

Intelligence-Led Policing and Forces of Organizational Change in the United States

Jeremy G. Carter, Ph.D.¹
Indiana University - Purdue University Indianapolis

Scott W. Phillips, Ph.D.
Buffalo State College

Abstract

The intent of this study is to explore organizational factors, both conceptually and operationally that, facilitate or inhibit a police agency from adopting intelligence-led policing. Research to date has yet to explore organizational factors related to intelligence-led policing among American law enforcement agencies. Drawing from original survey data of national law enforcement agencies as part of a 2009 U.S. Department of Justice, National Institute of Justice-funded project, the present incorporates force field analysis to explore factors of intelligence-led policing adoption in the United States. Findings suggest state and local agencies' familiarity with the intelligence-led concept and utilization of open source and received information appear to be driving adoption. Conversely, formal policies, lack of sufficient personnel, training, and a lack of intelligence-led decision making appear to be inhibiting change towards the intelligence-led policing paradigm. It appears agency size has minimal influence on an agency's shift towards intelligence-led policing. Access to necessary resources and training appear to pose a significant challenge to law enforcement. Limited resources to develop an intelligence-led approach may result in the capability going under-developed or taking the form of other policing practices related to available resources – such as homeland security preparedness. This research is one of the first empirical explorations of intelligence-led policing adoption, especially with a national sample of state and local agencies. Further conceptual clarity of the intelligence-led policing paradigm is provided and organizational factors are discussed.

Keywords: Intelligence-led policing, Police change, Analysis, Homeland security, United States

Carter, J. G. & Phillips, S. W. (Online First). Intelligence-led policing and forces of organizational change in the United States. *Policing & Society*. DOI:10.1080/10439463.2013.865738.

¹ Corresponding Author: 801 W. Michigan Street, Indianapolis, IN USA 46202, P: (317) 274-4170, carterjg@iupui.edu

Intelligence-Led Policing and Forces of Organizational Change in the United States

Introduction

Law enforcement currently finds itself in the midst of a philosophical shift in practice. Intelligence-led policing has emerged as a new policing paradigm (Crank, Kadleck, and Koski, 2010; Schaible and Sheffield, 2012). This philosophy is intended to meet the demands of an increasingly complex environment for American law enforcement post-September 11, 2001 (hereafter 9/11). Just as community policing faced implementation challenges when it was developed in the mid-1980s, intelligence-led policing will undoubtedly experience the same. However, the literature on intelligence-led policing is sparse at best as it lacks a clear understanding of how this new philosophy should be conceptualized as well as any evidence-based insights with respect to law enforcement's movement towards this emerging philosophy. The intent of this study is to explore organizational factors - both conceptually and operationally that - facilitate or inhibit a police agency from implementing intelligence-led policing. Drawing from original survey data of national law enforcement agencies as part of a National Institute of Justice-funded project, the present study seeks to remedy this research shortcoming by providing further conceptual clarity as to what an intelligence-led policing program should be and what organizational factors appear to be influencing its adoption.

Intelligence-Led Policing

In an effort to gain understanding of this new philosophy, intelligence-led policing has been compared and contrasted with recent police innovations such as community policing (Carter and Carter, 2009a), comparative statistics (CompStat), and problem-oriented policing (McGarrell, Freilich and Chermak, 2007; Ratcliffe, 2008). Though these policing paradigms

share commonalities with intelligence-led policing, such as a reliance on two-way information flow between the police and public, a specificity of crimes and problems rather than a general approach, and the use of data to inform evidence-based decision making, there are unique characteristics of intelligence-led policing which require a shift in organizational philosophy and practice. Rather than simply being an information clearinghouse that has been appended to the organization, intelligence-led policing provides strategic integration of intelligence analysis into the overall mission of the organization (Carter and Carter, 2009a). Ratcliffe (2008) echoes this approach as he envisions intelligence-led policing as involving a comprehensive re-adjustment of organizational functions deriving from the intelligence capacity. Ratcliffe (2008) goes on to note organizational characteristics which should diverge from traditional practices for an agency to implement intelligence-led policing. These characteristics include intelligence-specific training, communication of intelligence across all aspects of the organization, and the utilization of intelligence for strategic, tactical, and operational decision making – an aspect that is only achievable if the intelligence is actionable (Carter and Carter, 2009a).

Much of the literature related to the emergence of intelligence-led policing falls within the homeland security arena. Authors typically merge the two concepts, taking the position that intelligence-led policing is either a component of the homeland security function to enhance post-9/11 policing (Carter and Carter, 2009b; Oliver, 2006, 2009) or driven by homeland security as a result of funding incentives (Schafer, Burruss and Giblin, 2009; Schaible and Sheffield, 2012). Such positions are correct, but this is true for many facets of law enforcement and homeland security responsibilities as tasked by the federal government. As such, it is more appropriate to focus on literature and recommendations specific to intelligence-led policing to

provide clarity as to what this new philosophy is and why law enforcement is migrating towards the concept.

History and Emergence

The intelligence-led policing philosophy has grown from its roots in the United Kingdom where it takes the form of the National Intelligence Model (NIM). While some scholars have promoted the idea of applying the NIM to American policing (Baker, 2009; Ratcliffe, 2008), this approach is not so simple. The smallest of Britain's 43 constabularies has approximately 900 sworn constables who police large geographic areas with both urban and rural characteristics. The majority of these agencies employ 1,200 to 1,600 sworn personnel (Carter and Carter, 2009a). While not a national police force, there are national standards that apply to all of the agencies for training, promotion, operations, and salary (Bayley, 1992). Given the size of these police forces and their budgets, all have the resources to hire analysts and the flexibility to reassign personnel to operate an intelligence-led philosophy. Crescenzo (2007) echoed this sentiment in a qualitative study with intelligence professionals in the U.K. and U.S. - noting specifically the inability of the NIM to be successfully implemented in the U.S. without uniform standards across all levels of law enforcement.

When compared to the British police structure, the majority of approximately 17,985 U.S. law enforcement agencies (Reaves, 2011), many of which have fewer than ten sworn officers, have varied policing standards between and within states. The budgets of most of these agencies are small compared to those in the U.K. and typically come from local funds supplemented by short-term federal grants. New policing philosophies, emerging initiatives, and federal standards and recommendations are largely unenforceable unless explicitly stated in special conditions of a

grant. Though best practices can be gleaned from the NIM and applied to policing in the U.S., given the fragmented and diverse nature of American law enforcement, the philosophy of intelligence-led policing is much different in the United States. Moreover, intelligence-led policing dramatically shifted from a “tips and leads” policing practice in the U.S. prior to September 11, 2001, to a philosophy focused on the prevention and mitigation of threats and crimes through active information sharing and analysis. The focus of the research presented here is on intelligence-led policing as it is conceptualized and practiced in the U.S. – not in the United Kingdom.

The key difference between ILP as utilized in the U.S. versus the U.K. is a focus on the collection of raw information and proactive information sharing among a variety of law enforcement agencies (Carter and Gore, 2013; Schaible and Sheffield, 2012), other government organizations (e.g., public health), and the private sector within the U.S. model (Carter and Carter, 2009). The U.S. emphasis is truly on the sharing of information related to possible threats and the creation of actionable intelligence products as a result of this proactive effort which can prevent or mitigate threats. The U.K. model of ILP, as fashioned from the National Intelligence Model, is focused on generating and analyzing situational crime and habitual offender data to make more informed decisions regarding police resources and targeting specific crime problems (Ratcliffe, 2008).

In March 2002, more than 120 criminal intelligence experts from across the U.S. gathered for an “Intelligence Summit” funded by the Office of Community-Oriented Policing Services and hosted by the International Association of Chiefs of Police (International Association of Chiefs of Police, 2002). At this summit, law enforcement professionals expressed frustration in the lack of guidance from the government as to how intelligence-led policing should be defined

and put into practice. Specifically, one of the core recommendations was to “promote intelligence-led policing through a common understanding of criminal intelligence and its usefulness” (International Association of Chiefs of Police, 2002, p. v). Ratcliffe (2005) reaffirmed this frustration among police practitioners in New Zealand that while very excited about the potential benefits of the intelligence-led philosophy, found it difficult to adopt as a result of a lack of consistent understanding with respect to the new concept. As a result, the Global Intelligence Working Group was created and their first product was the National Criminal Intelligence Sharing Plan (NCISP) that stated “all agencies, regardless of size, must have a minimal criminal intelligence sharing capability” (Global Intelligence Working Group, 2003, p. iii). While there is no universally accepted definition of intelligence-led policing, the following definition perhaps best illustrates the conceptualization of the philosophy:

The collection and analysis of information related to crime and conditions that contribute to crime, resulting in an actionable intelligence product intended to aid law enforcement in developing tactical responses to threats and/or strategic planning related to emerging or changing threats (Carter and Carter, 2009a, p. 317).

Attempts to practice intelligence-led policing are as ambiguous as attempts to define the philosophy. Similar to community policing, different agencies practice intelligence-led policing in a manner consistent with their agency’s mission and community needs - largely a result of such a wide variance with respect to the needs and priorities of fragmented American law enforcement agencies. For example, many agencies are likely to interpret CompStat or hotspot policing as their intelligence-led policing practice. With minimal guidance and an increased demand for intelligence-led policing, there are likely to be agencies that refer to themselves as

“intelligence-led”, but lack the functional capabilities to actually operate an intelligence-led approach.

As law enforcement personnel grapple with understanding ILP, many have suggested that it is the same as CompStat (Wood and Shearing, 2007). There are important similarities that will help in the adoption of ILP, yet there are also important substantive differences that must be similarly recognized. Intelligence-led policing is concerned with “all crimes and all threats”, not just terrorism and the nature of crime that ILP focuses on is typically multijurisdictional and often complex criminality, such as criminal enterprises and established street gangs.

The value of CompStat is the identification of a crime series or serious crime within a jurisdiction (e.g., “hot spots”), based on a timely analysis of incident reports. The analysis of data captured via crime reporting can provide important information - such as geographical parameters and modus operandi - that can be used to forecast a crime series in the immediate future, aid in problem-solving and provide descriptive information, such as behaviors, targets, and criminal instruments that operational units may use to apprehend perpetrators, disrupt criminal activity, or alter crime generating environments (McDonald, 2002).

Conversely, ILP focuses on threats rather than crimes that have occurred. The threat information may be derived from suspicious activity reports (SARs) or a tip submitted by community or business members. Rather than analyze information and evidence derived from incident reports (e.g., an event that occurred in the past), ILP relies on the identification of threat factors that are contributing to the threat’s evolution (Carter and Carter, 2012). Similarly, to be effective, both community policing and ILP require feedback on analyzed information to be consistently informed of potential problems or threats that may be encountered during the course of their shift (Carter, 2009).

While the National Criminal Intelligence Sharing Plan states all agencies, regardless of size, must have an intelligence-led policing capability, there is no common denominator as to what an intelligence-led policing capability constitutes for agencies of different size and responsibility. Intuition would assert that a larger police agency should have a more comprehensive intelligence capacity than a smaller agency. While this is an appropriate assumption, it is not appropriate to automatically consider a small police agency's "basic" intelligence-led capability as being insufficient. An agency's intelligence-led policing capability need only be as advanced as the responsibilities that agency requires. The New York Police Department will have a significantly different intelligence-led policing capability than that of a rural department with less than five sworn officers.

While this is a crude example, it serves to point out the fundamental difference. Rather than being fixated on the label "intelligence-led policing", practitioners and academics alike need to be concerned with identifying an appropriate level of intelligence practices that allow an agency to fulfill its role in the greater law enforcement intelligence landscape. For example, a small rural agency will not need to employ a full-time intelligence analyst and does not require connectivity to the most sophisticated information sharing systems – they simply need to be aware of intelligence practices, have a process in place to send and receive information, and be able to identify and collect information consistent with the collection requirements identified in their jurisdiction. The difficulty for interpreting levels of adoption is that academics and

practitioners both struggle to identify characteristics of an appropriate intelligence-led policing function for an agency regardless of the agency's size and responsibility characteristics.

Regardless of the size of state or local law enforcement agencies attempting to engage in intelligence-led policing, all agencies have access to state fusion centers to either enhance or provide an analytic function (Carter and Carter, 2009b) which can yield desired actionable intelligence products. There are currently 77 official fusion centers in the U.S. (Carter, Chermak, McGarrell, Carter and Drew, 2012) to increase the exchange of information and data across government and private sectors to enhance law enforcement's ability to fight crime and terrorism and prevent threats (Global Intelligence Working Group, 2005; McGarrell *et al.*, 2007). The relationship between intelligence-led policing and fusion centers is reinforced by the Office of Homeland Security's National Strategy for Homeland Security that identifies the philosophy as one of the primary tools to combat terrorism and threats to the U.S (Homeland Security Council, 2007). Fusion centers increase the production and sharing of crime and intelligence analysis products. Manning (2001) suggested that crime analysis is a step in the right direction for policing, but that it lacks the actual analytic component to inform decision making – intelligence-led policing serves as the vehicle by which informed decision making can result from the utilization of analytic products.

Ratcliffe (2008) went on to note that intelligence-led policing is a new tactic relying on crime analysis that can rapidly improve police processes and management. Lastly, academics (Carter and Carter, 2009a; Ratcliffe, 2008; Ratcliffe and Guidetti, 2008; Scheider, Chapman and Schapiro, 2009) and practitioners (Bureau of Justice Assistance, 2005; Fuentes, 2006; Guidetti and Martinelli, 2009) alike agree that intelligence-led policing is not only new to policing, but so new in fact that it requires a shift in police management, organizational structure, and even day-

to-day operations. Furthermore, Scheider and his colleagues (2009) specifically identified intelligence-led policing as an innovation and that while it is new to law enforcement, the lessons learned from previous policing innovations are critical to its successful adoption.

Relying on available literature specific to intelligence-led policing to help inform the organizational change process is difficult as this knowledgebase currently remains in its infancy. Academics and professionals have shared the workload in producing the few available works, although a consistent understanding and conceptualization is lacking. This is not to discount the works authors have done to this point as a great deal of progress has occurred. Current conceptual works specific to intelligence-led policing have generally focused on the role of intelligence analysts (Cope, 2004), intelligence and crime analysis (Ratcliffe, 2008), counter-terrorism (Carter and Carter, 2012; McGarrell *et al.*, 2007), police management (Ratcliffe, 2005, 2008; Ratcliffe and Guidetti, 2008), and operational concepts (Carter and Carter, 2009a). However, from an empirical standpoint, there has been little advancement as the only empirical studies in the United States at the time of this study have come from either a cross-jurisdictional collaborative perspective (Schaible and Sheffield, 2012) or most commonly a fusion center perspective (Forsyth, 2005; Graphia-Joyal, 2010; Nenneman, 2008; Ratcliffe and Walden, 2010; Saari, 2010; Simeone, 2007).

As mentioned, the National Criminal Intelligence Sharing Plan (NCISP) was created by the Global Intelligence Working Group to provide law enforcement agencies with the necessary resources to develop, gather, access, receive, and share intelligence. To this end, the plan established a number of national standards that have been formally recognized by the professional law enforcement community as the proper role and processes for the contemporary application of law enforcement intelligence (Carter, 2009). The NCISP had a significant

influence on shifting organizational policies and procedures – even in some cases physical realignment of units within the agency (Ratcliffe and Guidetti, 2008). Within the NCISP was the formal call for American law enforcement agencies to adopt intelligence-led policing. However, this recommendation lacked guidance for adopting this new philosophy and evaluating progress – thus inhibiting researchers from exploring, and practitioners from implementing, the intelligence-led policing philosophy. A successful intelligence-led philosophy can be determined through the effectiveness of state, local, and tribal law enforcement agencies' ability to collect, analyze, disseminate, and integrate intelligence into the operations of the organization.

Intelligence-led policing is envisioned as a tool for information sharing both within and across law enforcement agencies (Carter and Carter, 2009a). The concept aids law enforcement agencies in identifying threats and developing responses to prevent those threats from reaching fruition in America's communities (International Association of Chiefs of Police, 2002). A challenge exists in that there are differing views of the intelligence-led policing concept and its application yet there remains a movement toward the adoption of intelligence-led policing without a universally accepted definition or operational philosophy (Bureau of Justice Assistance, 2009). Intelligence-led policing, like community policing, must be tailored to the characteristics of each individual agency. As such, the approach must be created through an inclusive development process that ensures it is in concert with an agency's goals and functions, its capabilities, and the characteristics of both the agency and the jurisdiction it serves. Throughout the history of change within police, a variety of organizational factors have either facilitated or inhibited philosophical movement (Weisburd, Uchida and Green, 1993; Willis, Mastrofski and Weisburd, 2007).

Organizational Characteristics and Police Change

Community policing has developed skills among law enforcement personnel that directly supports ILP: Problem solving, environmental scanning, effective communications with the public, fear reduction, and community mobilization to deal with problems are among the important attributes community policing brings to this challenge (Carter and Carter, 2009). It was specifically noted within the NCISP that:

Over the past decade, simultaneous to federally led initiatives to improve intelligence gathering, thousands of community-policing officers have been building close and productive relationships with the citizens they serve. The benefits of these relationships are directly related to information and intelligence sharing: COP officers have immediate and unfettered access to local, neighborhood information as it develops. Citizens are aware of, and seek out COP officers to provide them with new information that may be useful to criminal interdiction or long-term problem solving. The positive nature of COP/citizen relationships promotes a continuous and reliable transfer of information from one to the other. It is time to maximize the potential for community-policing efforts to serve as a gateway of locally based information to prevent terrorism, and all other crimes (Global Intelligence Working Group, 2003, p.4).

As one component of its philosophy, ILP employs community policing principles, building on tactics and methodologies developed during years of community policing adoption. From an information management perspective, community policing utilizes information gained from citizens to help define the parameters of community problems while ILP relies on information input as the essential ingredient for intelligence analysis. Two-way communication with the public is essential for community policing since information is sought from the public about offenders while disseminating critical information to the public aids in crime prevention and fear reduction (Carter and Carter, 2009). Within the context of ILP, communications from the public can provide valuable information for the intelligence process. Like community policing, ILP requires an investment of effort by all components of the organization as well as

the community (Maguire, 1997). Based on the precepts of the ILP philosophy and the standards of the NCISP, law enforcement intelligence is an organization-wide responsibility that relies on a symbiotic relationship with residents.

Given these similarities, it is useful to draw upon the litany of research which has examined the adoption of community policing. Many scholars account for the influence of organizational characteristics such as structure and context (King, 1999, 2000; Maguire, Kuhns, Uchida, and Cox, 1997; Maguire, Shin, Zhao, and Hassell, 2003; Zhao, 1996) while others have concentrated on agencies as a whole and both the internal and external influences of adoption (Moore, Sparrow and Spelman, 1997; Oliver, 2000; Skolnick and Bayley, 1986; Weisburd *et al.*, 1993). Consistent with this literature, organizational structure is examined in terms of complexity and control. Research has found significant relationships between organizational structure and community policing (Katz, 2001; Maguire, 1997, 2003; Zhao, 1996) with the exception of Wilson (2006) who did not – a finding he concluded to be striking. Complexity is determined by the extent organizations have variance in their employees and capabilities. Control is typically achieved through formal policies and procedures. With respect to the context of organizations, the size, regional location, and number of responsibilities of an agency have been found to influence adoption (King, 1999; Maguire *et al.*, 1997; Maguire *et al.*, 2003, Wilson, 2006; Zhao, 1996). Furthermore, commitment to, and training on, the desired innovation have been found to facilitate adoption (Morabito, 2010; Yates and Pillai, 1996).

Langworthy (1986) discussed the notion of differentiation across occupational specialties for accomplishing agency tasks within units which require specialized knowledge and training. This notion is supported in policing by Greene's (2000) finding that police agencies having a community relations unit would be more successful in community policing implementation as

well as research on gang units within police departments and effectiveness of combatting gang problems (Katz, 2001). Consistent with this perspective is the presence of intelligence personnel within police departments. Not only are these personnel responsible for handling the intelligence function within the police department, they are tasked with additional responsibilities unique to the intelligence-led philosophy – such as the development of public-private partnerships and operational relationships with fusion centers. As with other changes in policing philosophies, having dedicated personnel for the intelligence function, or at a minimum a sufficient number of personnel to handle intelligence-related tasks, is likely to facilitate change towards intelligence-led policing (Phillips, 2012).

The influence of organizational size on implementing change remains debatable. Wilson (2006) and King (2000) found size to have no effect on community policing implementation whereas Maguire and his colleagues (1997) and Zhao (1996) found a positive association between the two. Schafer and his colleagues (2009) found large agencies (100 or more sworn officers) and small agencies (10 or less sworn officers) located in a close proximity to metropolitan areas are more likely to adopt homeland security innovations. With respect to both community policing and homeland security, Lee (2010) found that smaller agencies are more likely to assign community policing and homeland security tasks to the same officers, thus integrating the two out of resource necessity. The uniqueness of intelligence-led policing is that unlike previous policing paradigms, all agencies regardless of size have been changed to adopt a minimum intelligence capacity (Global Intelligence Working Group, 2003).

In an effort to facilitate successful implementation, commitment has been shown to be a significant construct of successful change towards community policing (Morabito, 2010; Yates and Pillai, 1996). Ford and his colleagues (2003) found commitment to be positively associated

with community-policing operations, a tenet outlined as a philosophical “must have” for successful community policing implementation (Trojanowicz and Bucqueroux, 1994). Moore and Stephens (1991) refer to chiefs of community policing agencies as “executives” in that they are aware of strategic management that will allow for the successful integration of necessary philosophies to meet the needs of their environment. The necessity of commitment from the chief executive for successful intelligence-led policing implementation has been acknowledged in research (Carter and Carter, 2009a; Ratcliffe, 2008) and professional publications (Bureau of Justice Assistance, 2009; Global Intelligence Working Group, 2003).

Training provides a critical opportunity to communicate understanding of new policy and procedural changes. Chief executives often have a more comprehensive understanding of intelligence-led policing as compared to line level officers (Cope, 2004; Carter, 2009). This lack of understanding among line level officers can be attributed to resistance to “new” policing methods (Ratcliffe, 2008) or poor perceptions of outputs on behalf of sworn officers and civilian analysts (Cope, 2004). Morabito (2010) found a positive relationship between training and community policing adoption while Schafer and his colleagues (2009) found a positive relationship between training and local law enforcement agencies in Illinois that are adopting homeland security preparedness. Despite a recognized demand for training on intelligence-led policing (Bureau of Justice Assistance, 2009), there is little supply. While training focused on community policing is widely accepted, a study in South Carolina indicated 99% of state and local police academies have courses designed for community policing operations while only 11% have courses designed to encompass issues most commonly associated with intelligence, such as terrorism and homeland security – a finding believed to be consistent nationwide (Rojek, Kaminski, Smith and Scheer, 2007).

Current Study

The current study seeks to explore conceptual and operational characteristics of police organizations as they shift towards an intelligence-led policing philosophy. Research on this emerging police philosophy is sparse and lacks empirical insights as to what factors facilitate or inhibit change. The current study remedies this shortcoming by exploring a national sample of state and local law enforcement agencies and the factors which drive or restrain the desired change. Further conceptual clarity is provided on intelligence-led policing, explorative findings are presented, and implications for policy and practice are discussed.

Data and Methods

Data

Data were gleaned from a larger project funded by the National Institute of Justice² which conducted a national survey of law enforcement intelligence practices of different key personnel. The survey sample consisted of state and local law enforcement officers and other individuals charged with building an intelligence capacity for individual agencies. Given the infancy of the intelligence-led policing concept, it is critical to target key personnel working within the intelligence capability of a police department to increase the likelihood of valid responses. This approach has been utilized in police research focused on specialty personnel when examining issues such as police assigned to cybercrime (Bossler and Holt, 2012), policing the mentally ill (Borum, Deane, Steadman and Morrissey, 1998) and policing sex workers (Simic, Johnston, Platt, Baros, Andjelkovic, Novotny and Rhodes, 2006).

² Grant number 2008-IJ-CX-0007. National Institute of Justice, U.S. Department of Justice.

Survey of Key Personnel

In order to obtain insights into intelligence practice of local law enforcement agencies, a web-designed survey was distributed to law enforcement personnel across the United States. More specifically, these persons were individuals who had attended a national law enforcement intelligence training program funded by the Department of Homeland Security. Individuals selected to attend this training program were typically selected by their agency to lead the efforts to develop or re-engineer their agency's intelligence capacity. This sampling strategy, which includes personnel from significantly different sized police agencies in all geographic regions of the country, was chosen for three reasons. First, in attending this training, these officers were identified by their respective agency as a representative of the intelligence function within the agency. Second, as a result of their selection on behalf of their agency, this sample includes law enforcement personnel who have a working understanding of key issues related to intelligence-led policing, and thus will be able to address specifically the factors associated with the change process. Third, their awareness of the contemporary intelligence structures, requirements, and formal communication networks increases the likelihood that they will have direct knowledge about the extent to which their agency has adopted this new philosophy.

A group of state, local, and tribal law enforcement intelligence leaders served as subject matter experts and scrutinized preliminary survey drafts. A separate group of law enforcement officials then took part in a pretest of the survey to identify ambiguous or poorly worded questions, issues that were overlooked, and items that could be potentially difficult to answer correctly. In general, the survey captured respondents' intelligence experiences and issues related to intelligence-led policing. The survey was administered using a web-based software

program. In early June 2009 an e-mail was sent to each addressee outlining the purpose of the study and inviting them to complete a self-administered online questionnaire. Formal refusals to participate and automated server notifications explaining the source addresses were no longer valid were removed.

The sampling frame was then corrected by removing individuals who could not be contacted or who declined to participate. Invitation e-mails were sent to a sample of 967 to participate in the survey study. Further follow-up e-mails were issued a second, third, and fourth time at approximately monthly intervals; the fifth and final reminders were sent at the end of March 2010 and the collection window closed a month later. A total of 272 state, local, and tribal law enforcement agencies are included in the sample³. It should be noted that the sample for the present study is comprised of personnel drawn from only state, local, and tribal law enforcement agencies. Initial responses were received from a variety of federal law enforcement, such as the Federal Bureau of Investigation, Drug Enforcement Administration, Bureau of Alcohol, Tobacco, and Firearms, Transportation Security Administration, and Immigration and Customs Enforcement. These responses were removed from the sample. Though these agencies play a significant role in law enforcement intelligence (especially national security intelligence), the present study is focused on practices at the state and local levels – thus federal agencies were not appropriate for comparison. Regional information sharing centers⁴ were also removed from the sample as they are intelligence-mission specific and are not representative of state or local law enforcement.

³ A complex survey design function was utilised within STATA statistical software to adjust standard errors and account for multiple responses from individuals from the same agency.

⁴ Regional information system (RISS) centers that responded included: Middle Atlantic-Great Lakes Organised Crime Law Enforcement Network (MAGLOCLLEN), Mid-States Organised Crime Information Center (MOCIC), and the Regional Organised Crime Information Center (ROCIC).

The response rate for the present study is 28% (n= 272 / 967). Such a response rate is not surprising given online-based surveys yield lower response rates than do traditional mail or in-person surveys (Shih and Fan, 2009), that cross-sectional response rates in social sciences are declining (Brick and Williams, 2013), and the exploratory nature of the research within an area of law enforcement commonly believed to be a difficult one to sample (Chermak *et al.*, 2013; Graphia-Joyal, 2012). Though this response rate is lower than one would hope, we believe the sample is valid. The sample includes agencies from small, medium, and large municipalities, county sheriffs, and state police. Furthermore, 41 states (including the District of Columbia) with geographic distribution across the five regions of the U.S. are represented in the sample.

In an effort to learn why the response rate was not higher, follow-up telephone interviews were conducted with 100 randomly selected participants from the sample. Among the key reasons that were consistently reported for not responding were:

Job responsibilities. A number of individuals stated that they had been reassigned or promoted and no longer worked in the intelligence function. As a result they either felt the survey no longer applied to them or they were not familiar with current activities in the intelligence function.

The survey length. In order to fully explore the nature of and challenges to law enforcement intelligence work, the survey asked respondents more than 100 questions. Feedback suggests individuals were uncomfortable committing to this task, especially when they were at work. As one informant remarked, “Thirty minutes is too long, there’s no way I have time to take a survey for half an hour – we’re under massive pressure as it is.”

Security. A handful of individuals were concerned about the security implications of sharing information about intelligence activities outside of the law enforcement community.

Despite the low response rate, the present study provides unique value because there has been so little research on intelligence-led policing, especially at the national-level. As a result this study provides one of the first empirical insights into the factors associated with organizational change towards an intelligence-led policing philosophy. Table 1 displays descriptive information for the agencies represented in the current study. The median agency size is 276 total sworn and non-sworn personnel while the majority of agencies were located in the Midwest region of the United States, followed closely by the Southeast and Northwest. Respondents are mostly investigators and administrators who have been employed by their agency for more than 15 years. Appendix A provides a list of the survey items and coded responses for variables categorized as either “driving” or “restraining” forces in the analysis.

[Table 1 approximately here]

Force Field Analysis

When there is intent to change parts of an organization, whether by enacting innovative programs or shifting the institutional thinking, organizational inertia and threats to the traditional organizational framework can result in resistance to that change (Lee, 2010). During the research and planning stages of any intended change it is imperative that an organization identify forces that can contribute to smooth implementation of the change, and those forces that may resist the change. In 1951 Kurt Lewin advanced force field analysis as a model “for

understanding a problematic situation and planned corrective actions” (French and Bell, 1995, p. 101). Force field analysis has several components. First, an organization balances opposing forces in a state of quasi-stable “equilibrium.” Second, driving forces push an organization toward change; restraining forces resist change. Third, equilibrium ensures stability in organization and member behavior and productivity. Finally, if an organization wants to change it must move the balancing point to a new position. Successful change requires an organization to increase the driving forces while reducing or minimizing the restraining forces. Lewin stressed that both sides of an equilibrium point must be understood to successfully move the equilibrium point to a new state.

There are four-steps in a force field analysis to identify the driving and resisting forces. First, specify the current condition and why it must be changed. Second, define the desired condition or goal of successful change. Third, determine the driving and restraining forces in the current state of equilibrium. Fourth, measure the intensity of the driving and restraining forces to determine which forces are strong, weak, and controllable (French and Bell, 1995). When a driving force is determined to be strong it should be maximized to move toward the desired equilibrium state. Conversely, if a restraining force is weak, this too should be exploited to move to the desired state. If a restraining force is strong, attempts should be made to minimize its influence, if possible. Finally, driving and restraining forces that are not particularly strong or weak may be ignored if they are of little assistance in the change process.

An advantage in using Force Field analysis is that it is fairly easy to use and understand. Further, a researcher can be creative when identifying potential driving and resisting forces. A disadvantage is that identifying driving and restraining forces is not an easy task (Pippard and Bjorklund, 2003). Force field analysis has been used to examine a variety of organizational

fields, including changes in health care programs (Baulcomb, 2003), social work organization (Bragal, 2000), mental-health care (Grant, 2001), educational program (Lifter, Kruger, Okun, Tabol, Poklop, and Shishmanian, 2005), the forces impacting the decision-making of social problems (Pippard and Bjorklund, 2003), and the driving and restraining forces in cognitive activity (Kruglanski, Belanger, Chen, Kopetz, Pierro, and Mannetti, 2012).

Current State, Desired State, and Driving and Restraining Forces

It is suggested that the current state of quasi-stable equilibrium for policing is “tradition” because most police agencies maintain a response-based policing strategy (Dabney, 2010; Weisburd, Mastrofski, McNally, Greenspan, and Willis, 2003). Policing innovations, such as community policing and CompStat, include an expanded use of information analysis to improve crime reduction strategies (Ratcliffe, 2007; Rickman, Stewart and Dimitrov, 2012). Thus, the desired equilibrium state of policing is proposed to be an adoption of ILP strategies (i.e., analysis and the use of intelligence products).

This study identified a variety of driving and restraining forces. From a conceptual perspective, police agency may have some exposure to ILP without actually using the approach. Understanding respondent’s views of ILP, prior to its actual application in policing, are important. Their exposure to the notion of ILP can shape the strength of driving and restraining forces because the respondents do not have first-hand experience with the new approach. Thus, several forces examined a respondent’s, or the agencies, awareness of ILP. Respondents were asked “How familiar are you with the National Criminal Intelligence Sharing Plan.” Familiarity with the NCISP is considered a driving force; awareness of the plan would indicate extended - understanding of ILP. A high score on this item would be a strong driver toward ILP. A second

item asked “How familiar are you with the intelligence-led policing concept?” Because respondents are experienced investigators or police administrators, and they can model behavior for the entire agency (Jones, Moulton, and Reynolds, 2010), this item is considered a driving force. If the mean score of this item tilts toward “very familiar” this would suggest this is a strong driving force. A third item asked “The chief executive of your agency supports intelligence-led policing?” This is considered a driving force because administrative support is important to the acceptance of a new policy (Bayley, 1994; Greene, Bergman and McLaughlin, 1994) and has been found to facilitate change towards community policing (Morabito, 2010). Two items assessed overall agency familiarity with ILP: “Most of the intelligence analysts in my agency are familiar with the intelligence-led policing concept” and “Most personnel (beyond analysts) in my agency are familiar with the intelligence-led policing concept.” Both items are considered driving forces toward change because the phrasing of the items suggests that ILP is already used. Thus, if the mean scores tilt toward “agree” these are strong drivers for moving the rest of the agency toward ILP.

Several conceptual level measures are considered restraining forces in the current analysis of ILP. “Our agency has an intelligence capacity mission statement” is considered a restraining force because a formal written policy is time consuming and requires substantial effort on the part of the administration. This would be particularly true when a new policy for a new (possibly complex) analytic approach that is somewhat contrary to the traditional “real police work” approach. Thus, if the score tilts toward “disagree” this would be a strong restraining force because it indicates a lack of formal support from the administration. Another item asked “Legal counsel has reviewed and approved all policies and procedures of the intelligence capacity.” ILP might normally be resisted as “too big” or “not real police work” and

would be supported with legal legitimacy. Without it, resistance may actually gain legitimacy. Thus, if the mean scores tilt toward “agree” this would be a strong restraining force. Finally, the item “All analysts (or personnel responsible for the intelligence function) in your agency are required to receive specific training in intelligence-led policing” is considered a restraining force because the effort needed to develop or cultivate a training program may be a burden on the agency. It would be easier for an agency to simply enact an ILP program. Thus, if the mean score tilts toward “disagree” this would indicate a strong restraining force.

The second classification for selecting forces was operational, indicating that police agencies actually employ ILP functions within the department. The process of changing aspects of an organization to reflect a new paradigm requires effort on behalf of the organization’s personnel. While an agency may be committed to ILP, the development of formal policies and procedures to make this new paradigm operational require an output of manpower and/or resources to complete. Scholars have acknowledged the difficulties of overcoming this application of effort towards change, noting that the potential for change in policing is resisted by “a comfortable past” (Buerger, 2010, p. 92) – the notion of organizational inertia prohibiting new policies and procedures to either replace or parallel those already in existence. Furthermore, organizations have standard problems and solutions already developed that organizational personnel believe can be applied to emerging changes and creates a culture where new organizational components are difficult to create. As such, ILP may appear attractive and commitment to the philosophy may exist, but it is not a solution with any organizational precedent of use since it continues to emerge within practice and research – thus it requires significant effort to get a new policing practice accepted by police personnel (Stojkovic, Kalinich and Klofas, 2008).

The item “Does your agency’s intelligence function follow the National Criminal Intelligence Sharing Plan Recommendations” is a driving force because following recommendations would indicate the agency is moving toward a formal ILP program. Another item, “Does your agency have a specific ‘Suspicious Activity Reporting’ (SAR) policy?” is a driving force because, if it is assumed these already exist in an agency, they could be emphasized as an easy source of data for ILP. “We have a sufficient number of staff to achieve our agency’s intelligence capacity mission” is a driving force because the item is phrased in a way suggesting the agency already employ the needed personal for ILP; this would be less likely to result in expending extra effort to hire and train an analyst. If the mean score tilts toward “disagree” this would indicate a weak driver (but not necessarily a strong restraining force). Respondents were asked “Is your Criminal Intelligence Record System 28 Code of Federal Regulation Part 23 compliant?” is a driving force because this item indicates movement toward a formal ILP program. If the score tilts toward “yes” it would be a strong driving force toward adoption of ILP. The item “How often is intelligence formally integrated into your agency’s decision-making process” is a driving force because this item implies intelligence is used already. The phrasing of the item has a positive connotation. Thus, if the responses tilt toward the use of intelligence in decision-making then this is a strong driver if ILP as a more formal part of the organizations move toward ILP.

The item “Our agency uses information from open sources as part of the intelligence process” is considered a driving force. Open sources are free and easy to use (some agencies have used social media to track people). It may be that agencies “experiment” with open sources. Thus, if the mean score tilts toward agree, this could be a driving force toward accepting ILP. Respondents were asked “How close is the working relationship between your

organization and your State Fusion Center?” This item is considered a driving force because if a link exists it shows an established relationship and growth in an agency’s ILP efforts. Thus, a tilt toward a “close” relationship is a strong driver toward the institutionalization of ILP. Finally, the item “How frequently does intelligence from your agency contribute to arrests?” is a driving force. The item is phrased in a way suggesting the use of intelligence add to the common strategy of policing: arrest. Therefore, if results tilt toward “always” then this would be a strong driver to the adoption of ILP.

Several survey items are considered operational forces that restrain the acceptance of ILP. The primary reason these items are considered restraining forces is because they require extra or special effort on the part of an agency. Extra effort is considered a burden for an agency and is assumed to fall on the “restraining” side of a Force Field analysis. The item “Does your agency have defined goals and objectives for collecting, analyzing, producing and sharing information” is considered a restraining force because the lack of formal agency goals in this area would suggest the organization does not take ILP or analysis very seriously. This disinterest may be viewed as support for the traditional police culture. Thus, if the mean score tilts toward “no,” this could be a weak restraining force. The item “Do you audit your intelligence function and records?” is a restraining force because an audit will take effort and may be seen as a burden of an ILP program. Thus, a mean score tilting toward “no” would indicate that this is a strong restraining force in the acceptance of ILP. A final restraining force was measured in the item “Do you have a policy designed expressly to guide your intelligence function.” This is a restraining force because a formal written policy is time consuming and requires substantial effort on the part of the chief and agency. Thus, an agency may start an ILP component without

taking the effort to formally institutionalize the program. Therefore, a score that tilts toward “no” would indicate this is a strong restraining force from an operational perspective.

Findings

Determining if a force is strong or weak, thus identifying which forces can be exploited, minimized, or ignored, is subjective; while the driving and restraining forces are measured in a quantitative fashion, a reasonable level of “strength” or “weakness” must be classified in the same way a level of statistical significance is set. For this study, Table 2 labels the classification scores. It is important to note that a resulting score is not automatically strong or weak, but rather scores must be interpreted based on whether the item was a driving or restraining force. For example, the item “All analysts (or personnel responsible for the intelligence function) in your agency are required to receive specific training on intelligence-led policing” received a fairly low score of 0.18 on a 0 – 1 scale. This item was originally identified as a restraining force because the effort needed to develop a training program may be a burden on an agency. It would be easier for a police department to simply enact an intelligence-led policing program and let it run its course. A higher score would indicate the agency is placing effort on training, thus it would be a weak restraining force in the effort to move police agencies to accept intelligence-led policing. In this case, however, the lower score suggest a stronger restraining force.

[Table 2 approximately here]

With respect to the driving forces in the conceptual model (Figure 1), only one of the driving forces appears to be somewhat strong. Respondents who are familiar with the concept of intelligence-led policing ($\mu = 2.76$) may serve as a beneficial or productive driving force. They are already acquainted with components of intelligence-led policing and how it may fit within a police agency. This can be very beneficial as a driving force because the workers within an organization, particularly those most familiar with a new program, can serve as “change agents” in the implementation of that program (Toch, 2008). The driving force “The chief executive of your agency supports intelligence-led policing” is mostly neutral ($\mu = 2.73$), and this misses an important component of leadership as it relates to worker behavior. Specifically, supervisor officers and police administrators model the attitude and behavior for subordinate officers (Ferraro, 1989; Jones, Moulton, and Reynolds, 2010). The remaining driving forces are either mostly neutral (respondents are familiar with the National Criminal Intelligence Sharing Plan) or somewhat weak (“most personnel [beyond analysts] in my agency are familiar with the intelligence-led policing concept”).

[Figure 1 approximately here]

The right side of Figure 1 shows the restraining forces of the conceptual model. Three of the items – our agency has an intelligence capacity mission statement, all analysts are required to receive specific training in intelligence-led policing, and legal counsel has reviewed and approved all policies and procedures of the intelligence capacity – received fairly low scores, indicating potentially strong resisters. The item “information sharing is one of the priorities of our agency” received a neutral score from the respondents. Police agencies interested in moving

toward an intelligence-led policing strategy will want to focus energy on reducing these restraining forces.

Figure 2 shows the force field model for operational items related to intelligence-led policing. The fact that agencies appear to use open-sources for analysis is a strong driving force. This may suggest that police agencies are not reliant on formal or official sources in order to conduct analysis. Further, responses indicate that most agencies have a suspicious activity reporting policy. Between the use of open sources and formal “in-house” sources, the police agencies in this study appear to utilize available information sources, and are not necessarily waiting for after-the-fact crime reports to conduct analysis. These driving forces, open sources and in-house sources, are relatively easy to utilize, and should be exploited to move an agency toward accepting intelligence-led policing.

Most of the other items received lower or neutral scores, indicating they would be fairly weak as driving forces toward the acceptance of intelligence-led policing in police agencies. Several of these items warrant attention. First, respondents indicated they do not have sufficient staff to achieve an intelligence mission. This is an important driving force because it would demonstrate commitment by the agency to an intelligence-led policing strategy; however, hiring analysts (or shifting sworn officers into these positions) can expend inadequate agency resources, and attempts to increase this weak driving force may be limited. Second, using intelligence in the agencies decision-making process received a neutral score. Given that the primary goal of an intelligence process is to provide information to decision makers (Lowenthal, 2012), its absence in the decision-making process could be interpreted by sworn and non-sworn personnel in a way that amplifies the weakness of this driver. Analysis and analytic products could be seen as a “make-work” policy. Third, and somewhat related to the use of analysis in decision-making,

results show that intelligence does not frequently contribute to arrests. This finding should be interpreted with caution. Analysis is a component of many policing initiatives, including the “SARA” process in problem-solving, CompStat, evidence-based policing, and the smart policing initiative of the U.S. Department of Justice (Phillips, 2012). As such, the use of analysis and intelligence should contribute to a reduction in crime and disorder, but this would not necessarily contribute to an increase in arrests. Still, many studies of intelligence-led policing use “increases in the number of arrest” as a measure of effectiveness (Maguire, 2000, p. 330).

[Figure 2 approximately here]

The right side of Figure 2 shows the restraining forces of the operational model. Most of the items revolve around the issue of “formality” of intelligence-led policing, and the low scores indicate the potential for strong restraining forces. Specifically, respondents indicated their agencies did not have a policy to expressly guide the intelligence function. Also, there were no defined goals for collecting, analyzing, production, or sharing information. Finally, there was a low score for agencies having an intelligence capacity mission statement. These items point to a lack of support by agency administrators. Top-level police supervisors are responsible for providing guidance and direction to the agency, thus illustrating to the officers and the public what is important to the agency. This also allows the internal and external environment to decide if the agency is reaching its goals (Stojkovic *et al.*, 2008). If there is a lack of formal guidance by the administration in the area of intelligence-led policing then officers and the public will likely interpret this as an indication that intelligence-led policing is unimportant. A final restraining force, “Does agency receive information from outside agencies?” received a fairly

high score, indicating that agencies do work with other agencies in their intelligence-led policing process. A collaborative effort with the external environment can illustrate agency actors that the policy is serious, particularly in secretive policing environment.

Lastly, restraining and driving forces for both the conceptual and operational models were explored with agency size. As agency size has been found to be positively associated with law enforcement's change towards homeland security (Schafer *et al.*, 2009; Giblin, Schafer and Burruss, 2009), it seems reasonable to assume such a relationship might exist with respect to intelligence-led policing. Further along this school of thought is that large agencies – especially those which are major urban areas (e.g., New York, Washington, DC, Chicago, etc.) – are more likely to feel the need to adopt an intelligence-led approach as compared to a small rural department. However, as posited within the National Criminal Intelligence Sharing Plan (which is published by the U.S. Department of Justice and intended to be the guidelines by which state and local agencies develop intelligence-led policing), *all agencies regardless of size* (emphasis added) must adopt an intelligence capability.

Through the exploration of agency size and the factors identified in this study, it was found that agency size was not correlated with any of the restraining or driving forces (analysis not shown). Moreover, when agency size was simplified into “large” (100 or more sworn officers) and “small” (10 or less sworn officers) agencies consistent with Schafer and his colleagues' (2009) approach, there were no statistical differences in the means when utilizing an independent t-test between these two groups (analysis not shown). It is reasonable to assume that if differences did exist with respect to change towards intelligence-led policing, it would exist between these two categories of agencies. This finding is promising as all agencies,

regardless of size, are charged with the responsibility to develop an intelligence capability to effectively share information. It appears this may be the case, albeit at a very basic level.

Discussion and Conclusion

The current study sought to explore conceptual and operational characteristics of police organizations as they shift towards an intelligence-led policing philosophy. Despite the data limitations outlined within the methodology section, the responses that comprise the present study are thought to be the most valid from the available population of key personnel. Identifying people who work in the expanding arena of law enforcement intelligence in diverse law enforcement agencies is a difficult sampling frame to capture. Also, and though it is not believed to be the case, given respondents' investment in intelligence-related work within their organization, their ability to make objective determinations with respect to the organization's progress on these issues is worth noting. Despite these concerns, the data utilized for this study are currently some of the best available for exploring intelligence-led policing at the national level within the United States as it is derived from a NIJ-funded national assessment specifically targeting intelligence practice among state and local law enforcement using a survey instrument vetted by police professionals working within their agencies' intelligence unit. Empirical research to date exploring the extent to which state and local agencies are engaged in intelligence-led policing (as conceptualized post-9/11) has resulted from secondary data analysis in the U.S. (Schaible and Sheffield, 2012) and two studies with original data collection in New Zealand (Darroch and Mazerolle, 2013; Ratcliffe, 2005).

Determinations, albeit somewhat subjective, made to categories means of binary variables (as shown in Table 2) into "weak", "neutral", and "strong" were done to create

discernible differences among responding agencies. Future research may build on these measures to improve the range and measurement sensitivity to more accurately reflect an organization's position. Survey results indicate driving and restraining forces that may be enhanced or maximized, others that need to be minimized, and still other forces that may currently be ignored. Several of the weak or neutral driving forces, as well as strong restraining forces, appear to be aspects of organizational leadership. Consistent with previous findings on organizational commitment and police change (Ford *et al.*, 2003; Morabito, 2010; Yates and Pillai, 1996), a chief executive needs to increase the support for intelligence-led policing, articulate their support in an agency mission statement, and enact policies that demonstrate a commitment to the intelligence-led policing function in an agency. This could be done with clear guidelines and goals for collecting, analyzing, and producing intelligence reports.

Further, intelligence-led policing products should be integrated into agency decision-making (Ratcliffe and Guidetti, 2008). For example, an analytic product related to a crime-specific problem should contribute to the development of a targeted approach to deal with the problem. Or, a large-scale intelligence-led policing report may help inform the decision to enact a new policy on training. It should be noted that this weak driving force may be one of the easier forces to adjust. Agency leaders should make extra effort to either utilize intelligence products in their decision-making, or they should clearly explain their rationale for making a decision that discounts the intelligence. Similar to the CompStat strategy, agencies can seek to establish regularly scheduled intelligence meetings to discuss existing intelligence cases, the flow of information within the agency and external with other agencies, and also the dedication of necessary resources to further improve the intelligence function. Regardless of whether intelligence-led policing products are used in the decision-making process or not, agency

administrators should be transparent when it comes to application of the intelligence-led policing products.

Several of the weaker driving forces, or stronger restraining forces, were related to administrative support for intelligence-led policing, and it could be argued that they are relatively easy to change. A police chief can demonstrate support for intelligence-led policing through formal and informal communications with subordinates. A new policy dealing specifically with intelligence collection, analysis, and production, while not necessarily an easy administrative task to construct, can show department personnel and the public that intelligence-led policing is important to the chief and the agency. This can also occur with a mission statement that clearly includes the use of intelligence-led policing. As was proven with community policing, clear support from the upper-levels of chain of command can increase the likelihood of success for ILP within the organization. More specifically, commitment should come in the form of formal rewards based in performance evaluation and be voiced in the agency's list of priorities.

The lack of sufficient personnel to conduct intelligence analysis, and the insufficient intelligence-led policing training, are driving and restraining forces, respectively, that will likely be more difficult for a police agency to tackle. Hiring additional agency personnel will be difficult, particularly in the current economic environment (Wiseman, 2011). Also, police agencies will likely have to seek out training resources (Willis *et al.*, 2007). While many departments are reluctantly assigning intelligence responsibilities to existing staff (who are likely already overburdened), the lack of required intelligence-specific training is likely to undercut the movement towards adopting intelligence and analysis capabilities. Rather straightforward is the necessity that intelligence and analysis, in order to be most effective, relies on specialized training (Carter, 2009). A lack of training could result in poor intelligence products and thus

poorly informed decision making. The difficulty with this impediment is the lack of available training specific to intelligence-led policing. At the time of this research, there is currently not a single training program provided to law enforcement that specific targets the intelligence-led process (Carter, Carter, and Chermak, 2013). The best law enforcement can currently hope for is for some of the basic ILP concepts to be touched upon within homeland security or counter-terrorism programs – though such programs themselves are few and far between.

More pertinent to adoption, regardless of the organizational reason as to why intelligence training is not required, it implies that training is not important, and thus may communicate to line personnel that intelligence-led policing is not important. Therefore, minimizing this restraining force will require resources, and this is often one of the biggest problems for police agencies to access. A clarification here is likely warranted as the sample population is agencies that attended an intelligence training program. Though this may imply that an agency is dedicated to training on intelligence, this training program was provided by funding from the Department of Homeland Security and free of charge to the agencies which attended. Moreover, there is a distinct difference between an agency sending personnel to a training program at no cost (beyond dedicating personnel for training for that day) and requiring personnel responsible for the intelligence function to receive intelligence-specific training. Again as economic times continue to strain police agencies, it may be necessary for the federal government to make training (the funded training program which the survey population was drawn is no longer receiving funding at the time of this is written) and materials more accessible while also providing technical assistance programs similar to the initiatives of the Office of Community-Oriented Policing Services did in the 1990s.

References

- Baker, T. 2009. *Intelligence-led Policing: Leadership, Strategies and Tactics*. New York, NY: Looseleaf.
- Bargal, D. 2000. The future development of occupational social work. *Administration in Social Work*, 233, 139-156.
- Baulcomb, J. S. 2003. Management of change through force field analysis. *Journal of Nursing Management*, 11, 275-280.
- Bayley, D. H. 1992. Comparative organization of the police in English-speaking countries. *Crime and Justice*, 15, 509-545.
- Bayley, D. H. 1994. *Police for the future*. New York, NY: Oxford University Press.
- Borum, R., Deane, M. W., Steadman, H. J. and Morrissey, J. 1998. Police perspectives on responding to mentally ill people in crisis: Perceptions of program effectiveness. *Behavioral Sciences and the Law*, 16, 393-405.
- Brick, M. J and Williams, D. 2013. Explaining rising nonresponse rates in cross-sectional surveys. *The ANNALS of the American Academy of Political and Social Science*, 6451, 36-59.
- Bureau of Justice Assistance. 2005. *Intelligence-Led Policing: The New Intelligence Architecture*. Washington, D.C.: U.S. Department of Justice. Office of Justice Programs.
- Bureau of Justice Assistance. 2009. *Navigating Your Agency Path to Intelligence-Led Policing*. Washington, D.C.: U.S. Department of Justice. Office of Justice Programs.
- Bureau of Justice Statistics. 2007. *Law Enforcement Management and Administrative Statistics LEMAS*. Washington, D.C.: Office of Just Programs. U.S. Department of Justice.
- Carter, D. L. 2009. *Law Enforcement Intelligence: A Guide for State, Local and Tribal Law Enforcement Agencies*. Second Edition. Washington, D.C.: U.S. Department of Justice. Office of Community Oriented Policing Services.
- Carter, D. L. and Carter, J. G. 2009a. Intelligence-led policing: Conceptual considerations for public policy. *Criminal Justice Policy Review*, 203, 310-325.
- Carter, D. L. and Carter, J. G. 2009b. The intelligence fusion process for state, local and tribal law enforcement. *Criminal Justice and Behavior*, 3612, 1323-1339.
- Carter, J. G., Carter, D. L. and Chermak, S. 2013. Intelligence training. *Law Enforcement Executive Forum*, 13, 1-18.
- Carter, J. G. and Carter, D. L. 2012. Law enforcement intelligence: Implications for self-radicalized terrorism, *Police Practice and Research*, 13, 138-154.
- Carter, J. G. and Gore, M. 2013. Conservation officers: A force multiplier for homeland security. *Journal of Applied Security Research*, 8(3), 285-307.
- Carter, J. G. and Rip, M. 2013. Homeland security and public health: A critical integration. *Criminal Justice Policy Review*, 24(5), 573-600.
- Carter, D., L., Chermak, S. M., McGarrell, E. F., Carter, J. G., and Drew, J. 2012. *Understanding the Intelligence Practices of State, Local, and Tribal Law Enforcement Agencies. Final Report*. Washington, DC: National Institute of Justice. U.S. Department of Justice.
- Chermak, S., Carter, J. G., Carter, D., McGarrell, E., and Drew, J. 2013. Law enforcement's information sharing infrastructure: A national assessment. *Police Quarterly*, 16, 211-244.
- Cope, N. 2004. Intelligence led policing or policing led intelligence? Integrating volume crime analysis into policing. *British Journal of Criminology*, 44, 188-203.

- Crank, J. P., Kadleck, C. and Koski, C. M. 2010. The USA: The next big thing. *Police Practice and Research*, 11, 405-422.
- Crescenzo, L. D. 2007. *Application of the United Kingdom's National Intelligence Model to United States Law Enforcement*. Masters Thesis. Erie, PA: Mercyhurst.
- Dabney, D. 2010. Observations regarding key operational realities in a Compstat model of policing. *Justice Quarterly*, 271, 28-51.
- Darroch, S. and Mazerolle, L. 2013. Intelligence-led policing: A comparative analysis of organizational factors influencing innovation uptake. *Police Quarterly*, 16, 3-37.
- Ferraro, K. J. 1989. The legal response to woman battering in the United States. In Hanmer, J., Radfore, J., Stanko, E.A. *Women, policing, and male violence: International perspectives*. Great Britain. Routledge.
- Ford, J. K., Weissbein, D. A. and Plamondon, K. E. 2003. Distinguishing organizational from strategy commitment: Linking officers' commitment to community policing to job behaviors and satisfaction. *Justice Quarterly*, 20, 159-186.
- Forsyth, W. A. 2005. *State and Local Intelligence Fusion Centers: An Evaluative Approach in Modeling a State Fusion Center*. Master's Thesis. Monterey, CA: Naval Post-Graduate School.
- Fuentes, J. R. 2006. *New Jersey State Police Practical Guide to Intelligence-Led Policing*. New Jersey State Police. Retrieved November 20, 2012 from http://www.state.nj.us/njsp/divorg/invest/pdf/njsp_ilpguide_010907.pdf
- Giblin, M. J., Schafer, J. A., and Burruss, G. W. 2009. Homeland security in the heartland: Risk, preparedness, and organizational capacity. *Criminal Justice Policy Review*, 203, 274-289.
- Global Intelligence Working Group. 2003. *National Criminal Intelligence Sharing Plan*. Washington, D.C.: U.S. Department of Justice. Retrieved November 28, 2012 from http://www.it.ojp.gov/documents/National_Criminal_Intelligence_Sharing_Plan.pdf.
- Global Intelligence Working Group. 2005. *Guidelines for Establishing and Operating Fusion Centers at the Local, State, Tribal and Federal Level*. Washington, D.C.: U.S. Department of Homeland Security. Retrieved November 28, 2012 from http://it.ojp.gov/documents/fusion_center_guidelines_law_enforcement.pdf.
- Graphia-Joyal, Renee. 2010. Are fusion centers achieving their intended purposes? Findings from a qualitative study on the internal efficacy of state fusion centers. *International Association of Law Enforcement Intelligence Analysts Journal*, 191, 54-76.
- Grant, C. 2001. Evaluating newly commissioned services in primary care: Lessons from a force field analysis. *Primary Health Care Research and Development*, 24, 209-214.
- Greene, J. R. 2000. *Community Policing in America: Changing the Nature, Structure, and Function of the Police*. Washington, D.C.: National Criminal Justice Resource Service. Retrieved November 23, 2012 from http://www.ncjrs.gov/criminal_justice2000/vol_3/03g.pdf.
- Greene, J. R., Bergman, W. T., and McLaughlin, E. J. 1994. Implementing community policing: Cultural and structural change in police organizations. In D. P. Rosenbaum Ed., *The Challenge of Community Policing: Testing the promises*, pp. 92-109. Thousand Oaks, CA: Sage.
- Guidetti, R. A. and Martinelli, T. J. 2009. Intelligence-led policing - A strategic framework. *Police Chief Magazine*. Retrieved November 23, 2012 from

- http://www.policechiefmagazine.org/magazine/index.cfm?fuseaction=display_archandarticle_id=1918andissue_id=102009
- Homeland Security Council. 2007. *National Strategy for Homeland Security*. Washington, D.C.: Office of Homeland Security. U.S. White House. Retrieved November 29, 2012 from http://www.dhs.gov/xlibrary/assets/nat_strat_homelandsecurity_2007.pdf
- International Association of Chiefs of Police. 2002. *Criminal intelligence sharing: A national plan for intelligence-led policing at the local, state and federal levels*. Recommendations from the Intelligence Summit. Retrieved November 26, 2012 from <http://epic.org/privacy/fusion/intelsharerpt.pdf>.
- Jones, M., Moulton, E., and Reynolds, J.K. 2010. The “Universality” of Leadership and Management in Policing. In J. A. Schafer and S. Boyd Eds.. *Advancing Police Leadership: Considerations, Lessons Learned, and Preferable Futures*, pp. 30-44 Vol. 6 of the Proceedings of the Futures Working Group.
- Katz, C. 2001. The establishment of a police gang unit: An examination of organizational and environmental factors. *Criminology*, 391, 37-73.
- King, W. R. 2000. Measuring police innovation: Issues and measurement. *Policing: An International Journal of Police Strategy and Management*, 233, 303-317.
- King, W. R. 1999. Time, constancy, and change in American municipal police organizations. *Police Quarterly*, 23, 338-364.
- Kruglanski, A. W., Belanger, J. J., Chen, X., Kopetz, C., Pierro, A., and Mannetti, L. 2012. The energetics of motivated cognition: A force-field analysis. *Psychological Review*, 1191, 11-20.
- Langworthy, R. H. 1986. *The Structure of Police Organizations*. New York, NY: Praeger
- Lee, H. P. 2010. Newton’s laws and a dynamic force-field analogy for analyzing organizational changes. *International Journal of Mechanical Engineering Education*, 384, 277-285.
- Lee, J. V. 2010. Policing after 9/11: Community policing in the age of homeland security. *Police Quarterly*, 134, 347-366.
- Lifter, K., Kruger, L., Okun, B., Tabol, C., Poklop, L., and Shishmanian, E. 2005. Transformation to a web-based pre-service training program: A case study. *Topics in Early Childhood Special Education*, 251, 15-24.
- Lowenthal, M. 2012. *Intelligence: From Secrets to Policy* Fifth Edition. Thousand Oaks, CA: Sage.
- Maguire, E. 1997. Structural change in large municipal police organizations during the community policing era. *Justice Quarterly*, 143, 547-576.
- Maguire, M. 2000. Policing by risks and targets: Some dimensions and implication of intelligence-led crime control. *Policing and Society*, 94, 315-336.
- Maguire, E. R. 2003. *Organizational Structure in American Police Agencies: Context, Complexity and Control*. Albany, NY: State University of New York Press.
- Maguire, E. R., Kuhns, J. B., Uchida, C. D. and Cox, S. M. 1997. Patterns of community policing in nonurban America. *Journal of Research in Crime and Delinquency*, 343, 368-394.
- Maguire, E. R., Shin, Y., Zhao, J., and Hassell, K. D. 2003. Structural change in large police agencies during the 1990s. *Policing: An International Journal of Police Strategies and Management*, 262, 251-275.

- Manning, P. K. 2001. Technology's ways: Information technology, crime analysis, and the rationalization of policing. *Criminal Justice: The International Journal of Policy and Practice*, 1, 83-103.
- McDonald, P. P. 2002. *Managing Police Operations: Implementing the New York Crime Control Model – CompStat*. Belmont, CA: Wadsworth.
- Moore, M., Sparrow, M. and Spelman, W. 1997. Innovations in policing: From production lines to job shops. In A. Altshuler and R. Behn Eds., *Innovation in American Government*. Washington, D.C.: Brookings Institute Press.
- Moore, M. H. and Stephens, D. W. 1991. *Beyond Command and Control: The Strategic Management of Police Departments*. Washington, D.C.: Police Executive Research Forum.
- Morabito, M. S. 2010. Understanding community policing as an innovation: Patterns of adoption. *Crime and Delinquency*, 564, 564-587.
- Nenneman, M. 2008. *An Examination of State and Local Fusion Centers and Data Collection Methods*. Master's Thesis. Monterey, CA: Naval Post-Graduate School.
- Oliver, W. M. 2006. The fourth era of policing: Homeland security. *International Review of Law, Computers and Technology*, 201&2 49-62.
- Oliver, W. M. 2009. Policing for homeland security: Policy and research. *Criminal Justice Policy Review*, 203, 253-260.
- Oliver, W. M. 2000. The third generation of community policing: Moving through innovation, diffusion, and institutionalization. *Police Quarterly*, 34, 367-388.
- Pippard, J. L., and Bjorklund, R. W. 2003. Identifying essential techniques for social work community practice. *Journal of Community Practice*, 114, 101-116.
- Phillips, S. W. 2012. Police Supervisor's Attitude toward Analysis in Policing: A Force-Field Analysis. *International Association of Law Enforcement Intelligence Analysts Journal*, 211, 37-56.
- Ratcliffe, J. H. 2005. The effectiveness of police intelligence management: A New Zealand case study. *Police Practice and Research*, 65, 434-445.
- Ratcliffe, J. H. 2008. *Intelligence-Led Policing*. Cullompton, UK: Willan Publishing.
- Ratcliffe, J. H., and Guidetti, R. A. 2008. State police investigative structure and the adoption of intelligence-led policing. *Policing: An International Journal of Police Strategies and Management*, 311, 109-128.
- Ratcliffe, J. H. and Walden, K. 2010. State police and the intelligence center: A study of intelligence flow to and from the street. *International Association of Law Enforcement Intelligence Analysts Journal*, 191, 1-19.
- Reaves, B. A. 2011. *Census of State and Local Law Enforcement Agencies, 2008*. Washington, D.C.: Bureau of Justice Statistics. Office of Just Programs. U.S. Department of Justice. Retrieved December 9, 2012 from <http://bjs.ojp.usdoj.gov/content/pub/pdf/cslla08.pdf>
- Rickman, S., Stewart, J., and Dimitrov, E. 2012. Smart policing: Addressing the twenty-first century need for a new paradigm in policing. Accessed November 20, 2012, at <http://www.smartpolicinginitiative.com/background/cna-white-papers>
- Rojek, J., Kaminski, R. J., Smith, M. R., and Scheer, C. 2007. *South Carolina Law Enforcement Training Survey: A National and State Analysis*. Columbia: Department of Criminology and Criminal Justice. University of South Carolina. Retrieved November 29, 2012 from <http://www.cas.sc.edu/crju/pdfs/trainingreport.pdf>

- Saari, S. C. 2010. *Fusion Centers: Securing America's Heartland from Threats*. Master's Thesis. Monterey, CA: Naval Post-Graduate School.
- Schaible, L. M. and Sheffield, J. 2012. Intelligence-led policing and change in state law enforcement agencies. *Policing: An International Journal of Police Strategies and Management*, 354, 761-784.
- Schafer, J. A., Burruss, G. W., and Giblin, M. J. 2009. Measuring homeland security innovation in small municipal agencies: Policing in a post-9/11 world. *Police Quarterly*, 123, 263-288.
- Scheider, M. C., Chapman, R. and Schapiro, A. 2009. Towards the unification of policing innovations under community policing. *Policing: An International Journal of Police Strategies and Management*, 324, 694-718.
- Shih, T. and Fan, X. 2009. Comparing response rates in e-mail and paper surveys: A meta-analysis. *Educational Research Review*, 41. 26-40.
- Simic, M, Johnston, L. G., Platt, L., Baros, S., Andjelkovic, V, Novotny, T. and Rhodes, T. 2006. Exploring barriers to 'respondent driven sampling' in sex worker and drug-injecting sex worker populations in Eastern Europe. *Journal of Urban Health*, 83, 6-15.
- Simeone, Jr., M. J. 2007. *The Integration of Virtual Public-Private Partnerships in Local Law Enforcement to Achieve Enhanced Intelligence-Led Policing*. Master's Thesis. Monterey, CA: Naval Post-Graduate School.
- Stojkovic, S., Kalinich, D., and Klofas, J. 2008. *Criminal justice organizations: Administration and management* Fourth Edition. Belmont, CA: Thomson.
- Toch, H. 2008. Police officers as change agents in police reform. *Policing and Society*, 181, 60-71.
- Trojanowicz, R. and Bucqueroux, B. 1994. *Community Policing: How to Get Started*. Cincinnati, OH: Anderson.
- Weisburd, D., Mastrofski, S. D., McNally, A. M., Greenspan, R., and Willis, J. J. 2003. Reforming to preserve: Compstat and strategic problem solving in American policing. *Criminology and Public Policy*, 23, 421-456.
- Weisburd, D., Uchida, C. and Green, L. Eds. 1993. *Police Innovation and Control of the Police: Problems of Law, Order, and Community*. New York, NY: Springer-Verlag.
- Willis, J. J., Mastrofski, S. D. and Weisburd, D. 2007. Making sense of CompStat: A theory-based analysis of organizational change in three police departments. *Law and Society Review*, 411, 147-188.
- Wilson, J. M. 2006. *Community Policing in America*. New York, NY: Routledge.
- Wiseman, J. 2011. *Strategic Cutback Management: Law Enforcement Leadership for Lean Times. Research for Practice*. Washington, D.C.: U.S. Department of Justice. National Institute of Justice.
- Yates, D. L. and Pillai, V. K. 1996. Attitudes toward community policing: A causal analysis. *Social Science Journal*, 332, 193-210.
- Zhao, J. 1996. *Why Police Organizations Change: A Study of Community-Oriented Policing*. Washington, D.C.: Police Executive Research Forum.

Tables

Table 1. Respondent demographics

	N (Valid Percent)
<i>Agency Size</i> ¹	
Small ²	35 (13%)
Medium ³	84 (31%)
Large ⁴	153 (56%)
<i>Agency Region</i>	
Northeast	60 (22%)
Southeast	62 (23%)
Midwest	73 (27%)
Southwest	30 (11%)
West	47 (17%)
<i>Respondent's Position</i>	
Administrator	82 (30%)
Supervisor	62 (23%)
Investigator	87 (32%)
Analyst	41 (15%)
<i>Respondent Years at Agency</i>	
Less than 1 Year	1 (.3%)
1-3 Years	16 (6%)
4-9 Years	49 (18%)
10-15 Years	57 (21%)
More than 15 Years	149 (55%)

¹Mean = 276, Median = 1,341

²10 or less sworn officers

³11 – 99 sworn officers

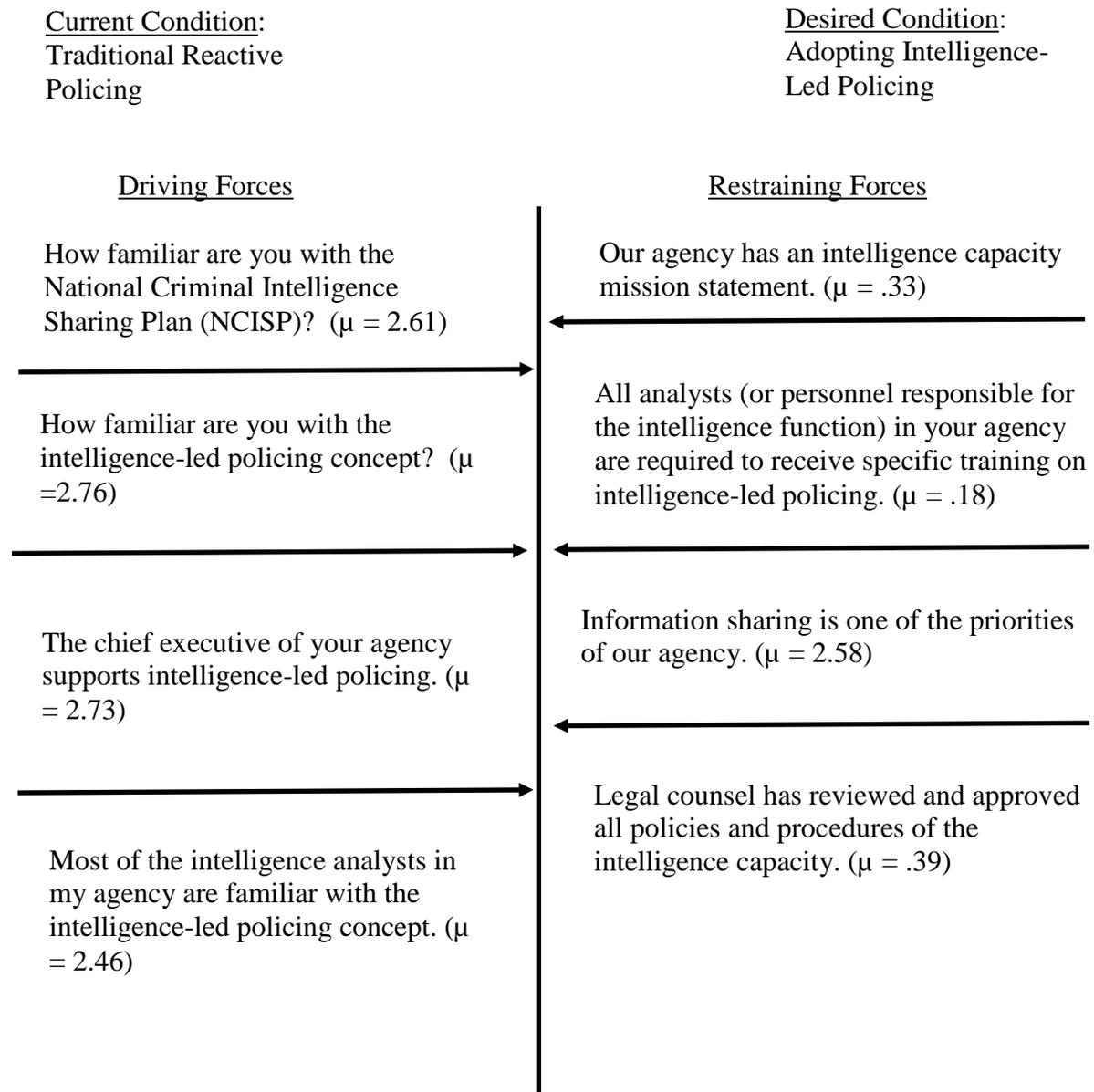
⁴100 or more sworn officers

Table 2. Measurement of driving or restraining forces

1 – 4 Ordinal Measures	
1.00 – 1.74	Fairly weak / strong
1.75 – 2.24	Somewhat weak / strong
2.25 – 2.74	Mostly neutral
2.75 – 3.24	Somewhat strong / weak
3.25 – 4.00	Fairly strong / weak
0 – 2 Ordinal Measures	
0.0 – 0.75	Weak /strong
0.76 – 1.24	Mostly Neutral
1.25 – 2	Strong / weak
0 – 1 Dichotomous Measures	
0.0 – 0.4	Weak / strong
0.41 – 0.60	Neutral
0.61 – 1.0	Strong / weak

Figures

Figure 1: Force-Field Model (Conceptual Model)



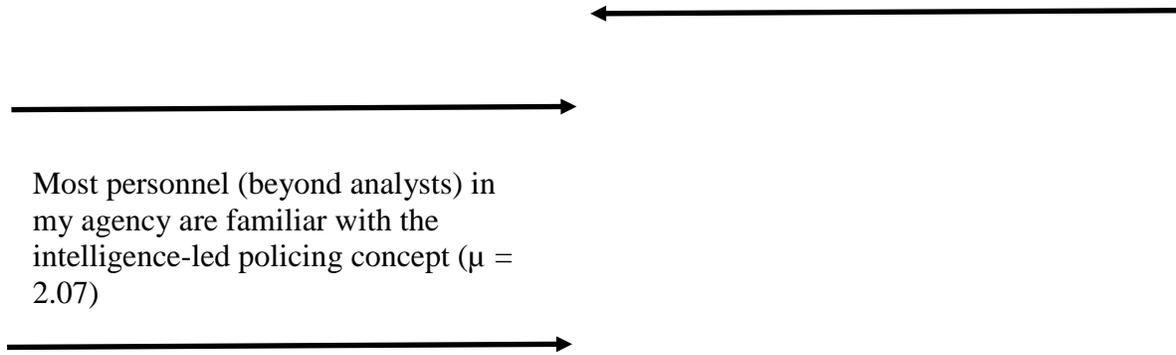


Figure 2: Force-Field Model (Operational Model)

Current Condition:
Traditional Reactive Policing

Desired Condition:
Adopting Intelligence-Led Policing

Driving Forces

Restraining Forces

Does your agency’s intelligence function follow the NCISP Recommendations? ($\mu = 2.23$)

Do you have a policy designed expressly to guide your intelligence function? ($\mu = 1.07$)

We have a sufficient number of staff to achieve our agency’s intelligence capacity mission. ($\mu = 2.03$)

Do you audit your intelligence function and records? ($\mu = .60$)

How often is intelligence formally integrated into your agency’s decision-making process? ($\mu = 2.53$)

Does your agency have defined goals and objectives for collecting, analyzing, producing and sharing information? ($\mu = .41$)

Does your agency have a specific “Suspicious Activity Reporting” (SAR) policy? ($\mu = .86$)

Our agency has an intelligence capacity mission statement. ($\mu = .33$)

Is your Criminal Intelligence Records System 28 CFR Part 23 compliant? ($\mu = 1.04$)

Does agency receive information from outside agencies? ($\mu = 3.44$)



How close is the working relationship between your organization and your State Fusion Center? ($\mu = 2.62$)



Our agency uses information from open sources as part of the intelligence process. ($\mu = .74$)



How frequently does intelligence from your agency contribute to arrests? ($\mu = 1.92$)



Our agency has processes in place for sharing relevant terrorism information with the public? ($\mu = .39$)



Appendix A

Survey Items and Coding

Driving Forces

How familiar are you with the National Criminal Intelligence Sharing Plan (NCISP)?

Scale: (3) Very Familiar; (2) Somewhat Familiar; (1) Have Heard of It; (0) Have Not Heard of It

How familiar are you with the Intelligence Led Policing concept?

Scale: (3) Very Familiar; (2) Somewhat Familiar; (1) Have Heard of It; (0) Have Not Heard of It

The chief executive of your agency supports ILP

Scale: (3) Strongly Agree, (2) Agree, (1) Disagree, (0) Strongly Disagree

Most of the intelligence analysts in my agency are familiar with the ILP concept

Scale: (3) Strongly Agree, (2) Agree, (1) Disagree, (0) Strongly Disagree

Most personnel (beyond analysts) in my agency are familiar with the ILP concept

Scale: (3) Strongly Agree, (2) Agree, (1) Disagree, (0) Strongly Disagree

How frequently does intelligence from your agency contribute to arrests?

Scale: (3) Always, (2) Frequently, (1) Occasionally, (0) Rarely

Our agency has processes in place for sharing relevant terrorism information with the public.

Binary: (1) Yes, (0) No

Does your agency's intelligence function follow the NCISP Recommendations?

Scale: (3) Completely, (2) Mostly, (1) Some, (0) None

We have a sufficient number of staff to achieve our agency's intelligence capacity mission.

Scale: (3) Strongly Agree, (2) Agree, (1) Disagree, (0) Strongly Disagree

How often is intelligence formally integrated into your agency's decision-making process?
Scale: (3) All the time, (2) Sometimes, (1) Occasionally, (0) Never

Does your agency have a specific "Suspicious Activity Reporting" (SAR) policy?
Binary: (1) Yes, (0) No

Is your Criminal Intelligence Records System 28 CFR Part 23 compliant?
Scale: (2) Yes, (1) It is being modified, (0) No, (0) Unknown

How close is the working relationship between your organization and your State Fusion Center?
Scale: (3) Very Close, (2) Somewhat Close, (1) Distant, (0) We have No Relationship

Our agency uses information from open sources as part of the intelligence process
Binary: (1) Yes, (0) No

Restraining Forces

Our agency has an intelligence capacity mission statement.
Binary: (1) Yes, (0) No

All analysts (or personnel responsible for the intelligence function) in your agency are required to receive specific training on intelligence-led policing.
Binary: (1) Yes, (0) No

Information sharing is one of the priorities of our agency.
Scale: (3) Strongly Agree, (2) Agree, (1) Disagree, (0) Strongly Disagree

Legal counsel has reviewed and approved all policies and procedures of the intelligence capacity.
Binary: (1) Yes, (0) No

Do you have a policy designed expressly to guide your intelligence function?
Scale: (2) Yes, (1) It is in development, (0) No, (0) Unknown

Do you audit your intelligence function and records?
Binary: (1) Yes, (0) No

Does your agency have defined goals and objectives for collecting, analyzing, producing and sharing information?
Binary: (1) Yes, (0) No

How frequently does your agency receive the information from outside agencies?
Scale: (7) Daily, (6) Weekly, (5) Bi-Weekly, (4) Monthly, (3) Quarterly, (2) Bi-Annually, (1) Less than Annually, (0) Never