceptual framework on which to orientate themselves (see for example Ratcliffe and Guidetti, in press). Federal intelligence agencies have desks specifically to examine groups such as South-East Asian organised crime and the Russian mafia, and there are now a range of federal and national agencies that have directives to interdict transnational organised crime organisations and to link domestic and international intelligence on these groups (Wardlaw & Boughton 2006). Internationally, organizations with mandates that stretch beyond traditional national borders are becoming common, including; the myriad agencies under the Department of Homeland Security (US), the UK Serious and Organised Crime Agency (SOCA), Criminal Intelligence Service Canada (CISC), and the Australian Crime Commission (ACC) and Australian Federal Police (AFP).

While these drivers (the demand gap, improvements in information technology, new public managerialism, and the growth of organised crime) were responsible for creating an environment conducive to intelligence-led policing, there are specific milestones that map the route to the current law enforcement landscape. One is the publication in 1993 of *Helping with Enquiries: Tackling Crime Effectively* by a British government financial oversight body (Audit Commission 1993). Their recommendations sought to achieve the greatest value for money from the police in the fight against crime and looked to move the police away from a reactive, crime focus to a proactive, offender focus. *Helping with Enquiries* had three main arguments:

- Existing policing roles and the levels of accountability lacked integration and efficiency;
- The police were failing to make the best use of resources; and
- Greater emphasis on tackling criminals would be more effective than focusing on crimes (Ratcliffe 2003).

Helping with Enquiries included a raft of statistical data that appeared to support the case for proactive policing. Some researchers questioned the validity of the case proposed by the Audit Commission (see for example Dunnighan & Norris 1999 and related work by Townsley & Pease 2002), but the government had already gathered vocal and enthusiastic support, especially from

within the police. Intelligence-led policing provided an argument for police to re-engage with what they considered to be core business; fighting crime and arresting serious offenders. Further publications (Maguire & John 1995, Amey et al. 1996, HMIC 1997) provided a framework for implementation and the experiences of police in Kent, under the leadership of David Phillips with the Kent Policing Model (Anderson 1994, Collier 2006), demonstrated that proactive policing could be applied to high volume, property crime as well as to organized crime. To promote the idea to all forces, Her Majesty's Inspectorate of Constabulary identified in 1997 the central tenets of a successful intelligence-led model:

- Enthusiastic and energetic leadership that endorses intelligence-led policing and promotes it through a Director of Intelligence,
- A published strategy that sets the intelligence agenda for a force, as well as explains what is meant by 'proactivity',
- An integrated intelligence structure so that analysts can work at the hub of operational policing activities,
- Criteria to measure performance to determine the effectiveness of the introduction of the crime intelligence function and the tasking of operational units, and
- The forging of effective partnerships with local agencies that may be able to help police combat local crime and disorder problems (HMIC 1997: 1).

Beyond the UK, the events of September 11th, 2001 (9/11) served to fuel a growing international interest in intelligence-led policing. Realizing that a reactive, investigation-focused approach was of increasingly less comfort to a public seeking prevention and disruption of future incidents rather than swift investigation, police in a number of countries began exploring intelligence-led policing as a framework for the reduction, disruption and prevention of crime. In particular, based on recommendations from the Criminal Intelligence Sharing Summit held in Spring 2002, senior US law enforcement officers called for a National Intelligence Plan to promote information sharing and intelligence-led policing (IACP 2002). Intelligence-led policing was now firmly established into the worldwide policing lexicon (Ratcliffe 2003).

DEFINITION

Possibly the easiest way to begin to explain what intelligence-led policing is, it to start by addressing what it is not. Intelligence-led policing is a business process and not an intelligence-gathering technique. Both inside and outside policing, there is a belief that surveillance and confidential informant use constitutes 'intelligence'. This is not the case, as both surveillance (physical and electronic) and information from confidential human sources are more accurately described as covert information-gathering techniques. There is an important distinction between gathering information and using intelligence to influence the decision-making of crime reduction practitioners. Intelligence-led policing does involve an extension of what constitutes traditional information resources to include more sources than an investigation-oriented, case-support analyst

might consider. For example, 'the interpretation of crime and incident data through analysis, and community information on a range of issues, as well as that more commonly used information gleaned from various sources on the activities of known or suspected active criminals' (Oakensen et al. 2002: 7) are all considered valid information sources under an intelligence-led policing regime.

In the US, some members of the public (and some in law enforcement) view the word *intelligence* within the context of policing with some suspicion. This caution has its origins in the abuses of police intelligence activity in the 1950s and 1960s. Investigations of political and non-violent war protest organizations were brought to public notice when it was revealed that public figures such as John Lennon and Dr Martin Luther King Jr had been kept under police surveillance. Some organizations (such as the US National Institute of Justice) therefore prefer the use of the term *information-led policing* in lieu of *intelligence-led policing*. This is, however, inaccurate and confusing because it does not do justice to the continuum from data to intelligence. To build on and extend the ideas of Davenport (1997), intelligence is the end result of a process that starts with data, becomes information, that itself can become knowledge, and - if employed to have an impact on decisions affecting the criminal environment - becomes intelligence. For example, a computer database can store locations of drug-related incidents and arrests. These computer records are *data*. When a crime analyst accesses the data and recognises a new pattern of drug market incidents at a particular street corner, then this becomes *information*. Information is data given meaning and structure. If the analyst talks to a narcotics intelligence officer and shares this information, and the narcotics officer remembers that this was a favourite corner for a particularly violent drug set and that the gang leaders have just been released from prison, this collective understanding of the context of the drug corner now becomes *knowledge*. Finally, when the analyst and the officer take their knowledge to a senior commander who agrees to mount both a surveillance operation to arrest ringleaders as well as a problem-oriented policing project to identify and resolve why the particular corner is attractive to drug dealers, then this actionable knowledge becomes *intelligence*. Intelligence is therefore knowledge that is geared towards action.

So what is intelligence-led policing if it is neither *information-led policing* nor *investigation-led intelligence* (where covert information gathering techniques support investigations)? When originally proposed in the early 1990s, intelligence-led policing was seen as a conceptual model that used crime analysis and criminal intelligence in a strategic manner to determine offenders for targeting. Crime reduction tactics would concentrate on enforcement and the prevention of offender activity with a particular interest in using crime intelligence against the activities of prolific and serious offenders. The techniques to be deployed included an expanded use of confidential informants, analysis of recorded crime and calls for service, surveillance of suspects, and offender interviews. Where intelligence-led policing was revolutionary was in the use of intelligence derived from covert information as a *strategic* planning resource rather than as a means to develop case-specific evidence, as had traditionally been the case. Furthermore, intelligence-led policing became synonymous with the greater integration of criminal intelligence and crime analysis.

In the last few years, the implementation of intelligence-led policing appears to suggest a widening definition that is moving towards integration with the tenets of problem-oriented policing. While

still remaining true to the core ideas that police should avoid expending substantial resources in reactive, individual investigations, intelligence-led policing has now evolved into a business model that can include greater emphasis on information-sharing with local partnerships and on strategic problem solving. The police are still central to the process and the core activity of disrupting recidivist and serious offenders remains pivotal, but there is also an increased desire to work with partners in order to develop collaborative, strategic solutions to crime problems.

In summary:

Intelligence-led policing 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. (Ratcliffe, 2008)

DISTINCTIVE FEATURES

Readers familiar with other chapters in this book, as well as the broader policing literature, will recognize some familiarity in the internal and external drivers introduced at the beginning of this chapter. These drivers helped promote intelligence-led policing but also acted as forces that influenced the development of other conceptual frameworks of policing, such as community policing, Broken Windows theory, problem-oriented policing and Compstat. Problem-oriented policing is covered in the preceding chapter, and the theory of Broken Windows is addressed later in this book. However for now, some definitional clarity is required in order to establish that there is clear daylight between these differing views on how to control crime.

TABLE 1. KEY DIMENSIONS OF FIVE POLICING MODELS. SOURCE: RATCLIFFE, 2008.

	<i>Standard model of policing</i>	<i>Community policing</i>	<i>Problem-oriented policing</i>	<i>Compstat</i>	<i>Intelligence-led policing</i>
Easily defined?	Yes	No	Fairly easy	Yes	Fairly easy, but still evolving
Easily adopted?	Yes	Superficially	Difficult	At the technical level, but managerially challenging	Managerially challenging
Orientation?	Police administrative units	Neighbourhoods	Problems	Police administrative units	Criminal groups, prolific and serious offenders
Hierarchical focus?	Top down	Bottom-up	As appropriate for the problem	Top down	Top down
Who determines priorities?	Police management	Community concerns/demands	Sometimes crime analysis, but varies from problem to problem	Police management from crime analysis	Police management from crime intelligence analysis
Target?	Offence detection	Unclear	Crime and disorder problems, and other areas of concern for police	Crime and disorder hotspots	Prolific offenders and crime problems, and other areas of concern for police
Criteria for success?	Increased detections and arrests	Satisfied community	Reduction of problem	Lower crime rates	Detection, reduction or disruption of criminal activity or problem
Expected benefit?	Increased efficiency	Increased police legitimacy	Reduced crime and other problems	Reduced crime (sometimes other problems)	Reduced crime and other problems

Table 1 describes particular dimensions of five common policing models. Of course, any attempt to highlight the distinctive tenets of any policing model requires both a considerable degree of generalisation and some latitude in this attempt to distil into a simple table the varying policing models; inevitably the table suggests differences that appear more severe than they often are in reality.

The first is the standard model of policing, an approach that;

relies generally on a “one-size-fits all” application of reactive strategies to suppress crime and ... is based on the assumption that generic strategies for crime reduction can be applied throughout a jurisdiction regardless of the level of crime, the nature of crime, or other variations. Such strategies as increasing the size of police agencies, random patrol across all parts of the community, rapid response to calls for service, generally applied follow-up investigations, and generally applied intensive enforcement and arrest policies are all examples of this standard model of policing (Weisburd & Eck 2004: 44).

While still the most common way to conduct policing in America, many of the tenets of the standard model have been found to be unsuccessful in promoting long-term crime control. For example, research from the 1970s and 1980s went a considerable way to debunking the myth that random patrol had any significant crime prevention benefits (see for example Kelling 1981, Kelling et al. 1974).

Community policing (the second model) evolved not just a response to the limitations of the standard model but mainly as a way to re-establish police legitimacy in communities that had lost confidence and trust in the police. This approach, one that believes the police should consult with the public in determining operational policing priorities as well as collaborate with them in the search for solutions (Bennett 1994), was supported by significant funds from federal and state governments in the US. In the ensuing scramble for dollars (nearly nine billion were on offer from the US federal government alone) a wide array of policing tactics and approaches were labelled as ‘community policing’ such that it has become impossible to determine what is, and what is not, community policing. The neighbourhood level empowerment of community officers working with local people on priorities determined by the community is certainly attractive to politicians and the media, but the lack of clear criteria for success has hampered efforts to label community policing a success. Community policing has been unable to overcome a lack of enthusiasm from a police culture that does not regard community policing as real police work, there has been resistance from mid-level commanders in some police departments, some departments have been unable to appropriately staff community policing units, a number of evaluations have not found significant crime reduction benefits from community policing efforts, and it has been difficult to sustain the interest of the public in community policing (Skogan & Hartnett 1997).

Unlike community policing, intelligence-led policing is a top-down managerially driven approach to crime control, that concentrates on prolific offenders and criminal groups identified as threats through crime intelligence analysis, as opposed to specifically working to alleviate community concerns and address issues of public trust. This is not to say that there is no possibility of overlap, but rather that a community’s concerns are not permitted to perpetually trump an objective

assessment of the criminal environment. Furthermore, like problem-oriented policing but unlike community policing, community involvement in a crime control solution is not a requirement of intelligence-led policing.

Problem-oriented policing's focus is more objective than community policing as it employs crime analysis as a major determinant of problems to be addressed. While applicable to a broad range of issues, both the requirement to stick with problems until they are resolved and the common approach of empowering rank-and-file members of the police department as the action arm of the model require a considerable cultural change for many police departments. The chapter in this book by John Eck, Mike Scott and Herman Goldstein describes problem-oriented policing in greater detail.

The last decade has seen the term Compstat cemented into the lexicon of policing. Like the standard model, Compstat is a managerial accountability process, but is oriented towards the crime reduction aspect of police business. With Compstat, mid-level commanders are required to be accountable to the top brass for the control of crime in their basic command units. By encouraging and requiring accountability, the theory runs that precinct captains and managers will have to make use of regular, detailed crime analysis (often in the form of crime maps) in order to determine an appropriate crime reduction strategy.

Because it is focused on police managerial levels, Compstat is organized along police administrative units and is very-much a top-down approach to effecting change. Commanders survive in Compstat meetings by demonstrating their knowledge of the crime situation in their area, and ideally showing that they have lowered crime rates in the worst locations, at least in the short-term. Few Compstat meetings review crime patterns from more than the preceding meeting, so commanders rarely have to worry too much about crime that occurred before the last assembly. Priorities are determined by commanders reviewing crime and disorder hotspots identified by crime analysis, and this use of analysis by senior police commanders to drive the actions of officers under their command makes Compstat, in a broad sense, similar to, but not the same as, intelligence-led policing.

So where does intelligence-led policing fit into the picture, and how is it unique from these other attempts to control crime?

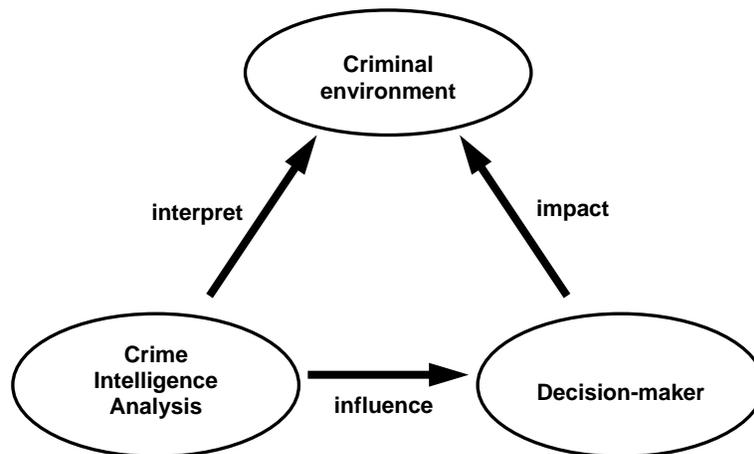
As Table 1 shows, intelligence-led policing is relatively easy for a police department to adopt, at least from the perspective of police culture: Inhibiting the activities of serious and prolific offenders and disrupting their criminal activity is definitely the type of work for which most police officers joined the job. However existing managerial cultures may take some time to adapt to intelligence-led policing. It is a management philosophy and business model that employs a top-down management approach, employing the existing rank structure, where strategic priorities derived from a combination of crime analysis and criminal intelligence are used to focus tactical outcomes with the aim of achieving crime reduction and prevention and the disruption of offender activity. This is a business model because the combined crime analysis and criminal intelligence (collectively termed crime intelligence) are used to objectively direct police resource decisions. As said earlier, it is this resource allocation and prioritisation that makes intelligence-led policing

different to previous uses of criminal intelligence: what used to be a myopic, case-specific, evidence-gathering tool is now used for strategic planning at a higher organizational level.

A CONCEPTUAL MODEL OF INTELLIGENCE-LED POLICING

While Table 1 outlines intelligence-led policing, there is some latitude in the definition from a conceptual sense. This section therefore outlines the three-i model (Ratcliffe 2003, Ratcliffe 2004b), a simplified conceptual framework of how crime reduction is achieved in an intelligence-led policing environment. The model is shown in Figure 1.

Figure 1: The three-i model (from Ratcliffe 2003).



In the three-i model (interpret, influence, impact) the analytical arm of the police department actively interprets the criminal environment in order to determine who the main players are, and what are the significant and emerging threats. In the model, the arrow runs from the intelligence analysis unit to the criminal environment. While this frustrates some analysts who are more used to viewing their role as part of a cycle, it is a reflection of the reality of crime intelligence analysis. While a *push model*, where analysts send out information requests and wait for that information to come back to them is nice in theory;

...the push model does not work well in practice. The bureaucratic structure and culture of law enforcement agencies militates against the effective communication of intelligence requirements. The culture also thwarts the push model because large volumes of intelligence remain tacit, 'inside officers' heads', rather than recorded in intelligence records which can be shared at the push of a button (Higgins 2004: 80).

As a result of this failure, crime intelligence analysts have to resort to a *pull model* for information collation. This approach entails the analyst actively seeking intelligence from contributors and actively seeking out the information they require by interviewing investigating officers and debriefing handlers of confidential informants.

The second arrow runs from the intelligence function to the decision-maker. The three-i model does not make a determination as to who is the best decision-maker: that is for the individual analyst to figure out for themselves. Many decision-makers are not the people who initially commissioned the intelligence product, and many are also outside of the immediate law enforcement environment. For example, mobile phone thefts in the 1990s were predominantly thwarted by the activities of the cell phone industry rather than the enforcement actions of the police (Clarke et al. 2001). This illustration is an example of what Wood and Shearing (2007) call *nodal governance*: networks of actors both within law enforcement and from outside agencies such as government and the private sector, all of whom having responsibilities to provide security. The *influence* part of the three-i model requires analysts to influence the thinking of decision-makers – whoever they determine decision-makers to be.

Influencing decision-makers is a tricky area for many analysts. Analysts with a traditional intelligence background often feel that their role is simply one of investigative case support, providing output and descriptive analyses of wire taps, intelligence gleaned from individual investigations, and grading information that detectives receive from confidential informants. The notion of providing commanders with recommendations as to targets and action can seem quite alien and many analysts feel this is outside of their remit. Making recommendations for action is especially difficult for civilian analysts in a sworn-officer world, however the analysts often have a sense of the broader perspective and are less reliant on experiential knowledge, one of the major causes of ‘policing-led intelligence’ (Cope 2004). However from the perspective of the three-i model, this is a crucial part of the analysts’ job in an intelligence-led policing environment. Cope points out the importance of differentiating ‘the capacity to make *recommendations based on analysis and research* and the *capacity to make decisions about adopting recommendations and directing action*’ (p. 191, emphasis in original). Crime intelligence analysts are quite entitled and usually qualified to make the former: the latter is an issue for decision-makers.

Intelligence-led policing does not occur if *interpret* and *influence* are the only components of the three-i model that occur. For crime reduction to result, decision-makers must bring about an *impact* on the criminal environment. The process can break down at any stage in the three-i model; however the last stage is particularly troublesome because of the lack of education and training available for senior officers in law enforcement. As the literature on problem-oriented policing demonstrates (for an overview see Sampson & Scott 1999, Scott 2000, the chapter in this book, and www.popcenter.org), many tactics that effectively reduce crime over the long term do not involve operational policing. Regretfully however, operational commanders too-often rely on traditional policing tactics (such as investigations and saturation patrolling) as the only response to crime problems. The cause for this lack of tactical imagination is likely to be a general sense that if a commander has made it to the higher echelons of law enforcement, then that commander must know how to ‘do’ crime prevention. This probably explains why one of the leading providers in police education in the US in 2004 offered only one course dedicated to crime prevention from a total of 68 available courses (Ratcliffe 2004a).

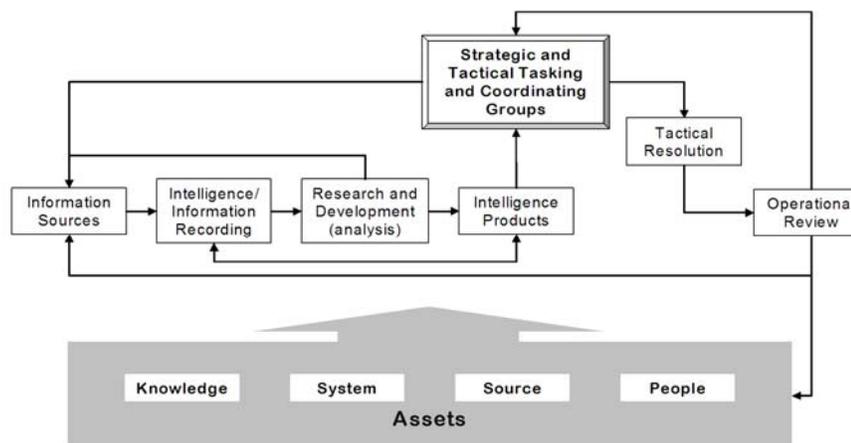
For crime prevention, reduction or offender disruption to occur, all three *i* components of the three-i model must occur; the crime intelligence analysts must *interpret* the criminal environment, the

analysts must then use that intelligence to *influence* decision-makers, and decision-makers must direct resources effectively in order to have a positive *impact* on the criminal environment.

IMPLEMENTING INTELLIGENCE-LED POLICING

In the UK, it is almost impossible to discuss the concept of intelligence-led policing without making reference to the National Intelligence Model (NIM). While the National Intelligence Model is not entirely synonymous with intelligence-led policing, the NIM has been adopted as a business model through which to implement the conceptual framework of intelligence-led policing. Released by the National Criminal Intelligence Service in 2000 and becoming the policy of the Association of Chief Police Officers in the same year, the NIM became the required business model of police services in England and Wales in April 2004, courtesy of the Police Reform Act 2002. The NIM has also been adopted in the UK by the Serious and Organised Crime Agency (SOCA), the Immigration Service, and it is also used by the Crime and Disorder Reduction Partnerships established by the 1998 Crime and Disorder Act to create partnerships between the police and relevant local authorities such as the probation service, health authorities and the local community.

Figure 2: The National Intelligence Model Business Process, adapted from NCPE (2005a: 14).



The NIM is designed to work on three levels. At the local level, neighbourhood policing teams handle their own crime and disorder problems, gather information and use local intelligence resources to address problems in the local area and immediate region. This is level 1 of the NIM. Level 2 NIM operations occur at the cross-border area where offenders are operating in more than one jurisdictional area or affecting more than one region such that additional resources are required to combat their criminal activity (Sheptycki 2004a). Level 3 is designed for the types of serious and organised crime activity that operate at national or international levels. Offenders operating at this level may have to be identified by more proactive methods and the targeting and response is directed primarily through the work of dedicated units (NCPE 2005a). Within each level, the NIM is conceptualised to operate in roughly the same way. Figure 2 shows NIM business process, derived from the original model that accompanied the rollout of the NIM from the National

Criminal Intelligence Service (an agency now incorporated into SOCA). The figure shows that the tasking and coordinating process is central to the model, but that importance is also placed on the need to have knowledge, system, source and people assets to support the model. Expected outcomes address community safety, reduced crime, limiting criminality and reducing disorder.

For this process to work, analysts have to create products that feed into the tasking and coordinating process, products that influence the thinking of managers who are able to deploy resources and engage partnerships. Intelligence products feed into the model at two levels of tasking and coordination; strategic and tactical.

The Strategic Tasking and Coordination Group is usually comprised of senior management of the local police area and, according to the National Centre for Policing Excellence (NCPE 2005a), should also include the commanders responsible for operations, roads policing, business and administration, training, technology, forensics, intelligence management and analysis. It is also possible that members of the local police authorities, prosecution service and local Crime and Disorder Reduction Partnerships can be invited to attend. This group is expected to meet at least every 6 months (NCPE 2005b). The Strategic Group set the Control Strategy, a document that lays out the region's long-term priorities for crime prevention, enforcement and intelligence gathering.

The Tactical Tasking and Coordinating Group take the Control Strategy and use it as the guiding document that dictates the day-to-day priorities for resource allocation. The role of the tactical group is also to identify crime hotspots for attention, try and identify linked series of crimes, and identify and target prolific and serious offenders, all within the broad mandate from the strategic assessment.

From the perspective of a police analyst, the NIM provides the first real guidance as to how crime intelligence products directly link to the decision-making process. It is also beneficial because the NIM requires only four specific types of output. As Flood notes; "the NIM's emphasis is deliberately on formal intelligence products. Intelligence process in law enforcement cannot be merely a voyage of discovery but demands predictability in the delivery and content of intelligence products for managers' decision-making" (Flood 2004: 48). The strategic tasking group are influenced by the *strategic assessment* (the main strategic intelligence product) prepared every six months and used to indicate long-term priorities and intelligence gaps. The three other products have more operational functions: *the tactical assessment* supports the business of the tactical tasking and coordinating body and is essentially an update document that charts progress towards the Control Strategy; the *problem profile* is an operational document that describes linked series of crimes or the problems surrounding a crime hotspot (an area of higher intensity crime volume); and the *target profile* is a product that directs law enforcement to tackle the offenders responsible for causing the significant disruption that often causes a problem profile.

Outside the UK, attempts to integrate intelligence-led policing into the thinking of police organisations have been less dramatic than the British approach of forcing the move through legislation, however a number of police departments are actively moving towards intelligence-led policing as a conceptual framework for conducting operations and determining strategy.

One such example is the New Jersey State Police (NJSP). The NJSP performs patrol, traffic, criminal investigative, homeland security, technical services, and emergency management responsibilities for the State of New Jersey. The state adjoins New York City and with thriving ports and a major casino complex in Atlantic City, the state has received the unfortunate attention of a number of organized crime families. The state is also a major thoroughfare for illicit contraband and a staging post for criminal activity between New York, Philadelphia and up and down the Interstate-95 corridor between Boston and Washington DC. Combating these threats is one task of the NJSP Investigations Branch.

Branch commanders recognised that their organizational structure was one that reflected a model of bureaucratic efficiency but was not one that reflected the criminal environment they were trying to tackle. For example, individual units existed within their own silo of operations: a street gang bureau looked at street gangs, a narcotics bureau addressed drug crime, and an intelligence bureau focused on organised crime families. Within each group there was certainly expertise, but this tight specialisation had two significant negative outcomes. First, the organizational structure did not reflect the criminality performed by the groups targeted. For instance, street gangs were often involved in the distribution of narcotics, and organized crime families were involved in political corruption and sometimes wholesale narcotics distribution. Secondly, the organisational architecture encouraged *intelligence-hoarding* and *information silos* (Sheptycki 2004a) where if particular bureaus found evidence of activities conducted by their targets that fell outside their specialised remit, they did not necessarily pass this intelligence on.

To resolve this problem, the Investigations Branch has reorganized the entire structure of the department so that commanders are in charge of geographic regions of the state, and within those commands fall units that address street gangs, organized crime and narcotics. Each command has their own tactical intelligence group so that the intelligence for the region can be pooled to address any overlaps in criminal activity. Furthermore, the branch has created a strategic intelligence group to address the strategic planning needs of senior executives (for more information see Ratcliffe and Guidetti, in press).

The formation of a tactical intelligence group at the regional level and a strategic intelligence group situated within the branch level command are strongly reminiscent of the tactical and strategic tasking and coordinating groups of the NIM. The reorganization of the structural architecture of the branch is a way to overcome some of the problems that specialisation in an intelligence-led policing environment can cause. As Sheptycki (2004a) pointed out, close inspection of the intelligence process often finds that it is not as 'rationally ordered' as would appear on the surface. The NJSP response has been to structure the organization so that intelligence products have the greatest chance of influencing the commanders who need them.

EVALUATING INTELLIGENCE-LED POLICING

As Table 1 indicated, intelligence-led policing is still evolving in a definitional sense. The recent UK move to greater incorporation of partnership work and problem-solving into the NIM is a good indication of this. As a result, an evaluation of intelligence-led policing is currently difficult as the

goalposts are still moving. The situation is further confounded by the fact that intelligence-led policing is not in itself a tactic like the use of CCTV cameras or hotspot policing. It is a business model and therefore to date, evaluations in the UK of the National Intelligence Model have tended to examine the ability of the NIM to provide for effective information sharing and a better ordering of crime reduction priorities, in lieu of the model's direct ability to deliver crime reduction. Some studies have identified implementation problems associated with intelligence-led policing. At the strategic intelligence level problems include technical, organizational and cultural factors that are inhibiting a rapid adoption of the central tenets of intelligence-led policing (Sheptycki 2004a, Sheptycki 2004b). Moreover, recent moves within the UK towards reassurance policing and the competition between a localised, neighbourhood approach to policing and crime reduction targets set by government have driven a shift back towards more reactive approaches to policing (Maguire & John 2006). While there appears to be a considerable overlap between problem-oriented policing and intelligence-led policing - at least in terms of overall crime reduction aim and the use of analysis as the fundamental cornerstone of problem identification - it may be that reassurance policing (with its overtones of community policing) is some way from the original conceptualization of intelligence-led policing. Either way, the success of intelligence-led policing in the UK may be intertwined with the perceived accomplishments of the National Intelligence Model.

Outside the UK, adopting intelligence-led policing can appear to be little more than adoption of rhetoric rather than a true integration of the central tenets into business practice. While a number of police departments are experimenting with vastly different organizational philosophies, priorities and configurations, some claims to be intelligence-led are rather dubious, often simply based on the police department conducting a successful prosecution of a big case rather than any evidence that the case was the result of priorities set at the managerial level based on a strategic assessment of the criminal environment. Unfortunately, many such approaches tend to stress the *intelligence* aspect of *intelligence-led policing* rather than emphasising *policing*; in doing so they relegate the value of crime intelligence to a sideshow rather than as central to forming organisational goals.

Studies that have examined intelligence management find that many police departments have to undertake significant organizational change in the process. For example, there were significant organizational implications to improved management of resources in response to crime problems in Edmonton Police Service, Canada (Clarke 2006), while another study found flaws in intelligence management processes of three divisions of the New Zealand Police (Ratcliffe 2005). It is too early to say if the sweeping changes often found necessary are worth the investment, however the signs are extremely promising. For example, when the Australian Federal Police based in the Australian capital city of Canberra conducted a burglary reduction operation that employed many tactics associated with intelligence-led policing (surveillance of recidivist offenders, targeted policing in crime hotspots, and extensive use of confidential informants to identify targets) the operation resulted in statistically significant reductions in burglary (Makkai et al. 2004). The burglary reduction was not only associated with the operational period but also for a further 45 weeks after the operation, with evidence of a diffusion of benefits to other crime types and nearby areas (Ratcliffe & Makkai 2004, Ratcliffe 2008).

Voices of concern occasionally surface from people concerned that the police are adopting a business model that places greater emphasis on the use of confidential informants and physical and electronic surveillance. In Australia, for example, a number of well-publicised corruption inquiries have damaged the reputation of more than one police service (Ratcliffe 2002). And while policing has a long tradition of using informants, their strategic use as a planning tool is quite new. The increased use of confidential sources has been questioned; both in terms of the cost benefits of using paid informants as well as in terms of the moral and legitimacy considerations (see for example Dunnighan & Norris 1999). To some degree these objections stem from a misconception of the distinction between tactics used to gather information, and the management strategy used to determine priorities that is intelligence-led policing.

Most concerns have largely been ignored in the post-9/11 environment. In the current politically-charged atmosphere that sees terrorism as a substantial threat, policing has recognized that reactive models may be insufficient to address future significant criminality, and that a more proactive risk management strategy is required. While never designed to specifically address counter-terrorism management, the advantage of intelligence-led policing is that as a business model it may be equally efficient as a terrorism prevention model as it is in addressing the day-to-day crime problems of neighbourhoods and communities. Intelligence-led policing represents a model that looks to provide objective crime intelligence that allows decision-makers to better manage risk, and as such is certainly attractive to police executives looking to return to the preventative paradigm that originally fuelled the development of modern policing in 1829. To achieve this, crime analysis and criminal intelligence will need to be merged to create a more complete picture of the criminal environment, and greater information sharing is essential. It remains to be seen if a traditional police resistance to sharing information, especially if from confidential sources, can be overcome to help fulfil this holistic objective.

REFERENCES

- Amey, P., Hale, C. and Uglow, S. (1996) 'Development and evaluation of a Crime Management Model', *Police Research Group: Police Research Series*, Paper 18, pp. 37.
- Anderson, R. (1994) 'Intelligence-led policing: A British perspective', in A. Smith (Ed) *Intelligence Led Policing: International Perspectives on Policing in the 21st Century* (Lawrenceville, NJ: International Association of Law Enforcement Intelligence Analysts) pp. 5-8.
- Audit Commission (1993) 'Helping With Enquiries: Tackling Crime Effectively' (London: HMSO).
- Bennett, T. (1994) 'Community policing on the ground: Developments in Britain', in D.P. Rosenbaum (Ed) *The Challenge of Community Policing: Testing the Promises* (Thousand Oaks, CA: Sage) pp. 224-246.
- Chainey, S. and Ratcliffe, J.H. (2005) *GIS and Crime Mapping* (London: John Wiley and Sons).
- Christopher, S. (2004) 'A practitioner's perspective of UK strategic intelligence', in J.H. Ratcliffe (Ed) *Strategic Thinking in Criminal Intelligence* (Sydney: Federation Press)
- Clarke, C. (2006) 'Proactive policing: Standing on the shoulders of community-based policing', *Police Practice and Research*, 7:1, pp. 3-17.
- Clarke, R.V., Kemper, R. and Wyckoff, L. (2001) 'Controlling Cell Phone Fraud in the US: Lessons for the UK "Foresight" Prevention Initiative', *Security Journal*, 14:1, pp. 7-22.

- Collier, P.M. (2006) 'Policing and the intelligent application of knowledge', *Public Money & Management*, 26:2, pp. 109-116.
- Cope, N. (2004) 'Intelligence led policing or policing led intelligence?: Integrating volume crime analysis into policing', *British Journal of Criminology*, 44:2, pp. 188-203.
- Crawford, A. (1997) *The local governance of crime: appeals to community and partnerships* (Oxford: Clarendon Press).
- Davenport, T.H. (1997) *Information Ecology: Mastering the Information and Knowledge Environment* (New York: Oxford University Press).
- Dunnighan, C. and Norris, C. (1999) 'The Detective, the Snout, and the Audit Commission: The Real Costs in Using Informants', *Howard Journal of Criminal Justice*, 38:1, pp. 67-86.
- Ericson, R.V. and Haggerty, K.D. (1997) *Policing the Risk Society* (Oxford: Clarendon Press).
- Flood, B. (2004) 'Strategic aspects of the UK National Intelligence Model', in J.H. Ratcliffe (Ed) *Strategic Thinking in Criminal Intelligence* (Sydney: Federation Press) pp. 37-52.
- Gill, P. (1998) 'Making sense of police intelligence? The use of a cybernetic model in analysing information and power in police intelligence processes', *Policing and Society*, 8:3, pp. 289-314.
- Grieve, J. (2004) 'Developments in UK criminal intelligence', in J.H. Ratcliffe (Ed) *Strategic Thinking in Criminal Intelligence* (Sydney: Federation Press) pp. 25-36.
- Higgins, O. (2004) 'Rising to the collection challenge', in J.H. Ratcliffe (Ed) *Strategic Thinking in Criminal Intelligence* (Sydney: Federation Press) pp. 70-85.
- HMIC (1997) 'Policing with intelligence' (London: Her Majesty's Inspectorate of Constabulary).
- IACP (2002) 'Criminal Intelligence Sharing: A National Plan for Intelligence-Led Policing at the Local, State and Federal Levels'. *IACP Intelligence Summit* (Alexandria, VA: COPS and International Association of Chiefs of Police).
- Kelling, G. (1981) 'The Newark Foot Patrol Experiment', *Washington, DC: Police Foundation*.
- Kelling, G.L., Pate, T., Dieckman, D. and Brown, C.E. (1974) 'The Kansas City Preventative Patrol Experiment: A Summary Report' (Washington DC: Police Foundation).
- Maguire, M. and John, T. (1995) 'Intelligence, Surveillance and Informants: Integrated Approaches', *Police Research Group: Crime Detection and Prevention Series*, Paper 64, pp. 58.
- Maguire, M. and John, T. (2006) 'Intelligence led policing, managerialism and community engagement: Competing priorities and the role of the National Intelligence Model in the UK', *Policing and Society*, 16:1, pp. 67-85.
- Makkai, T., Ratcliffe, J.H., Veraar, K. and Collins, L. (2004) 'ACT Recidivist Offenders', *Research and Public Policy Series*, 54, pp. 83.
- NCPE (2005a) 'Guidance on the National Intelligence Model' (Wyboston, UK: National Centre for Policing Excellence on behalf of ACPO).
- NCPE (2005b) 'National Intelligence Model: Minimum Standards' (London: National Centre for Policing Excellence).
- Oakensen, D., Mockford, R. and Pascoe, C. (2002) 'Does there have to be blood on the carpet? Integrating partnership, problem-solving and the National Intelligence Model in strategic and tactical police decision-making processes', *Police Research and Management*, 5:4, pp. 51-62.
- Ratcliffe, J.H. (2002) 'Intelligence-led policing and the problems of turning rhetoric into practice', *Policing and Society*, 12:1, pp. 53-66.
- Ratcliffe, J.H. (2003) 'Intelligence-led policing', *Trends and Issues in Crime and Criminal Justice*, 248, pp. 6.

- Ratcliffe, J.H. (2004a) 'Crime mapping and the training needs of law enforcement', *European Journal on Criminal Policy and Research*, 10:1, pp. 65-83.
- Ratcliffe, J.H. (2004b) 'The structure of strategic thinking', in J.H. Ratcliffe (Ed) *Strategic Thinking in Criminal Intelligence* (Sydney: Federation Press) pp. 1-10.
- Ratcliffe, J.H. (2005) 'The effectiveness of police intelligence management: A New Zealand case study', *Police Practice and Research*, 6:5, pp. 435-451.
- Ratcliffe, J.H. (2008) *Intelligence-Led Policing* (Cullompton, Devon: Willan Publishing).
- Ratcliffe, J.H. (in press) 'Knowledge management challenges in the development of intelligence-led policing', in T. Williamson (Ed) *The Handbook of Knowledge Based Policing: Current Conceptions and Future Directions* (London: John Wiley and Sons)
- Ratcliffe, J.H. and Guidetti, R. (in press) 'State police investigative structure and the adoption of intelligence-led policing'. *Policing: An International Journal of Police Strategies & Management*.
- Ratcliffe, J.H. and Makkai, T. (2004) 'Diffusion of benefits: Evaluating a policing operation', *Trends and Issues in Crime and Criminal Justice*, 278, pp. 1-6.
- Sampson, R. and Scott, M.S. (1999) *Tackling Crime and Other Public-Safety Problems: Case Studies in Problem-Solving* (Washington DC: US Department of Justice: Office of Community Oriented Policing Services).
- Scott, M.S. (2000) 'Problem-Oriented Policing: Reflections on the First 20 Years' (Washington DC: COPS Office).
- Sheptycki, J. (2004a) 'Organizational pathologies in police intelligence systems: Some contributions to the lexicon of intelligence-led policing', *European Journal of Criminology*, 1:3, pp. 307-332.
- Sheptycki, J. (2004b) 'Review of the influence of strategic intelligence on organised crime policy and practice' (London: Home Office Research and Statistics Directorate).
- Skogan, W.G. and Hartnett, S.M. (1997) *Community Policing, Chicago Style* (New York: Oxford University Press).
- Townsley, M. and Pease, K. (2002) 'How efficiently can we target prolific offenders?' *International Journal of Police Science and Management*, 4:4, pp. 323-331.
- Wardlaw, G. and Boughton, J. (2006) 'Intelligence-led policing: The AFP approach', in J. Fleming and J. Wood (Eds) *Fighting Crime Together: The Challenges of Policing and Security Networks* (Sydney: University of New South Wales Press) pp. 133-149.
- Weisburd, D. and Eck, J. (2004) 'What can police do to reduce crime, disorder, and fear?' *The Annals of the American Academy of Political and Social Science*, 593:1, pp. 43-65.
- Wood, J. and Shearing, C. (2007) *Imagining Security* (Cullompton, Devon: Willan Publishing).