BEYOND THE RHETORIC: FACTORS INFLUENCING THE IMPLEMENTATION OF
STRATEGIC PLANS BY AMERICAN POLICE AGENCIES

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DEDICATION

This manuscript is dedicated to my wife, Eileen, who never lost faith in me and to my parents,

who, in 1978, gave me a blank book in anticipation of a project such as this.
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ABSTRACT

Police managers must find a means to balance external and internal pressures and develop organizations that can accomplish their goals in the face of conflicting demands. Some police agencies appear willing and able to adopt innovative practices. This research examines strategic planning, a management concept that is relatively new to police organizations, and the factors that influence its implementation. While there is evidence that strategic planning in public agencies such as the police has been successful, little is known about the factors that affect its implementation.

The larger question this study examines is, What factors explain variation in the level of police organizational commitment to change, as indicated by agencies implementing a strategic plan as planned?

I have chosen to focus on the efforts of U.S. police agencies and base my research on the “open systems” perspective that acknowledges that police organizations are enmeshed in complex environments that determine their work and tasks. Two linking theories—contingency theory and institutional theory—will also be used in the theoretical framework.

A conceptual model will be developed that illustrates how innovation implementation occurs. Two measures, inclusiveness and scope of performance measures, along with measures
founded in institutional and contingency theories, will be tested and analyzed to understand what factors play a role in the implementation of the strategic plan as proposed.

The data to test this model comes from three sources. Zhao, Thurman & Ren’s (2003) survey data of 105 police agencies forms the basis of the analyses. Data from the Law Enforcement Management and Administrative Statistics survey addresses the constructs of organizational structure and capacity. U.S. Census data provides information about political structure and community heterogeneity.

The results of this research conclude that inclusiveness plays a significant role in implementation of a strategic plan; more specifically, the inclusion of internal stakeholders is the most significant determinant of the successful implementation of the innovation of a strategic plan. The findings suggest that police agencies should focus their efforts on including the members of the agency in the development of, training on and assessment of a strategic plan to ensure successful implementation.
PREFACE

April 10, 1990 Recruit Class 90-8 Metropolitan Police Academy

Washington, DC: As noted in the first full day of my policing career, our class officer entered the classroom and scrawled two passages on the blackboard. The first was “The only thing constant is change.” The second was a series of six P’s that stood for “Prior Planning Prevents Piss Poor Performance.” Now, these epiphanies were not meant to be overly sophisticated but were aimed at letting our class of 50 plus recruits know that the agency was going to mess (for lack of a better word) with every facet of our life and to be prepared. He was right.

Fast-forward 25 years and those words still ring true and are emblazoned on all that I know and have experienced about policing. Change does happen, never mind the theories and the studies; a police organization is in a constant state of flux just to survive. External pressures from politicians, community and business groups, victims and suspects, special interests, the media, other agencies, and the federal government all play a part in determining what gets done by the organization. Internal factors, like unions, command staff, supervisors, rank-and-file officers, civilians, and the CEO, chart a course of change for a department.

Now add such ethereal variables as fear of crime, morale, trust, leadership skills, efficiency, and citizen satisfaction, along with more concrete measures like budgets, crime rates, victimization rates, arrest rates, and prosecution rates, and it is no wonder that defining just what makes an agency change is so hard to pin down.

This I do know: American police agencies are like no other organization. Whether this is due to the 24/7/365 operating hours, the history of corruption and brutality, or the fact that the police do all the things that no one else wants to do, rookie police officers soon find out that their
daily world centers on constant change. The strains on the individual police officer make for interesting research; however, this study focuses on the strategic changes that organizations contend with to address effectiveness in their operations, the means by which they bring about the changes, and, most importantly, the variables that influence the organization’s ability to commit to the changes that have been termed innovative.
ACKNOWLEDGMENTS

Obviously, a project such as this could not have been possible without a supporting cast of characters. While I will attempt to list all of the people who have assisted me in this endeavor, I will unintentionally leave someone out; to that unnamed person, I want to say thank you now.

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To my parents, Jim and Carolyn, for always having faith in my abilities (even when I did not live up to them) and providing me with the solid foundation from which to even attempt
something of this magnitude, I love you. To my brother, Chris, who read countless versions of this manuscript and is 10 times smarter than I will ever be, thank you (though I did get here first; tag, you’re it!). To my in-laws, Rae and Jerry Morrissey, thank you for the countless hours of babysitting and support.

To my kids, Jake, Faith, Timothy, and Christian, I hope you will have the same zeal I have for learning and understand one day why I locked myself away in the basement just so we could have a better future. While none of you were here at the beginning of this project, you were my inspiration not to give up. And, of course, to my beautiful wife, Eileen, who got more stressed about this than I did at times, you know how much it meant to me, and I appreciate your sacrifices more than you will ever know. I love you...now let’s get on with the rest of our lives!
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CHAPTER 1
INTRODUCTION

Police and Organizational Theory

Organizational theory tells us that formal organizations exist to provide services or perform tasks that individuals are unable or unwilling to accomplish on their own (Swanson, Territo, & Taylor, 1993). Police agencies are no different in this sense. Organizational theory, when applied to a modern police agency, reflects upon the internal consequences of the various external pressures placed on the agency. These external forces, such as the political and community structure, demand accountability and efficiency of operations to carry out the agency's tasks. At the same time, internal pressures, such as administrative functions or labor demographics, also influence a police agency's organizational behaviors. What is clear is that police managers must find a means to balance these internal and external pressures and develop an organization that can accomplish its goals in spite of the sometimes conflicting demands it faces.

Since organizations can be thought of as dynamic entities, organizational change is prevalent and necessary (March, 1981). Leaders of organizations acknowledge that organizational change and growth can be linked to innovation (Damanpour, 2008). To realize the level of responsiveness required to provide effective service to the citizens of its jurisdiction, a police agency will enact organizational change in a variety of ways. Historically, police agencies in the United States have developed and implemented successful innovations, such as the hierarchical, military command structure; community-oriented policing; and, more recently, Compstat and intelligence-led policing. Each innovation required substantial change in the structure of police agencies, even down to a change in their philosophy of service delivery.
Another significant change that police agencies have undertaken in more recent years is the use of strategic planning to develop responsive organizations.

**Strategic Planning as a Radical Innovation**

Strategic planning became accepted as a management concept in the 1960s to provide companies and organizations with a methodology to address the changing environmental factors they faced (Ansoff, 1965; Gilmore & Brandenburg, 1962). The use of this model establishes strategic planning as an action-oriented concept that aimed to make organizations more effective by focusing on the environmental context in which the organization operates and helping to produce decisions that work within that environment (Bryson, 2010). The process of strategic planning moves away from the classical style of management by necessitating long-term incremental changes in response to that anticipated environmental context, both internal and external, in which an organization operates.

Strategic planning is action oriented but “is useful only if carefully linked to implementation” (Poister & Streib, 2005, p. 46). The action-oriented facet of the strategic-planning process is also found in the implementation, and the two are inherently linked under the rubric of strategic management. What should be clear is that the decision by an organization to engage in a strategic-planning process does not guarantee that the actions identified in that process will be implemented. It is the ability of the police agencies to implement the strategic initiatives that have been identified in the strategic plan that form the basis for this research.

Research has discussed the difference between diffusion of innovation and adoption of innovation. The former deals with the spread of an innovation across agencies, while the latter deals with the generation, development, and implementation of innovation (Kimberly, 1981;
Damanpour, 1991), yet little attention has been paid to police organizational commitment to innovation.

Police agencies are no different in their need to be innovative to produce changes necessary to address organizational needs. Strategic planning has with it an entrepreneurial spirit that requires an organization to be forward-thinking and to avoid committing its resources to the status quo of its operations or output (Drucker, 1993). Thus, the determination to engage in strategic planning by American police agencies, as will be shown in later sections of this dissertation, can be considered an innovation.

**Police Agencies as Open Systems**

My research takes the view that police agencies are an example of open system organizations. To explain the way that a police agency engages in decision-making relative to their environment, consideration must also be given to how the reality of agency structure and value systems influences innovation. To accomplish this, two linking theories, contingency theory and institutional theory, will also be used in the theoretical framework.

A system can be defined as “a grouping of separate but interrelated components working together toward the achievement of some common objective” (Swanson, Territo, & Taylor, 1993, p. 112). General systems theory has a plethora of interpretations and definitions, but the common thread is a focus on the “interaction of different units toward a common goal” (Bernard, Paoline, & Pare, 2005, p. 204). Systems theory seeks to explain the relationship between organization components in a manner that does not rely on situational perspectives. General systems theory classifies organizations into closed and open systems, though neither can be completely realized (Swanson, Territo, & Taylor, 1993). The designation of organizations into either open or closed systems relies on the means by which the agencies interact with their
environment. Open systems receive input from a variety of environmental sources, process these inputs, and release outputs. These organizations recognize that the end state or goals can be achieved through many different means (von Bertalanffy, 1969). Closed systems, in contrast, focus on internal functions and behaviors and often do not recognize or accept that the external environment has influence over the activities of the organizations.

Contingency theory states that there is no best way to structure an organization. The management of that organization therefore must consider the external and internal environmental factors to produce a structure that creates the best “fit between context and structure” (Van de Ven & Drazin, 1985, p.333). This is important because the structure and management concepts of an organization reflect the environment in which they operate. Contingency theory provides an understanding that police agencies must decide how their limited resources will enable them to determine whether the innovation is needed, how the innovation will be implemented, and how the organization can determine the “success” of the innovation.

In the same vein, institutional theory can be used to explain how the implementation of an innovation is influenced by the values and beliefs of the agency in relation to its external environment. Research into the institutional aspects of organizations and innovation find that an agency’s structure affects the ability of the organization to change and influences the strategies an organization uses to achieve its goals (Wilson, 1989). Police agencies have been found to be highly value driven and constantly striving to legitimize their tasks through their organizational structure relative to the pressures from their external environment. Institutional theory will help define factors that influence a police agency’s ability to implement an innovative practice like strategic planning.
As history has shown, police agencies are willing and able to adopt innovative practices, yet there are few, if any, studies of how committed to implementation the agencies are once the decision is made to enact the new practice. This research undertakes a discussion on a management concept, strategic planning, that is relatively new to police organizations and the factors that influence its implementation.

**What This Research Is About**

The larger question that this study undertakes is, “What factors explain the variation in the level of organizational commitment to change, as indicated by the agency implementing a strategic plan as proposed?”

Strategic planning by police agencies is considered an innovative practice meant to bring about change in those organizations. To understand how the commitment to the strategic-planning process affects the overall implementation of the innovation the use of systems, contingency and institutional theories will provide concepts that describe the variation of the implementation.

While this study focuses on police agencies, the findings in this research could apply to public agencies of all types. Since strategic planning and its implementation are about managerial decision-making, the value created by the implementation of a strategic plan plays a role in effective governing.

Strategic planning requires the input from the external environment; thus, the level of involvement from the stakeholders in developing and implementing the strategic plan is critical. Therefore, I develop a measure of inclusiveness that taps into the extent to which agencies include stakeholders in the development and implementation of strategic-plan objectives.
Police agencies use a variety of measures to determine their performance. Crime rates, closure rates, and response time are all examples of the typical measures that police organizations use to decide how the agency should accomplish work and explain how well (or poorly) the agency is doing. Strategic planning uses these measures to define the issues that require change. The scope of performance defines the variety of measures that an agency uses during the goal creation, goal implementation, and goal achievement for these strategic plans.

There are other control variables founded in systems theory, a model shown in Figure 1, that can influence the strategic-planning process and the plan’s ultimate implementation. The implementation of the strategic plan as proposed will then demonstrate the agency’s commitment to change.
Figure 1. Conceptual Model

- Inclusiveness
- Scope of Performance
- Institutional Controls
- Environmental Controls

Implementation as planned
Importance of This Research

As with any new research, the study must add to the established body of literature of that topic; in this case, the topic is organizational commitment and innovation implementation in American police agencies. The research must also convey added value to the unit of analysis: again, American police agencies. This research is important because it accomplishes the following three things.

First, this study expands upon the research of Zhao, Thurman, and Ren (2008) regarding the involvement of American police agencies in strategic planning. The authors acknowledged at the time of their study that there is little research on the topic of strategic planning and American police agencies. Despite this fact, their study found that strategic planning has been incorporated into the new reform efforts associated with community policing and their study provided the background data collection for this research on the commitment to strategic planning. As described in the Zhao, Thurman, & Ren (2008) study, “An Examination of Strategic Planning in American Law Enforcement Agencies: A National Study,” many police agencies claim to have adopted strategic planning, and this management concept has been accepted as a means of organizational change. However, the promise by the police in many jurisdictions to adopt these changes has been hampered by rhetoric over principle. The latest unrest in areas like Ferguson, Missouri and Baltimore, Maryland is symptomatic of a devolution away from practices that are consistent with the principles of community policing and show a lack of commitment to change. The 2008 study “assessed the prevalence of strategic planning in U.S. law enforcement agencies” (p. 5) and looked at the conceptual styles of strategic planning in use in these agencies.

While the Zhao, Thurman & Ren study provides the backdrop for the importance of this dissertation, many police agencies can claim to have adopted strategic planning, but there is no
research on agency commitment, as shown through the actual implementation of the agreed-upon plan to the strategic-planning process. This research defines commitment to the strategic-planning process as the combination of inclusiveness of stakeholder input throughout the strategic-planning process and the use of scope of performance measures by the organization to design and measure the change brought about by the implementation of the strategic plan. These two variables consider both the external influences on the organization and the internal processes that lead a police agency to commit to an innovation; thus, they play an important role in the implementation of a strategic plan.

For a strategic plan to be effective, it is not just the effort of development that is important. Rather, the deliverable actions linked to the changes the organization wishes to see realized must be linked to the actual implementation. The strategic-planning process is a purposeful action-oriented process; so too is the implementation of that plan. Much time and effort are invested in the planning process, and a failure to implement as planned not only robs the agency of its resources but also denies it the opportunity to bring about change. An organization must understand that the strategic-planning process is not a rhetorical paper chase but an effort to bring about change within the organization in response to the internal and external environmental cues that have been identified. In the inevitable struggle for legitimacy and to remain responsive to its clients/citizens, a police agency must be prepared to enact the changes identified throughout the strategic-planning process or face the possibility of having the changes imposed upon it by external stakeholders. Today, many agencies face political pressure to change or are forced to change by consent decrees from the federal government. Recent events in Ferguson and Baltimore illustrate the force of political and citizen unhappiness with policing practices. Cleveland, Ohio, which went through government-mandated change 10 years
ago, now finds itself back under a consent decree from the U.S. Department of Justice on its use of force patterns and practices. Clearly, the changes that were planned and implemented never took hold, resulting in a relapse of unacceptable methods of policing.

Strategic plans, in and of themselves, do not bring about change in organizations; this is accomplished by the implementation of the strategic plan by agency members (Poister & Streib, 2005). Thus, the dependent concept, defined as "implementation as proposed," means the agency, after going through the strategic-planning process, actually implemented the actions outlined in the strategic plan. Since this research examines the relationship between organizational factors and environmental factors on actual implementation of innovation, this study can act as a baseline for future researchers when studying long-term objective success of a police agency's implementation of innovative practices.

Second, this study underscores the importance of evaluating the multidimensionality of strategic planning in police agencies. There is a view that strategic planning is an innovation capable of being developed and implemented by an organization (Zhao, 2008). At the same time, there is an alternate, and analogous, premise that strategic planning is a mechanism available to an agency to instill innovative practices into its environment (Bryson, 2004). This provides further impetus for police agencies to promote its implementation: they can benefit from the planning process itself as well as the resultant changes it is designed to bring about in the agency. Current and future police leaders may use this work as a guide for moving beyond the rhetoric of idle claims of change to developing substantive concepts that actually produce cultural change in the organizations.

Third, this research places the use of strategic planning by police agencies into the proper context for it to be applied to the world of practitioners. The need to study an agency's
commitment to strategic planning can be felt in this quote from Bryson (2004): “Strategic Planning is a leadership and management innovation that is likely to persist because, unlike many other recent innovations, it accepts and builds on the nature of political decision making” (p. 28).

In this dissertation, a foundation will be laid regarding general systems theory, specifically the belief that American police agencies act as open systems. Open systems maintain a steady state of work product and are thus continuously influenced by environmental factors, both internally and externally—a perfect description of police agencies. A subtheory of general systems theory is contingency theory, which illustrates how an organization is deep-seated in an environment and how this environment places demands and pressures that can bring about change (Gaines & Worrall, 2012). These demands occur as defined by Lawrence and Lorsch (1967) on the operational and administrative levels. Therefore, police agencies adopt change by responding to and interacting with their environments.

By applying this theory, a conceptual model can be developed that illustrates how innovation implementation occurs. This model begins by defining the concepts of inclusiveness of the agency during the strategic-planning process and use of scope of performance measures to indicate means to evaluate the input, throughput, and output of the strategic-planning process. By controlling for issues that might affect the agency, including vertical differentiation, diversity, and professionalism of the police agency’s environment, the dependent variable, implementation of the innovation as proposed, will be analyzed.

Darroch and Mazerolle (2013) found that there were fewer than 10 empirical studies of the determinants of organizational innovation in police organizations worldwide since 1998. Since so little has been written about commitment to change in organizations, and even less
about how it specifically explains variations in the implementation of strategic planning, the literature reviewed discusses the variation in implementation of innovations by police agencies as a whole. This has the added benefit of developing factors that can be generalized to other innovation implementations by police agencies.

Chapter 2 begins by presenting the literature that provides the context of the relevance of strategic planning as an innovation, followed by the discussion of studies and practices by American police agencies with respect to innovation. It then summarizes the relevant literature regarding general systems theory and its derivative theories: contingency theory and institutional theory as providing the basis for the conceptual model. Contingency theory speaks to the structure of the organization and how this structure fits relative to the tasks and contingencies it faces (Wilson, 2004). In this vein, Wilson (2004) explains that organizations, viewed as “open organic systems” through the lens of contingency theory can actually be found on a spectrum from “mechanical to organic” (p. 18). Institutional theory focuses less on the tasks and operational efficiency in exchange for an understanding of how the environmental factors, such as laws, opinions, and desire for legitimacy, shape an organization’s focus (Wilson, 2004). The interrelationship between these two theories will be discussed later in this paper.

Chapter 3 develops the conceptual model and provides a detailed discussion related to its structure and assessment. This entails explaining the specific measures and the data sources from which these measures are derived. This chapter also describes the methods used to evaluate the theoretical model and the specific hypotheses related to the measures. Chapter 4 provides the outcomes associated with the analysis of the theoretical model, along with a discussion of the process used in analyzing the data. Chapter 5 discusses the major findings and future areas of
research. Collectively, these sections provide an examination of the factors that influence the implementation of innovation, in the form of a strategic plan, in American police agencies.
CHAPTER 2
LITERATURE REVIEW

In the previous section, the context for innovation in modern American policing was illustrated. The following review of literature is crafted in specific stages; first, it outlines the types of police innovation studies and then discusses the categories of police innovations. It is important that part of this discussion underscores the logic behind a police agency’s decision to engage in strategic planning as an innovative practice. Public organizations innovate in pursuit of more effective ways to produce public value, whether through more efficient delivery of services, adoption of new technology, or wholesale organizational changes. While the goals of an attempted, or adopted, innovation may not have the intended effect, the rationale for the innovation is improvement of the organization’s capabilities. Then follows a discussion of the systems theory of organizational behavior: specifically, American police agencies as open systems to deliver the framework for the theoretical model of this research. Next, the similarity between the use of the strategic-planning process and innovation adoption is illustrated. Strategic planning is also founded on improving an organization through improved decision-making, mission alignment, and legitimacy (Bryson, 2010). This review of literature culminates with the outlining of the theoretical model of this research.

**A Brief History of American Police Agencies and the Influence of Their Environment**

Police agencies have historically found themselves asking their members to perform activities that the rest of society chooses not to perform (Bittner, 1990). Despite the fact that, historically, the distribution of police work is considered inefficient, police agencies act in a manner consistent with other organizations in that they are designed to accomplish specific goals. The accomplishment of these goals requires that a police organization understand the
pressures placed upon it, both externally and internally, and adopt management concepts to address these demands.

As will be shown in the following sections, there have been management innovations that influence the police. The police in modern times can be thought of as intrinsically linked with change, both as a social innovation and as a government entity that has relied on innovation to change. In recent years, innovations such as Compstat and intelligence-led policing have been introduced as new techniques to influence delivery of police services (Carter, 2009; Henry, 2003). Innovation research has gradually become a part of policing literature over the last generation, with an emphasis on explaining how and why new practices, programs, and technologies are implemented by American police agencies (Carter, 2011).

The police, being the natural extension and most visible arm of the executive branch of government, have a critical need to determine how to best bring about and commit to innovative approaches to managing the organization. Historically, there are well-documented divisions in the way American police agencies have responded to the pressures of the environment in which they operate. American police organizations have gone through a series of changes in the types of goals and influence these demands placed on them. The post-1830s American police agency was organized with respect to the political tides. This model could best be defined as the political model due to its reliance on the political power base of the population for its sanctioning.

For instance, to become a member of the New York City Police Department in the mid-1800s, you had to be appointed by the ward alderman (Swanson, Territo, & Taylor, 1998). The goals of the political police model were simple: control the influx of people in the cities and protect the political power base. Since "machine politics" were the only way to be hired and
promoted, loyalty to the political elite was a must for any member of the force. The force was
organized around political boundaries and highly susceptible to changes in power of the
politicians. If the mayor or ward alderman was not re-elected, the entire force would be fired,
and cohorts of the reigning party would be brought in (Swanson, Territo, & Taylor, 1998).
Because of the political influence, the forces were decentralized and had no stable hierarchical
structure. Policies and functions followed suit, with no rhyme or reason for the development,
conveyance, or enforcement of the practices. This design, if it can be called one, meant that the
hierarchy of command was extremely responsive to the power base of the political parties. This
responsiveness was considered a main measure of an agency’s performance.

As the turn of the 20th century approached, many of the disenfranchised began to question
the legitimacy of the political police and their elitist protection. The blatant use of police as an
instrument of urban machine politics created the view that they were not only corrupt but dumb
and brutal as well (Bittner, 1990).

The impetus to remove corruption, waste, fraud and abuse from government was the
touchstone of the reformist era. What was put in place was the development of a cadre of people
committed to careers in public service (Swanson, Territo, & Taylor, 1998). Police departments
began to take on a military-like structure to fight the possibility of corruption, brutality, and sloth
within the agencies (Bittner, 1990).

Perhaps the strongest change was brought about during the Reformation Period between
1900 and 1926. In most instances, the command structure was similar to the rank structure of the
military, which at the time was seen as a model of efficiency and accountability. Government
officials sanctioned the police use of discretion and allowed the police to develop an almost
mystique-like aura of competence and effectiveness. In this first wave of reform, the reformers
insisted that the primary purpose of police (and other public agencies) was not to provide jobs for lower and lower middle-class immigrants but to provide essential public services as efficiently as possible (Fogelson, 1977). Professionalism was viewed as organizational efficiency and crime fighting, with little emphasis on any performance measures save the crime rate (Gaines & Kappeler, 1997).

Society recognized and believed that the police had certain mandates that only a well-organized establishment could meet. Along the lines of this societal reform movement, the police began shifting away from the political model to a more stable and organized model. Characterized by a demand for efficiency of service, the use of scientific principles in crime detection, esoteric knowledge of the functions of policing, and an application of systems to police functions, the professional model of policing was born. To accomplish this, the agencies found that they needed to develop a system of centralized command structure. Reformers dictated that local control was no longer a source of political legitimacy (Fogelson, 1977).

The bureaucratic style of police was thought of as the pinnacle period within the professional era of policing (Gaines & Kappeler, 1997). The institution of goal setting and the reliance on information and data to formulate plans and strategies characterized bureaucratic policing. This type of structure required the agencies to declare even more formal lines of hierarchy and communication, in a more centralized configuration that allowed for more internal control over the work product. Specialists, albeit still a small percentage of the agency staff, were the mainstay of the philosophy of policing during this time. Traditional policing revolved around the response to crime and incidents after they have happened; thus, it is reactive as opposed to preventive and proactive.
Enlisting policies that focused more on bureaucratic efficiency and response than getting to the root of the problem caused ambiguity for the officers in the face of a changing political climate in the 1960s and 1970s. Officers were instructed to be crime fighters yet found themselves losing legitimacy within the community because of their aloofness caused by the reduction in face-to-face contact. Police agencies recognized the need to integrate back into the community in an effort to try to regain some of the lost confidence and legitimacy required to maintain legitimacy. Community Policing, as the model is called, refers to a change in philosophy for the police instead of the organizational model shift of earlier changes.

Each of these management concepts can be considered innovative thinking on the part of the police organization. While some innovations took hold and were adopted, others were discarded or rendered obsolete. Throughout these model changes, police agencies leveraged many different management concepts to revise the police organizations; scientific and bureaucratic principles were applied during the reform movement to professionalize the police and improve efficiency. During the professional period, administrative principles and studies on policing were applied. With community policing, team policing and problem-oriented policing were methods leveraged to affect the way police organizations achieved their ends.

Perhaps due to their unique position and history as the most visible embodiment of government, the American police forces have been historically subject to change brought on by the environment in which they operate. The police agencies have implemented innovative ideas and practices to effect change in their organizations or had these changes imposed on them by outside influences. The modern police force was as much an innovation as it was affected by the changing landscape of the modern ages. This multidimensionality of the police and their
delivery of service to stakeholders play an integral role in understanding how important it is to have long-term planning as provided for by strategic planning.

Categories of Police Innovations

Police agencies and their use of innovation have been studied extensively, with examples of these studies replete with different typologies of organizational innovation. As illustrated by some of the examples above, police innovations take many forms and come from different ideologies; some are the result of changes in management styles of the era, while others may incorporate new technologies. Other innovations integrate a combination of both management and technical opportunities.

For clarification, Damanpour (1991) defined four distinct typologies and Moore, Sparrow, & Spelman (1996) provided examples of each of these types of innovations:

Table 1

Typologies of Innovations

<table>
<thead>
<tr>
<th>Innovation Type</th>
<th>Definition</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radical</td>
<td>Innovations that require massive restructuring or changes in the organization</td>
<td>Community-oriented policing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Problem-oriented policing</td>
</tr>
<tr>
<td>Administrative</td>
<td>Innovations that affect or change the management of the organization</td>
<td>Affirmative action</td>
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<td></td>
<td></td>
<td>Mission/values statements</td>
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<td></td>
<td></td>
<td>Decentralization</td>
</tr>
<tr>
<td>Technical</td>
<td>Innovations that change the hardware use to produce a service or product</td>
<td>Semi-automatic handguns</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Nonlethal weaponry</td>
</tr>
<tr>
<td>Programmatic</td>
<td>Innovations that create new units or operations to meet organizational goals</td>
<td>Crime analysis</td>
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<td></td>
<td></td>
<td>Asset forfeiture</td>
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</tbody>
</table>
In the literature, there are even disputes on what constitutes innovation; what one agency feels is new and innovative may be considered part of the normal routine of another (King, 2000). Still other studies dispute what factors influence the adoption of innovation; Zhao, Thurman and Lovrich (1995) correlates external environmental factors as being responsible for innovative acceptance by police agencies, while Mullen (1996) interprets the acceptance based on internal organizational factors.

This dispute plays right into the heart of this research: both internal and external factors influence innovation, or at least the commitment of the agency to this change once it is adopted. Police agencies are bureaucratic organizations typified by the critical tasks they perform, the way in which they perform these tasks, and the ability to create autonomy to make changes (Wilson, 1989). When adopting a new way of business, new tasks have to be developed in part as a response to the failure of police to achieve the crime-control goals of the professional model of policing (Weisburd & Braga, 2006). The control-centered professional bureaucratic model embraced by the police as part of their earlier reforms generally did not include strategic and long-term thinking. In managing the critical tasks of police agencies, it has been generally left to the police officers to handle the situation and maintain the police autonomy over crime-related matters (Braga & Weisburd, 2007). An innovation that requires a full-scale switch of the police agency identity, with changes in organizational structure, engagement of the community in problem solving, accountability of managers and executives, and delivery of service, requires not only philosophical modifications in the way police departments think about their role but also requires a physical transformation of the agencies. This classification of innovation has been defined as a “radical innovation” by Damanpour (1991).
The historical context of American police organizations and their complex arrangement with society provide insight into their acceptance to innovation and change. As was illustrated, modern police agencies in America have instilled a mind-set of accepting innovation in all facets of their operations: some that are overcome by new innovations, with others accepted and institutionalized (King, 2000). Integral to this discussion is why the agencies feel the need to change in the first place and how they go about committing resources to bring about those changes.

As a point of reference, community policing is one of the most prevalent forms of innovation that police agencies have engaged in over the last 40 years, yet there are mixed reviews on how well this innovation has been implemented (Manning, 2011). Consider this quote from Greene (2000):

There are those who charge that community policing is more rhetorical than real (cf. Manning 1988; Weatheritt 1988) or that it follows a long line of circumlocutions “whose purpose is to conceal, mystify, and legitimate police distribution of nonnegotiable coercive force” (Klockars 1988). Others assert that such efforts represent “the new blue line” of police innovation and social experimentation (Skolnick and Bayley 1986) and the resurgence of improved relations between the police and the public (Wycoff 1988).

The absence of a strategic emphasis also has implications within police departments. Without a road map of where the agency is going, it is difficult for police managers to muster line-level support for changes in police services or styles of interaction with the public. Without announced direction, those who would resist such efforts are relatively free to continue to passively, and at times actively, resist those changes. For example, this resistance to change is a major obstacle to the implementation of community and problem-oriented policing. The unrest in cities across the country, such as Ferguson, Baltimore, and Cleveland, was caused by the hypocrisy of touting a community-policing mentality by the leadership, while the patterns and
practices on the street level were contrary to those principles. The resistance comes from line-level officers who may believe that community and problem-oriented policing is soft on crime, who do not accept a crime prevention versus a crime-fighting role, and who cling to union and civil service regulations and procedures to better control their work and the workplace (Zhao, Thurman, & He, 1999). It furthers the precepts of Hebert and Colton’s findings (1978) that innovations are seldom accepted by line officers without the support of top management (Lawless, 1987). In fact, some studies have concluded that police agencies are “unwilling to adopt strategic reform” (Lipsky, 1980). Understanding the determinants that affect the ability of a police agency to implement a strategic plan as anticipated and overcome the obstacles associated with innovation lies at the heart of this research. As indicated, change is not new to American police agencies and adoption of innovation by this culture is not novel either. While it may be said that police agencies are resistant to reform (Darroch & Mazerolle, 2013; Goldstein, 2003; Zhao, Thurman, & Lovrich, 1995) and implement innovation “superficially” (Darroch & Mazerolle, 2013), historically, police agencies have been at the forefront of many innovative public-sector reforms.

**Types of Innovation Studies in American Policing**

The following section presents a brief discussion of the types of innovation studies involving police agencies and then undertakes an examination of the classification of innovations in which police agencies engage. One consideration for this upcoming discussion is that the studies and classifications do face a biased approach, since most of them deal with innovations that have been attempted or adopted. This “success bias” limits the ability to understand why some agencies do not engage in innovation and generally gives no importance to why innovations, once attempted or adopted, fail (Willis & Mastrofski, 2011).
Studies of police innovation generally depict innovation through the lens of the way that the research is conducted, many times with disparate findings (King, 2000). These types of research fall along three distinct tracks: diffusion, innovativeness, and process (Wolfe, 1994). Each view has its own advantages and limitations that play a role in characterizing the reason behind the differing conclusions. Understanding the types of innovation studies already conducted helps to provide a theoretical grounding that can assist in explaining the nature of the research into commitment to innovation by police agencies.

Innovativeness studies are research that attempts to quantify the innovations adopted by an organization in an effort to explain why some agencies are more innovative than others (King, 2000; Mastrofski & Willis, 2010). This type of study has its limitations in the lack of ability to view the process of innovation over time and the fact that the studies may overly generalize an agency’s innovative behavior (Rogers, 2003).

Diffusion research “generally describes and predicts the spread of an innovation or innovations across a group of adopters, over time” (King, 2000). Studies of diffusion of innovation can take on the mantle of the point of view of technical/rational theory (Willis & Mastrofski, 2011). This perspective is based on the ability of the organization to adopt innovations that assist it in achieving the goals of the agency when there is a gap between the perceived need for change and the means to produce the services of the organization. The organization then develops a logical means of meeting the needs for these services (Willis, Mastrofski, & Weisburd, 2007). The argument is made that organizations operate in market economies and trade services or products within this environment. Pressure or demands drive the organization to develop structures to provide the most efficient means of “manufacturing” this product (Willis et al., 2007).
Technical/rational theory falls short for two distinct reasons in relation to this study of innovation and specifically understanding the commitment of an organization to change. First, the technical realm of policing is overshadowed by the institutional environment (Crank, 2003). This is due in part to the lack of reliable measures and outcomes in use by police agencies that speak to their environmental pressures. Second, police organizations have been viewed as closed systems, with little variation attributed to the environment, when in recent years, theorists speculate that police agencies are much more apt to be open systems, influenced by their environment (Crank, 2003; Langworthy, 1985a; Maguire, 1997; Zhao, 1996).

The thought of American police agencies as open systems helps explain how these agencies react to the changing environment. Police agencies operate in a volatile environment that is influenced by a multitude of pressures and demands. One such open systems theory, contingency theory, helps address the gap between the need for and the means to bring about change by explaining that organizations will engage in logical adjustments to produce results associated with their desired goals (Wilson, 2004). The effectiveness of these adjustments in meeting the demands of the environment results in more fitting outputs for the agency. In many instances, these adjustments need to be made quickly to meet the operational pressures that the environment places on the organization; however, there is also a need to have the capacity to develop long-term plans to instill lasting changes. Strategic planning, as part of its very nature, helps to differentiate between these operational and strategic demands. Diffusion in this sense is the means by which the organizations change or innovate to meet the demands of the environment.

This view is not without dissension. The work by Willis et al. (2007) proffered that the diffusion of the use of Compstat by police agencies was in response to a need to improve
departmental response to environmental issues, such as crime and safety. This study explained that an argument can be made along technical grounds on why the agency would adopt Compstat: the need of the agency to be more responsive to crime trends and the development of a rational process to address these needs to provide the delivery of service through computerized crime analysis, policies, etc. What the authors found was that the innovation of Compstat may be better explained by institutional theory because the agencies studied seemed to adopt the innovation of Compstat to acquire legitimacy as opposed to attaining any set goals.

A further thought is that both technical and institutional pressures can be dealt with by police agencies at the same time when adopting an innovation (Meyer et al., 1983). In doing so, an organization would be seen to deal with the technical aspect by directing structural changes to bring about the results desired from the adoption of the innovation. From the institutional perspective, an agency would also have to confer legitimacy to the innovation by the involvement of stakeholders.

**Strategic Planning as an Innovation**

In Peter Drucker’s seminal book *Management: Tasks, Responsibilities, Practices*, strategic planning is defined as the “continuous process of making present entrepreneurial (risk-taking) decisions systematically and with the greatest knowledge of their futurity; organizing the efforts to carry out these decisions; and measuring the results of these decisions against the expectations through organized, systematic feedback” (1993, p. 125). Similarly, John Bryson characterized strategic planning as “a disciplined effort to produce fundamental decisions and actions that shape and guide what an organization is, what it does and why it does it” (Bryson, 2004, p. 7–8).
By the 1970s, the adoption of strategic planning by private industry was widespread (Rabin, Miller, & Hildreth, 2000); however, public agencies began to adopt formal strategic plans only in the 1980’s, due to the need to conserve resources while responding to increased demands for service (Moore, 1995). The use of strategic planning was further extended by the Reinventing Government movement from the early 1990s (Zhao, Thurman & Ren, 2008). The Government Performance and Results Act of 1993 further formalized the utilization of strategic planning by mandating that all executive federal government agencies institute a strategic plan by 1997. ¹ While the federally mandated adoption of strategic planning was not imposed on local and municipal police agencies, many local governments followed suit with the decision to engage in this long-term effort. By the mid-1990s, many municipal areas with populations over 25,000 had begun to engage in the strategic-planning process (Poister & Streib, 2005) and have continued to make the process part of the orthodoxy of change management.

Strategic planning focuses on establishing the framework for subsequent decisions about the outcomes desired, while implementation emphasizes the ongoing actions necessary to carry out the plan in consideration of “mandates, mission, goals, and strategies while being open to new learning that may affect the framework for action” (Bryson, 2010, p. S257). Many studies have been completed about police agency involvement in, and development of, innovative practices (Colton, 1978; Damanpour, 1991; Damanpour, 2008; King, 2000; Lawless, 1987; Weiss, 1997; Zhao, 1995); however, there are few systematic studies of the process of innovation in policing (Skogan & Hartnett, 2005; Weisburd & Braga, 2006). The dearth of these reviews

¹ Executive agency defined under section 105, but does not include the Central Intelligence Agency, the General Accounting Office, the Panama Canal Commission, the United States Postal Service, and the Postal Rate Commission (5 U.S.C. § 305).
creates a vacuum for practitioners and theorists alike in determining the commitment of police agencies to innovation.

While there are many studies of the construct of organizational commitment (Watson & Papamarcos, 2002), these studies relate to the commitment of members of the organization to that organization. In this study, organizational commitment is defined as the commitment of the organization to the strategic-planning process. Commitment in the sense of this study is about the organization's ability to engage stakeholders in the organizational change process. Additionally, organizational commitment is identified as the capacity of the police agency to develop measures that are outside the normal range used in policing. These two factors will assist the police agencies in implementing a strategic plan.

It can be hypothesized that implementing the changes that are identified, developed, and adopted through the strategic-planning process establishes the agency's commitment to change. It is this ability to commit to the implementation and engage in the innovation process that results in change; failure to commit to an innovation means that an agency has merely engaged in rhetoric. This rhetoric is a common problem in innovation, especially for the police (Manning, 2008). Rationale for the agency's rhetorical behavior might be driven by the need to reduce political pressure to do something about a problem, or it could be to assuage external criticism from the media or other stakeholders.

Some studies have shown that police agencies engage in "shallow" implementations of innovation and then tend to regress into traditional police work (Eck & Maguire, 2000). Organizational commitment to an innovation—in the form of administrative support—has overall produced positive results. Studies within policing (Morabito, 2010; Yates & Pillai, 1996) and in the private sector (Collins & Porras, 1996) have found a positive relationship between
commitment to an innovation and the organization's adoption, and ultimately its implementation, of that innovation.

Police organizations have long held to the traditional, bureaucratic means of organization. This traditional theory carries with it a history of positive means to control and manage a complex organization such as a police agency. Its hierarchical control and unity of command ensure strict accountability and reduce the potential for conflicting directives. Critics describe some of the failings of this model as being too focused on conformity and reducing the creativity seen with more open and innovative models. (Bennis, 1966).

While applying this opinion to management concepts, it is clear that strategic planning can play a role in understanding the importance of stakeholders, both internal and external, to the organization. The continuous input, throughput, output cycle of an organization is indicative of systems theory; the process is constantly influenced by the factors that affect that state (Blegen, 1968). In systems theory, wherein an organization is continually carrying out work to maintain a steady state, these factors are the pressures and demands placed on an organization from within its own structure and externally from the environment in which the organization operates. In the input process, decisions about the processing can be developed, and outputs can be managed through the implementation phase.

In keeping with the open systems theory, the literature suggests that the structure of police organizations plays a role in the implementation of innovative practices. Police agencies, as public service entities, engage in new management practices, adopt new technology, or engage in new activities to provide better service; thus, agency commitment to the proposed innovation will be an indicator of the agency's overall commitment to be innovative. This commitment will
be demonstrated by the agency's ability to implement a strategic plan after undertaking the strategic-planning process.

Research has shown that structure and functions of an organization influence innovation, both in positive and negative fashions (Damanpour, 1991; Rogers, 2003; Willis & Mastrofski, 2011). The connection between the task environment and the means by which an organization innovates depends on organizational structure. The innovation literature also supports this concept when there is a consideration of agency implementation of those innovations (Wilson, 2002). Innovation in this context describes a change that involves the performance of new tasks or significant alterations in the way in which existing tasks are performed. Police agencies are complex organizations that have varied tasks and often conflicting environmental influences. In determining the course of change through strategic planning, a police agency must not only consider its capabilities internally, but it must also be guided by the influence of the social and political environment. The next section makes the case for identifying the implementation of strategic planning as a radical innovation.

**Strategic Planning as a Radical Innovation**

As already illustrated, strategic planning may be considered a radical innovation used to bring about change in critical tasks. The process of change endemic to strategic planning can be defined as "the alteration in the structure of a system that requires or could be required by relearning on the part of the actor(s) in response to a given situation" (Zaltman, 1977). The strategic-planning process itself is not just a simple form of change, but it also requires the agency to change the performance of its critical tasks of planning and analysis, along with implementing programmatic initiatives determined during the strategic-planning process.
Strategic planning seems like a logical process for any organization to engage in; the implications of a deficient strategic focus in a government organization like police departments are far-reaching.

The absence of a long-term plan has left many police agencies adrift. That is to say, absent a plan for the future, most agencies focus on incremental changes in both resource availability and allocation. Scant resources, greater demand, and greater civic awareness make strategic planning a more necessary activity in public service bureaucracies, including the police. Coupled with rising expectations about participation in the coproduction of public safety, communities are eager and vocal about their participation with the police (Greene, 2000, p. 329).

Police agencies must be able to harness the efficient use of their resources to produce a value to their communities. Strategic planning is about a long-term, incremental process that an organization engages in to produce positive change, either by improving those tasks that it does well or by minimizing those things that threaten the organization. All of these decisions and actions take place within the context of the environment within which the organization operates. General systems theory proposes that an organization is affected by this environment. The view of Bryson’s (2004) Strategy Change Cycle, specifically the input areas of Step 4A and 4B, which indicate the pressures and demands that influence the decisions and strategy formulation of the strategic plan are indicative of the open systems theory.
Figure 2. The Strategy Change Cycle (Source: Bryson, 2004)

Throughout the strategic-planning process, as illustrated in Figure 2, an agency will go through steps in a specific fashion to ensure that all of the relevant information is gathered from which to make decisions for the agency's future. Focusing on the logical pattern of the steps involved in the change process increases the likelihood of successful change patterns (Greiner, 1967). Because strategic planning requires critical steps to be fully implemented, there must be a concerted effort by a police agency to act on each of these steps. The separate stages of the strategic-planning process—development, implementation, and assessment—provide a systematic approach to the utilization of long-term planning to effect change in an organization. This is significant in understanding the concept of inclusiveness as one of the concepts of
commitment to change. Inclusiveness, in this study, incorporates the variety of stakeholders involved and the degree to which they are asked to provide input or feedback to the strategic-planning effort. The more stakeholders who are requested to participate and the higher the level to which they participate, the higher the level of inclusiveness in the process of change.

The understanding of strategic planning as a process is also integral to the other determinant, scope of performance, because this concept encompasses the use of a variety of specific means (e.g., crime statistics, surveys, etc.) to obtain feedback on the strategic-planning process and at what stage(s) this occurs. More reliance on a variety of measurement tools that assist the police agencies to develop, implement, or assess change will signify that the agency is more apt to be higher in the scope of performance measures.

Change is an inevitable part of organizational existence. The way that organizations adapt to change plays a part in their success or failure. There are routine changes that organizations develop processes and procedures to deal with, such as the yearly budget cycle, changes in organizational makeup due to turnover, or managerial change (Van de Ven, 1993). However, some changes ask the organization to perform new tasks or change the way in which the complex tasks of organizations are carried out. Wilson (1989) called this “true innovation.” Innovation thus is not composed of routine changes that an organization has developed procedures to deal with but of those “novel” changes that require the development of new procedures (Van de Ven, 1993).

Innovation is considered integral to enduring organizational success and the associated new ideas, technologies, and administrative precepts provide the backdrop for strategic changes to the organization (Willis & Mastrofski, 2011; Moore, Spelman, & Young, 1992). In American police agencies and the study of innovation affecting them, there is a dearth of knowledge, both
internal to the agencies and by external researchers who study them, that affects the
understanding of the influence of the diffusion of innovation on the processes and outputs
associated with the innovation (Klinger, 2003). In discussing evidence-based policing, for
instance, Lum (2009) argued that the failure of police executives to adopt innovations that have
scientific worth happens, in part, because the breaking of the “non-evidence-based habits is a
monumental undertaking involving the changing of organizational culture, structure, rules, and
norms.” In other words, even when faced with innovations that work, agencies must produce the
type of changes inherent in strategic planning.

Rogers (1982) describes a model of innovation in organizations as a linear process over
time that encompasses three phases: invention of an idea, its development, and its
adoption/diffusion. This seminal work has led to a standard linear model of innovation, as
shown in Figure 3.
Figure 3. Rogers's Model of the Diffusion of Innovation

Rogers's linear model furthers the conceptual model of this study in that it provides the distinct areas from which inclusiveness and scope of performance measurement can be selected. The request for evaluation from stakeholders and the use of a variety of measures can be seen as dipping the bucket in the stream to sample the water. The bigger the bucket (inclusiveness) or the more times the bucket is dipped (scope of performance measures), the greater the accuracy of the samples of water. This should hold true for the model as well: more involvement by stakeholders, both in variety and times included, will provide a higher measure of inclusiveness.

Again, the more willing the agency is to measure and evaluate the process, both in variety and frequency, the more accurate the measure. As with the Bryson chart in Figure 2, distinguishing where in this linear process the involvement of stakeholders can be measured will help determine the level of commitment the agency has to the innovation being adopted: in this case, strategic planning. Additionally, both Rogers (1982) and Bryson (2004) indicate that the implementation
of the plan or innovation occurs after the adoption of the plan or innovation. This will be significant as we progress with this discussion, since implementation will be indicative of the commitment the agency shows to the innovation.

In dealing with innovation, one must differentiate between the adoption of innovation and the diffusion of these changes (Damanpour, 1991). Adoption of innovations by an organization can occur in a linear fashion (Rogers, 1983) or in a complex series of overlapping behaviors (Van de Ven, 1993). In keeping with Damanpour (1991), for the purpose of this study, the definition of the adoption of innovation will deal with the creation and implementation of new behavior. While the issue of the institutionalization of innovation is an important consideration, this analysis does not cover the level of institutionalization of strategic planning, where it becomes part of the accepted part of the culture of the organization (Yin, 1978).

**Theoretical Framework**

As discussed, this research begins with the premise that the ability of a police agency to implement a strategic plan is synonymous with its ability to be innovative. To interpret the results of this study, this statement must be backed up by a theoretical framework. I view police organizations through several different, but not divergent, lenses to place the research into a proper context. The environment within which a police organization operates contributes to the tasks that it carries out and the expectations with relation to service delivery. Under the open system proposition, a police organization will develop its organizational structure to address these environmental influences. This theory explains how an organization like a police department is affected by its external and internal environs and how it creates processes to continue in a steady state.
By including the open systems theoretical background, the explanation of critical variables affecting the agencies can be defined. I will also use two subtheories of the systems perspective that help to define the context of the organization within its environment: contingency theory and institutional theory. A more in-depth discussion of these theories and their influence on this research follows.

**General System Theories**

As discussed earlier, the theoretical groundwork of systems theory explains how organizations co-exist within their environment. Daft and Marcic (2001) define a system as a collection of parts focused on accomplishing a goal or goals. To accomplish these goals, the organization relies on input from the environment, transforms that input, and delivers outputs or outcomes to the external environment in the form of goods and services. The ability of an organization to implement a strategic plan therefore must include the influence that the environment plays on the actions and processes initiated by the organization.

In the 1930s, Von Bertalanffy, a biologist, took the physical science "open system" theory that explained how organisms exchange matter with the environment in which they exist and applied it to organizations. In the physical science world, open systems theory defines the phenomenon of how a system can create a continuous exchange of material with its environment. This exchange is called a steady state or equilibrium. If a system is to continuously carry out work, it cannot be in equilibrium. For a system to be considered open, it must carry out work continually. This leads to the open system being constantly influenced by factors that affect that state.

Despite many changes in scientific principles and beliefs, there has not been fundamental change in the belief that "to understand an organized whole, we must know both the parts and the
relations between them” (Von Bertalanffy, 1973, p. 8). General systems theory explains why organizations behave the way they do with respect to change. “The whole is greater than the sum of its parts,” as proffered by Aristotle, is an example of ancient systems thinking that still applies. Historically, this viewpoint was more “philosophical” and did not readily become “science” due to the unsophisticated mathematical methods and unwavering belief in the classical scientific principles that did not allow for changes in “the fundamental paradigm of one-way causality and resolution into elementary units” (Von Bertalanffy, 1973). This changed when organizational theorists began looking for a way to explain the behavior of organizations that did not fit the rigid, bureaucratic mold.

Systems theories became more prevalent in discussions during the 1960s, but they have been part of organizational behavior thinking since the 1920s. The Hawthorne experiments of the 1920s and 1930s led researchers to develop theories about level of production, group dynamics within an organization, role of peer pressure on worker behavior over and above the economic incentives, and the importance of both formal and informal leadership in enforcing the norms of the organization (Swanson, Territo, & Taylor, 1998). Organizations recognized that other factors outside their control influence their ability to deliver their services (Wilson, 2004).

Closed system theory advocates that organizations use complete rationality in optimizing performance, developing internal efficiencies, and increasing certainty. Thus, this type of organization can seemingly operate in a functioning manner without consideration to the changing environment; all outcomes of the agency’s actions are predictable (Swanson, Territo, & Taylor, 1998). Closed system organizations would not use external feedback to correct inefficiencies in their operations and do not distinguish or employ the principle of “equifinality.”
The external influences and changes in the environment that an open system organization accepts would be ignored because little interaction with the environment is seen as necessary.

The thought of direct cause and effect are most prevalent in a closed system; flip a switch and the light turns on, for example. In the realm of innovation, a closed system organization would prefer to operate in the same manner and not contemplate innovations (Swanson, Territo, & Taylor, 1993). If changes were needed, a closed system agency would rely on internal feedback and discount external stakeholders’ input into the decision-making process. Police agencies have long been criticized for this type of parochialism. The traditional or professional model of policing, with the “just the facts” approach, is synonymous with the direct cause and effect of a closed system; so too is the effort of a police agency being called to handle a call for service, applying an intervention, and leaving without dispensing feedback or seeking to correct the underlying issue. I call this the “911 phenomenon.”

The “911” style of action belies the necessary component of external stakeholders’ input in both the reason for the issue and the necessary change needed to correct the issue. The “911 phenomenon” also ignores the need to ask stakeholders about whether the intervention or service provided worked or solved the problem. A closed system would sense that response and completion to the organization’s satisfaction would be sufficient.

In applying general systems theory to the criminal justice system as a whole, researchers found that its use was sporadic and tended to focus on closed system thinking, meaning all that was considered were those activities that were found within the criminal justice system or within specific agencies (Bernard et al., 2005). Another deficit in general systems thinking in its application to the criminal justice system was the lack of consistent goals within the components of the system. For instance, prosecutors have a different set of measures and goals (e.g.,
conviction rate) than a police department (e.g., crime rate). In this research, I will break the police agencies away from the criminal justice system and focus on the organizational dynamics of those agencies. Since the use of general systems theory has been applied to the study of individual organizations (as systems) as well, this singular focus will help to establish the means by which the interaction between police organizations and the environment is developed (Bernard et al., 2005).

**Open Systems Theoretical Framework**

Open systems theory, as discussed by Thompson (1968), differentiates between the thought that closed systems were autonomous from their external environment, as opposed to open systems, under which organizations rely on input from their environments (Wilson, 2004). The use of this school of thought provides the ability to engage both internal and external variables to determine commitment to innovation, just as strategic planning relies on the use of internal and external environments to determine implementation plans and provide feedback on progress or success.

Placing the commitment to innovation into the proper context requires the consideration of certain theoretical models to develop the subsequent modeling factors; this study proffers that American police agencies operate as "open systems." Recent research has shown that considering American police agencies within this context has merit (Langworthy, 1985b; Maguire, 1997; Maguire, 2003; Mastrofski, 1998; Zhao, 1996).

Despite their insular and parochial characteristics, American police agencies, in reality, are influenced by both organizational factors and external environmental dynamics. Thus, it can be inferred that systems theory explains the behavior of an organization as a "complete entity" that considers not just the closed system but the external environment as well (Blegen, 1968).
In the Community-Policing era, American police agencies can be considered open systems that depend on the relationship between the agency’s task environment and organizational structure. Katz and Kahn (1978) defined open systems organizations as those that seek continuous sources of inputs, develop these inputs via a throughput function and then export these inputs as outputs as products or services. These outputs, or in the case of a police agency, services, both satisfy a need and create a new demand for more service (outputs). More importantly, because of this cyclical pattern, open systems receive feedback as inputs from the larger environment in which they operate.

American police agencies operate within the reality that they have many sources of contact and interact with the external environment within which they exist. Since organizations engage in innovation to improve or become more effective, open systems theory provides an important model for commitment to innovation, in that it deals specifically with the importance of inclusiveness by placing significance on the input from the agency stakeholders. Open systems theory also plays a role in understanding how important it is for police agencies to engage in focused actions, as shown by the implementation of a structured strategic plan, in an effort to reach organizational goals in a more effective manner.

Though the theoretical underpinnings of open systems correspond with the reality within which police agencies operate, much of open system thinking has not been institutionalized. Open systems theory’s reliance on human relations in its application creates a divide in its practices by police agencies. Police agencies find it difficult to justify the expenditure of resources on prolonged or staff-intensive practices, such as citizen surveys or staffing studies, while engaged in the day-to-day operational tasks. The theory is also limited by its tendency to
overlook the importance of informal relations of individuals within the organization (Swanson, Territo, & Taylor, 1993).

**Bridging the Gap Between Traditional and Open Systems Theories**

It is clear that many facets to American police agencies are influenced by their internal, structural components as well as the cultural environment in which they exist. The bureaucratic makeup of current police agencies is a reality and not likely to change remarkably any time soon. Open systems thinking, founded in the dynamic relationships that a police agency has with its environment is also a legitimate means of organization. What is needed are theoretical models that provide a middle ground between traditional and open systems thinking. Contingency theory and institutional theory can contribute to a greater understanding of how the commitment to organizational change as signified by engaging in strategic planning can be considered an innovation for police agencies. Contingency theory holds that because police agencies operate in a complex and varied task environment, there is no one best way to structure and manage organizations; thus, structure and management are contingent on the nature of the environment in which the organization is situated. When dealing with innovation and change, contingency theory helps place the organization into the context of the external environment.

**Contingency Theory**

Contingency theory states, in general, that organizations are structured in ways that best fit the surrounding social environment (Van de Ven & Drazin, 1985). Contingencies for a police agency depend on the requirements of the environment in which that agency exists. Since police organizations exist in ever-changing environments, they must position the agency to adjust to these changes (Fyfe, 1997). In the unpredictable environment in which police agencies exist, effectiveness must rely on the ability of those organizations to adapt and provide the best fit.
The contingency theory framework will allow me to study the implementation of a strategic plan by a police agency as dependent on its task environment and structural configuration. Since this context is a reciprocating relationship, consideration of specific determinants is important. For instance, the political environment in which the police agency exists is one pressure associated with the demands for change. The agency will then alter the structure of the organization to answer the demands of the tasks placed on it to dispense outputs and achieve outcomes. To do so, the agency must consider and implement the needed changes.

As suggested by Wilson (1989), innovation is not merely the adoption of a new program or technology but is a change that involves the performance of new tasks or significant alterations in the way in which existing tasks are performed. Zaltman further defined innovation as "any idea, practice, or material artifact perceived to be new by the relevant unit of adoption" (1977, p.10). Therefore, the change in philosophy or culture of a police agency can be considered as innovative in that it requires a change in the critical tasks that the agency performs. The goal of engaging in innovation by public service organizations, like the police, is intended to produce beneficial results for both the organization and to create an enhanced sense of public value (Damanpour, 1991; Moore, 1995).

**Institutional Theory**

Institutional theory, another theory that helps bridge the gap between the traditional, bureaucratic model and systems thinking, was described by Meyer and Rowan (1977) as a means for organizations to structure themselves in response to environmental pressures or demands by prescribing to "myths" founded in the ideas and beliefs of the organization. Legitimacy is of key concern to the organizations, over the desire for effectiveness (Wilson, 2004). Police agencies, as governmental organizations, operate in complex environments and have established values
and missions; they perform "value work." (Crank, 2003). Institutional theory also explains that police agencies are responsive to the needs of their external stakeholders for the valuation of their service delivery. Strategic-planning implementation is rooted in providing new ways to improve organizations over the long term and with consideration of the environment in which they exist. Institutional theory helps to explain how police organizations, with their complexity and numerous tasks, reflect the values of their environment and stakeholders. It also explains why the discretionary behavior of the internal components of the organization in carrying out tasks does not necessarily reflect the formal policy espoused by the organization (Crank, 2003).

Crank (2003) explains further the link to American police agencies and institutionalized thinking:

Their constituents, those who are sovereign or whose opinions affect operational and strategic decisions, tend to frame values in terms of public safety first, and then in terms of other values such as due process, hiring and retention, gender equity, and public relations...The bottom line for police organizations is that they must display, in their organizational behavior and design, that they care about constituents' concerns across this panoply of groups and the way in which these issues are important to them. (p. 187)

This "bottom line" is synonymous with public value that is brought about in strategic planning: it is the profit of public organizations, such as mission, mandates, and organizational values (Bryson, 2004).

As discussed earlier, Langworthy (1985a) established that effectiveness studies did not always consider the effects of the context of the organization, which may explain why a "one size fits all" approach to policing will not find success. Crank and Langworthy (1992) argued that the institutional environment of a police agency created similar pressures and demands as external factors.
The theoretical framework laid out here will assist in identifying observable variables that affect the ability of police organizations to implement an innovation, in this case, a strategic plan. Next, I undertake a discussion of the structural and environmental categories that influence the design of this study. These theoretical categories consider internal factors, such as organizational size and complexity, inclusiveness, and scope of performance tasks, in the way an agency carries out its work. Also, categories that define the external environmental pressures, such as centralization of power, minority representation, and violent crime rate, will be discussed. The fortification of these influences will then lead to the defining of the measures used in this study, as will be found in chapter 3.

**Organizational Size and Complexity**

Internally, the structure of an organization, especially a bureaucracy like the police, is integral to the understanding of the factors affecting commitment to innovation. Max Weber proposed the concept of organizational success based on “legal authority, logic, and order” (1947). The bureaucracy relies on division of labor, hierarchical control, promotion by merit, trained and educated officials, and administration by rule to accomplish its varied tasks and to move “community action” into “social action” in a rational manner. (Weber, 1947; Schermerhorn, Hunt, & Osborn, 1997). According to Weber, authority is based on the positions within the hierarchical order in the organization. As discussed previously, the American police adopted the hierarchical command and control model of the military to institute control over their members as part of the reform movement of the early 20th century. This paradigm has changed little since that time.

Development of the separate levels of an organization is based on both the control and the complexity required to deliver the service or perform the necessary task. The control in use
by a bureaucracy like an American police agency is thus defined by centralization, formalization, and administration (Maguire, 1997a; Wilson, 2003). Ironically, the same factors that encourage the creation of new ideas or innovations may inhibit the implementation of these same innovations (Damanpour, 1991; Mastrofski & Willis, 2010; Rogers, 2003). Mastrofski and Willis (2010) give guidance that researchers into police innovations should “be careful to distinguish the initial acceptance/adopter of a police reform from its actual implementation” (p. 74).

Successful implementation of an innovation is constrained by a police agency’s inability to break from the hierarchical, paramilitary structure (Darroch & Mazerolle, 2013). Police agencies show commitment to change by more easily adopting innovations that do not threaten the status quo of the hierarchical paramilitary structure. Police agencies tend to have mandates that are complex; their services are not well defined; and the means of production are not fully understood (Willis & Mastrofski, 2011). Additionally, a public service organization like a police agency may have little or no competition (Wilson, 1989). However, research has found that organizational complexity, like the size of the agency, civilianization ratio, and the number of tasks carried out, are predictors of the adoption of innovations. Thus, even with the constraints of organizational complexity, the ability of a police agency to implement a change can be influenced by the structure, because the carrying out of orders and process are inherent in the very nature of a hierarchical structure.

Consider that during the strategic-planning process, an agency will incorporate a thorough review of the stakeholders that influence the agency. As defined by Bryson (2004), “a stakeholder is any person, group, or organization that can place a claim on the organization’s resources, attention, or output or is affected by its output.” In terms of a public service
organization like the police, this essentially means everyone. The stakeholder analysis plays a part in allowing the agency to obtain contextual information that will establish those strategic issues that are critical to the change process. It also plays a role in differentiating between stakeholders en masse versus “key” stakeholders who have more power and influence over the agency.

The Zhao, Thurman and Ren survey provides the measure for agency size, and it is hypothesized that larger organizations will be more committed to instituting change because of the resources that can be brought to bear on the innovation and the fact that the larger agencies have greater external political pressure to reform. However, because large organizations have more lines of communication and more internal complexity, the effect may be the opposite. Larger organizations have more complex task environments and more hierarchical communication structures that can inhibit the implementation of innovation.

To temper this multitude of demanders, a stakeholder analysis will designate “key stakeholders,” or as defined by Katz (2001), “sovereigns.” These stakeholders become integral to determining the success of an organization due to their power and influence over it and the environment in which it operates. Examples of key stakeholders can be employees, unions, politicians, other agencies, businesses, or special interest groups (Bryson, 2004; Willis & Mastrofski, 2011). This shows that a police organization must consider the needs and wants of these important entities when developing responses to their technical goals, even though these requirements may be contradictory or, at a minimum, independent of the agency’s requirements (Willis & Mastrofski, 2011).

Size is integral to the argument for adoption since it is easily measured, but there are conflicting reasons of the factors of its utilization. A larger organization has many resources and
is more sophisticated in its administrative capacities (Wilson, 2006), leading to an increased ability to adopt and implement innovation. These same large organizations, especially in the police world, have more complex systems and more bureaucracy, which may limit innovation (Maguire, Kuhns, Uchida, & Cox, 1997; Zhao, 1996). In the realm of police innovation studies, size is integral to explaining one of the institutional constraints influencing police agencies (Mastrofski & Willis, 2010): organizational commitment to change.

Vertical differentiation, indicated by the number of levels in the hierarchical chain of command of a police agency, affects not only how a police agency carries out its tasks but also how it responds to innovation. This distance from bottom to top can vary depending upon the size of the organization, with smaller agencies being flatter and larger ones more hierarchical (Maguire, 1997; Zhao, 1994). Thus, conceptually, size and vertical differentiation are similar and interdependent. You cannot have vertical differentiation without size, and size similarly implies that there is some level of hierarchical structure to deal with tasks and control of an agency. This interdependence does not mean that the concepts are so similar as to influence the implementation of an innovation. Size is related to the number of members determined to be suitable to deal with the variation in tasks, crime rates, and innovations that affect police deployment (Sharp, 2006). Vertical differentiation, as explained below, is the mechanism to carry out the tasks by defining specific layers of supervision from the executive/decision makers to the first-line operators.

Vertical differentiation has been proposed as an answer to external influences, such as political influence, as well as a means to control internal problems, like misconduct (Maguire, 2003). While the adding of a new level in the hierarchy, in and of itself, may reflect a proposed innovation, there are complications with the hierarchical structure as well. Police agencies show
commitment to change by more easily adopting innovations that do not threaten the status quo of
the hierarchical paramilitary structure. Thus, those innovations that maintain this paradigm tend
to be implemented as planned (Braga & Weisburd, 2007; Darroch & Mazerolle, 2013). In
contrast, vertical differentiation, because of its complexity, separates the policy makers from the
policy implementers, creating a chasm between the way an innovation is developed and how it is
actually implemented or delivered (Lipsky, 1980). More levels are thought to impede innovation
by making communication difficult between those levels, impeding the flow of ideas and
creating bureaucratic obstacles to the implementation of strategic planning (Bayley, 1994;
Damanpour, 1991; Maguire, 1997; Moore et al., 1992). For instance, community police theorists
have called for a flattening of organizations to lessen the influence of the hierarchy on
organizational success (Maguire, 2003). The organizational hierarchy of American police
agency, as defined by the levels in the rank structure, should correlate negatively to the
implementation of strategic reform as planned.

The use of cosmopolitanism as a measure of diffusion of innovation pointed to the
importance of organizations seeking out new and different ways of identifying innovations for
use by increasing their contact with outside resources, such as professional groups (e.g., IACP or
PERF), academics, consultants, politicians, and business leaders (Weiss, 1997). This measure
was found to be positively correlated to the adoption of innovation by police agencies.
Cosmopolitanism was also linked to increased “peer emulation,” meaning that the agencies
engaged in other less formal communication with other police agencies, as well as the replication
of those agencies’ adoption of an innovation (Weiss, 1997). As part of strategic planning, the
stakeholder analysis is specifically geared to identifying these “key stakeholders” who play a
role in directing the energy of the organizations (Bryson, 2004). The level of inclusiveness thus
relies not only on the quantity of outside entities that the organization engages but also on the quality of these contacts.

Ideally, this would include consideration of stakeholder input not only at the critical stage of creation of the strategic plan but also throughout the process of change and beyond. This most basic of concepts would see a police organization developing information about the needs and expectations of its stakeholders during the stakeholder analysis phase or within an environmental scan of the agency’s contextual underpinnings. Consideration of the stakeholders in this process of change helps explain their needs and expectations of the change, increases support for the change, helps minimize resistance, and assists the agency in understanding the consequences associated with the change (Zaltman & Duncan, 1977).

Generally, this can be done by surveys of community members, other agencies, internal members, businesses, and the like. Other influences to consider will be in the political context in which the agency operates; legislators, mayors, city administrators, and other government leaders also play a role in determining the course of the strategic plan. While surveys and other tools can be used, many times an agency can take the glamorous and highly logical step of guessing what the stakeholders are expecting (Bryson, 2004). This educated speculation can be backed by formative reports that the agency collects on a regular basis for other reasons that will impart how the organization stands on issues that may need to be changed. For instance, a police agency may specifically ask about its service provision through a survey but could glean further information from citizen complaint or commendation files collected over a period.

These bits of data can all play a role in establishing the need for change in the agency at the infancy of the strategic-planning process, yet an agency must consider obtaining this input from the stakeholders throughout the strategic-planning process. In Bryson’s Strategy Change
Cycle, stakeholder analyses may occur in every step of the planning process. This input is
critical, since stakeholders assess an organization by the criteria they choose, which may conflict
with the agency's criteria (Bryson, 2004). Alignment with the expectations of the stakeholders,
especially key ones, is critical to the success of any change process since they provide the
support of the organization. This is why including them throughout the process is important.

Failure to consider this valuable information may translate into the agency failing in its
duties to provide public value or failure to understand the effects of its changes on its
stakeholders. The basis for inclusiveness also determines whether the agency is "walking the
talk," especially in the context of using strategic planning to move its tasks into a community-
policing realm. It will be hypothesized that higher levels of involvement and continued
involvement of stakeholders throughout the process will aid in implementing the strategic plan as
planned. This is coupled with the ability of the police agencies to consider what these
stakeholders desire to see accomplished by their respective organizations using what can be
defined as scope of performance measures.

Measuring what the police do has been problematic in the Community-Policing era
because regular patrol activities of officers may not be reflected in the goals of the organization.
The ability to enact the philosophical changes necessary is through long-term, strategic patterns
(Greene, 2000). The argument that police have the ability to impact crime resounds in the daily
effort of patrol officers in a tactical and short-term way (Crank & Langworthy, 1992), and not
necessarily when determining the effectiveness of long-term organizational change. Since
strategic planning is about organizational change, which may have a crime component within
that plan, agencies must develop alternative measures to understand the commitment to change.
The expectations of the stakeholders are generally geared toward the tried and true measures,
like crime rates, closure rates, and the like. Each innovation should have embedded in it the methodology to measure the influence of the new process or program. The normative measures of police agencies have not changed, with a heavy reliance on crime statistics and quantitative measures like response times and closure/clearance rates to determine agency effectiveness. This dichotomy exists partially, if not wholly, because police agencies rely on changes that support the status quo of incident driven and reactive strategies (Braga & Weisburd, 2007) and not on new means to measure the effectiveness of the innovations. In the 2003 wave of the Law Enforcement Management and Administrative Statistics (LEMAS), less than 25% of American police agencies conducted surveys to measure public satisfaction with the agency; only 18% surveyed the public about their perception of the police, and only 12% and 14% of police agencies surveyed their constituents to ask about personal crime experiences or reporting of crimes, respectively. Roughly 50% of the agencies that answered in the affirmative used the survey data to evaluate either the performance or effectiveness of the agency.

Significant to this research, of the 2855 police agencies that contributed to the LEMAS data, only one acknowledged conducting a survey about strategic planning. This indicates that the use of surveys and the underlying data produces measures that are outside the mainstream measures used by police agencies to understand their performance or effectiveness. This also reflects the relationship that American police agencies have with their environment and stakeholders.

*External Environmental Influences*

As police agencies are clearly in a symbiotic relationship with their external environment, consideration for certain community-level attributes must be considered. The police provide services and respond to events at the request of the populace, while the external stakeholders of
the police provide feedback in various ways. One is through political influence of elected or appointed officials. These politicians control many facets of the external environment in which the police agency exists. The political powers enact legislation, control the budget, and maintain the ability to select and remove the chief. There are other oversight mechanisms, like hearings on misconduct or through local influence on citizen complaints associated with their positions. Historically, the police have been formally influenced by the local political authority in all facets of their work product (Walker, 2004). Though reforms took hold to deliver some level of autonomy for police agencies, high-level innovations, such as community policing or strategic planning, are influenced by the local political environment (Maguire, 2003; Morabito, 2008). Discussions about the effect of centralization of political power and their influence on diffusion of innovations illustrate the importance to have an understanding of the demands of the political environment (Morabito, 2008). For instance, a radical innovation like strategic planning that requires the reallocation or engagement of agency resources and is reliant on stakeholder input to bring about cultural change could be overpowered by even the slightest resistance to the plan. Thus, those agencies that are entrenched in a political environment with a high concentration of power and decision-making capacity, such as a city manager system, are more likely to be committed to change than a political environment that relies on multiple sources of decision-making such as the mayor-council system (Morabito, 2008; Stucky, 2003).

While strategic planning relies on the ability to gather stakeholder input and create meaningful concepts with this input, this is an intrinsic process issue as opposed to an environmental issue. The ability of a police agency to commit to the change as an organization will still be influenced by the type of political environment, as strategic planning is heavily reliant on key stakeholder influence to formulate strategic goals (Bryson, 2004). While the more
contextual indicators such as the political environment play a role in the adoption of police innovation (Morabito, 2008), there is no indication that partisan elections will indicate commitment to an innovation once it is adopted, but the form of government would be more conducive to a consistent application of change for the agency.

In a similar, but contradictory, vein, community power levels, as described by community support and involvement, have played a role in the implementation of innovations such as community policing. Higher, or lower, levels of community power and the associated minority representation measure may have a profound effect on the ability of the community to propose new, or dissent against, police agency changes (Morabito, 2008). High levels of community power provide more opportunities for stakeholders to inflict damage to a proposed change, especially one as radical as strategic planning. Heterogeneity, or disorganization of the population, can be used as an indicator of community power, as the more diverse the population is, the less likely it is that opposition from the stakeholders can influence the police agencies commitment to change (Dewar & Dutton, 1986; Morabito, 2008).

The environment also influences this relationship through a vast array of task arrangements, such as police response to crime patterns and disorder complaints, along with proactive approaches to establishing cooperative approaches to solving endemic crime and disorder issues in the community. The violent crime rate of a jurisdiction has been found to be a determinant in the ability of a police agency to adopt change (Morabito, 2010; Wilson, 2004). External police stakeholders also have a variety of means to provide the feedback to an agency through formal complaints, citizen oversight boards, or outward signs of displeasure toward the police. Higher levels of violent crime contribute to higher workloads for the police, reducing
their time for innovation as well as increasing the community’s demand to revert to traditional
and tougher crime-fighting activities.

This dissertation builds upon previous research from public administration and criminal
justice by exploring the factors that promote the implementation of a strategic plan in an
American police agency. The model has been developed from the use of the previously
discussed literature and explains how the key factors of inclusiveness and scope of performance
measures are based on the theoretical premise that stakeholder involvement and the use of scope
performance measures will have a positive effect on the implementation of the strategic plan as
the police agency proposed. The hypotheses and the sub-components are further defined in
Table 2.
<table>
<thead>
<tr>
<th>Hypothesis No.</th>
<th>Hypothesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypothesis One</td>
<td>Inclusiveness will have a positive effect on implementation as planned.</td>
</tr>
<tr>
<td></td>
<td>a) The total number of stakeholders involved will increase the ability of</td>
</tr>
<tr>
<td></td>
<td>the agency to implement a strategic plan as proposed.</td>
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<tr>
<td></td>
<td>b) Internal and external stakeholders should have a like influence on</td>
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<td></td>
<td>implementation as planned.</td>
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<tr>
<td>Null Hypothesis</td>
<td>Inclusiveness will not have an effect on implementation of the strategic</td>
</tr>
<tr>
<td></td>
<td>plan as planned.</td>
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<tr>
<td>Hypothesis Two</td>
<td>The use of scope of performance measures to develop, implement, and</td>
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<tr>
<td></td>
<td>assess a strategic plan will have a positive effect on implementation of</td>
</tr>
<tr>
<td></td>
<td>the strategic plan as planned.</td>
</tr>
<tr>
<td>Null Hypothesis</td>
<td>The use of scope of performance measures to develop, implement, and</td>
</tr>
<tr>
<td></td>
<td>assess a strategic plan will not have an effect on implementation of the</td>
</tr>
<tr>
<td></td>
<td>strategic plan as planned.</td>
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<tr>
<td>Hypothesis Three</td>
<td>Institutional (structural) characteristics of the police agency will</td>
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<tr>
<td></td>
<td>influence the implementation of a strategic plan as proposed.</td>
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<tr>
<td></td>
<td>a) Agency size will play a role in the implementation of the strategic</td>
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<tr>
<td></td>
<td>plan as proposed. The larger the agency, the greater the likelihood that</td>
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<tr>
<td></td>
<td>the plan will be implemented as proposed.</td>
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<tr>
<td></td>
<td>b) The greater the separation between the top ranks and rank-and-file</td>
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<td></td>
<td>members of the police agency (vertical differentiation), the less likely</td>
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<tr>
<td></td>
<td>the plan will be implemented as proposed.</td>
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<tr>
<td></td>
<td>c) The more professional the organization, in terms of advanced education</td>
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<td></td>
<td>required for hiring, the greater the likelihood that the plan will be</td>
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<tr>
<td></td>
<td>implemented as proposed.</td>
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<tr>
<td></td>
<td>d) The more diverse the agency, indicating progressive and innovative</td>
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<td></td>
<td>actions, the more likely the agency will be able to implement a strategic</td>
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<td></td>
<td>plan as proposed.</td>
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<tr>
<td>Null Hypothesis</td>
<td>Institutional (structural) characteristics of the police agency will not</td>
</tr>
<tr>
<td></td>
<td>have an influence on the implementation of a strategic plan as proposed.</td>
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<tr>
<td>Hypothesis Four</td>
<td>External characteristics from the environment that the police agency</td>
</tr>
<tr>
<td></td>
<td>operates in will influence the implementation of the strategic plan.</td>
</tr>
<tr>
<td></td>
<td>a) The type of political structure, centralization of power, will influence</td>
</tr>
<tr>
<td></td>
<td>the implementation of the strategic plan.</td>
</tr>
</tbody>
</table>
b) Minority representation will have a positive relationship with the ability of the agency to implement the plan as proposed.

c) The violent crime rate of the area will have an inverse influence on the implementation of the plan.

Null Hypothesis | The environmental characteristics of the jurisdiction will have no influence on the implementation of the strategic plan.

Overview

As discussed above, American police agencies do not undertake new management concepts or innovations in a vacuum. Inputs come from the external environment and internal structure to influence the way the innovation is adopted, implemented, and institutionalized. This research focuses on whether police organizations implement a strategic plan as proposed, after deciding to engage in the strategic-planning process. By developing a theoretical model through systems theory, the explanation of those factors that may influence the implementation of the strategic plan can be examined. Viewing a police organization within the context of the environment in which it exists will provide a more realistic view of these factors. In the next chapter, I will provide a proposed methodological approach to use systems, contingency, and institutional theories to examine the determinants of the level of commitment to strategic planning in American police agencies.
CHAPTER 3

METHODOLOGY

When selecting a methodological approach for a study on innovation, the literature suggests that research can rely on two distinct approaches: The case study method and the comparative method (Zhao, 1994). As discussed in the previous section on styles of studies, innovativeness and process of innovation studies generally rely on the case study method. Innovativeness studies use this technique to examine the acceptance and adoption of innovations in one agency, while process studies “attempt to explain the manner in which an innovation is first discovered, learned about, first adopted, changed and then employed by an organization” (King, 2000). The case study method has merits in explaining an innovation, such as strategic planning, by using analogies and detailed descriptions, to place the organization’s experience with the innovation in a specific context. This context can then be assumed to provide a more general understanding of these experiences, specific to those entities, through observation rather than statistical patterns (Manning, 2008). The use of this process to explain what may be practical knowledge is valuable; however, there are limitations to this approach.

Case study methods are limited by both internal external validity issues. Internal validity is threatened due to researcher bias and small sample size. The small sample size affects the reliability of the findings. External validity causes an issue with generalizability. The threat of generalizability is that the findings from the case study may not apply to other settings. They fail to explain or address change across agencies and rely heavily on qualitative methods of analysis. Greene and Taylor (1988) argue that this research does not allow generalizations into the extent and depth of organizational change. Case studies rely on observations of a single event or small group of events and try to determine what caused the event(s) to occur. The problem occurs in
that a myriad of intervening factors could have influenced the event to occur yet were not accounted for in the qualitative data collected for the case study. The case study is thus trying to measure what would have occurred had the effect not taken place. The dearth of "uncontrolled sources of difference" when conducting a case study means that objectivity and external validity, specifically generalizability, will be affected. There is a school of thought that the one-shot case study method cannot even provide a baseline for future research since there are too many other variables to account for the change in behavior (Campbell & Stanley, 1963).

The lack of controls on a case study provides little scientific external validity to the results of such a research design because the goal of any research into the causality of behavior of individuals or organizations relies on comparing pre-intervention with post-intervention behavior; the lack of the intervening "test" in the case study design poses serious issues with objectivity and precision (Campbell & Stanley, 1963). These limitations can work to confound the issue of systematic organizational change. While a comprehensive case study may assist in understanding the consequences of the application of an innovation, the use of this methodology will not provide insight in the effects of the innovation for comparative purposes. This is primarily because case studies lack the ability to provide generalization to other innovations and other systems (Rogers, 2003). Clearly, the case study method would not be appropriate and would provide little information in a discussion regarding comparative research of police agencies and their use of strategic planning.

Comparative level approaches depict commonalities and differences through a comparison of organizations (Damanpour, 1991). Studies have been conducted using this technique to describe innovation diffusion across many agencies (Mullen, 1996; Weiss, 1997; Zhao, 1995). This approach is more appropriate to examine the commitment of American police
agencies to innovation, since the findings can be applied across organizations. The value of this design also allows for replication and cross validation, which help provide confidence in the findings (Campbell & Stanley, 1963). This research relies on nationwide data, with American police departments as the unit of analysis.

The research design in this study is nonexperimental ex post facto, employing survey and archival data. The use of an ex post facto design allows for the observation, though not the manipulation, of independent variables that have already occurred and typically involve natural or life experiences (Black, 1999). This study seeks to examine the determinants of the level of commitment to strategic planning in American police agencies; it is intended to identify statistical associations more so than test causal claims.

The data for this research come from four sources. The first is a survey administered by researchers studying the prevalence of strategic planning in American police agencies. The second source is data collected from the 2003 wave of the LEMAS. The third source is developed from the 2000 U.S. Census for specific demographic data from the locales analyzed. The final source of data comes from Internet searches of the sampled police agency websites to capture other relevant data.

**Zhao, Thurman, & Ren (2008) Survey Information**

A telephone survey\(^2\) of 106 American police agencies was administered by a graduate assistant who asked a series of questions relating to agency demographics, involvement in strategic planning, and the influence it had on community-policing efforts. The agencies were

\(^2\) The original study also incorporated an on-site visit to seven agencies for further review of the strategic-planning process; however, this information is not included in the data collected from the telephone survey section and was not considered in this research. The survey date was not provided in the original article; however, the survey was conducted by a researcher from the University of Nebraska at Omaha (Zhao, et. al., 2008, p.10).
selected from the population of law enforcement agencies that responded to the 2000 Uniform Crime Report (UCR). The agencies in the telephone survey were randomly selected.

Table 3 represents the random sampling demographics of the survey.

Table 3

Random Sample Size of Telephone Survey

<table>
<thead>
<tr>
<th>Type of Agency</th>
<th>Population from UCR</th>
<th>Selected for Survey</th>
<th>Has Plan</th>
<th>No Plan</th>
<th>No Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large</td>
<td>862</td>
<td>100</td>
<td>55</td>
<td>35</td>
<td>10</td>
</tr>
<tr>
<td>Medium</td>
<td>1,026</td>
<td>148</td>
<td>38</td>
<td>54</td>
<td>56</td>
</tr>
<tr>
<td>Small</td>
<td>1,751</td>
<td>41</td>
<td>12</td>
<td>25</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>3,639</td>
<td>289</td>
<td>105</td>
<td>114</td>
<td>70</td>
</tr>
</tbody>
</table>

*Note: Zhao, Thurman, & Ren (2008)*

The interviews were conducted with the person listed in the UCR by the agency as the point of contact. The point of contact was asked whether the agency had implemented a strategic plan. If the answer was no, then no further questions were asked, and the interview was terminated. With the agencies that gave an affirmative response that a strategic plan had been implemented, the interviewer requested the contact information of the person who was in charge of strategic planning. The interviewer then contacted this member of the agency to complete the interview. Once this point of contact was established, the authors acknowledged that the interviews “proceeded very smoothly” (Zhao, Thurman, & Ren, 2008). These points of contact were presumed to be the members of the agency who had the most direct knowledge of the creation, implementation, and assessment of the strategic-planning process. If the agency agreed (less than 1% refused to cooperate), then the interview proceeded as scripted in Appendix A.

The fact that the telephone interviews and data gathering consisted only of those agencies that
had engaged in the strategic-planning process or that had attempted a strategic plan will limit the scope of this research. No data is available regarding those agencies that had no formal strategic-planning process; thus, the effect of the exogenous variables on the dependent variable may be hampered.

The interviews, which lasted from 40 to 90 minutes, consisted of both closed and open-ended questions about the process of strategic planning for the agency. The benefit of a telephone interview, as opposed to mail surveys, was that comprehensive information could be collected straight from the person with direct knowledge of the agency’s strategic-planning process. The phone interview also provided a potentially higher response rate that allowed for more probing of issues and explanation of terminology than a mail survey. The interviewer, in an introductory statement, defined a strategic plan to the agency representative as:

A strategic plan is generally a written strategy for implementing change with an agency, often occurring over several years’ time and involving the entire department, and often involving department-wide change in the overall philosophy of the organization. For example, if an organization decides to formally implement community policing, the might develop a “community policing strategic plan” that specifically defines community policing, its elements, implementation issues and goals, and details specific ways to achieve those goals. Furthermore, this plan might be implemented on a department-wide basis.
(Survey instrument; Zhao, Thurman, & Ren, 2008)

LEMAS 2003 Data

The 2003 LEMAS survey, the seventh in the Bureau of Justice’s program (U.S. Department of Justice, 2003), is a wide-ranging survey of American police departments conducted by the U.S. Census Bureau for the Department of Justice every three years.3 The

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3 Because the LEMAS data are self-reported, there may be bias in the responses as agencies desire to be thought of as more innovative. The temptation by agency heads to overstate commitment to specific programs, such as community policing, may play a role in the agencies engaging in rhetorical solutions to problems requiring just the opposite approach. The level of untruthfulness in the answers given on the LEMAS surveys is impossible to
LEMAS data collects information about local (i.e., state police, county police, municipal police, and sheriff's departments) law enforcement in the United States and includes variables such as the following:

...the size of the population served by the police or sheriff's department, levels of employment and spending, various functions of the department, average salary levels for uniformed officers, policies and programs, and other matters related to management and personnel. (LEMAS Codebook, 2006, p. 3)

The LEMAS data have been used in previous research to measure various aspects of police department structure and functioning (cf. King, 1998; King, 1999; Maguire, 1997; Maguire et al., 1997; Wilson, 2003). As an example, the 2000 wave of the LEMAS data asked agencies specific information on the use of portable and vehicle mounted laptop computers and mobile data terminals (MDT), along with the ability for the members in the field to access motor vehicle records, driving records, criminal history records, crime analysis files, and/or calls for service records. In addition, King (2000) used LEMAS data to discuss the level of innovations in law enforcement agencies, such as the use of technical innovations like Automated Fingerprint Identification System (AFIS), computer-aided dispatch (CAD), and MDTs, as well as the observation by agencies engaging in programmatic innovations like specialized units, such as domestic violence or hate crime units.

The collection of LEMAS data allows researchers to draw certain conclusions about agency operations, including its engagement in specific innovations, and determine the types of activities the agency finds important by looking at what types of structures it builds around specific specialized units.

measure. However, if one assumes that all agencies will engage in some level of this type of bias, then the effect on outcomes should be similar for each agency measured (Morabito, 2008).
The LEMAS surveys ask law enforcement agencies with more than 100 full-time members specifically about their involvement, as indicated by having at least one or more full-time employees assigned to programs to deal with problems or tasks. These specializations are listed as bias/hate crimes, child abuse, community crime prevention, community policing, crime analysis, cybercrime, domestic violence, drug education in schools, drunk drivers, environmental crimes, gangs, internal affairs, juvenile crime, missing children, prosecutor relations, repeat offenders, research and planning, victim assistance, and youth outreach.

Limitations arose from the collection of data from the Zhao, Thurman, & Ren (2008) survey that contained agencies with less than 100 members: specifically, data for this study regarding agency specialization and the LEMAS data because LEMAS does not ask for this information to be provided from agencies with less than 100 members. To collect data not contained in the survey instrument concerning agency specialization, Internet searches of the agency homepages were conducted to determine whether the agencies had specializations. This collection of data suffered from two distinct limitations: one, the time lapse from the original data collection and, two, the current state of specialization of the respective agencies. By using this data-collection technique, it is possible that an agency added the specialized unit sometime between the time of the original survey data, 2003, and the present. Thus, the capture of the specialization may not be entirely representative. This threat might be mitigated because police agencies are bureaucracies and move slowly with regard to structural changes.

**Dependent Variable**

The dependent variable for this study, organizational commitment to change, is measured by the implementation of a strategic plan by police agency as planned. It is measured by the responses to the Zhao, Thurman, & Ren (2008) survey question, “Has your department’s plan
been implemented as planned?" Thus, the binary dependent variable is implemented as planned versus not implemented as planned.

The strategic-planning literature provides a clear distinction between the creation and design phase of a strategic plan and the implementation phase. The implementation of the plan clearly shows the organization's ability to leverage its commitment to the innovative practice and place it into action in accordance with the plan's intentions. The binary measure of implementation as planned (IP) will be determined by those agencies that implemented a strategic plan as planned coded as a 1, while those that did not implement the strategic plan as planned will be coded 0. This metric does not suffer from nonresponse bias because only four out of the 105 agencies (3.8% nonresponse rate) in the population measured failed to provide an answer to the question.⁴

**Independent Variables**

The independent variables affecting the organizational commitment to change are divided into the four categories as depicted in my theoretical model. These categories are as follows:

1) Inclusiveness is measured by the level of involvement an agency uses to develop, educate on, and provide feedback on the strategic plan. This is measured over three distinct time frames and by the types of stakeholders involved in the process.

   a. There is stakeholder involvement at development (SIf1), in the provision of training on the implementation of the strategic plan (SIf2), via regular meetings regarding the implementation of the plan (SIf3), and in the receipt of formal feedback in the form of the final report (SIf4).

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⁴ In the original Zhao, Thurman, & Ren (2008) survey, 70 of the 289 selected agencies failed to respond to the survey, for a response rate of 24%.
b. The variety of stakeholders that the police agency includes in its strategic-planning process is hampered by the Zhao, Thurman, & Ren (2008) survey’s varying of the grouping of stakeholders in the responses to types of stakeholders involved in each individual step of the strategic-planning process. However, two distinct stakeholders are available for comparison. The first set measures external stakeholder (ExtSH) involvement in the form of other government agency stakeholders and community stakeholders. The other (IntSH) measures internal stakeholder involvement from rank-and-file officers, supervisory members, and command members of the police agency.

2) Scope of performance measures are defined by the agency’s means to obtain feedback from stakeholders regarding the strategic-planning process. The scope of performance measures for the purpose of the study can be measured over time as well, with the measures being used at separate and distinct times in the strategic-planning process.

a. Specifically, the time factored measures indicate that an agency is willing to use a variety of methods to develop the strategic plan (AM9), provide input on whether the specific goals of implementation were being met (AM17), and assess whether the objectives of the strategic plan are being achieved (AM19). These measures included district- and jurisdiction-wide crime statistics, community data, and employee survey data.

b. Similar to the inclusiveness data, the aggregate of these types of measure is also considered for analysis (AMTotal).

3) Internal organizational factors, including the following variables:
a. Agency size (AS) is defined by the number of full-time sworn and civilian members within the police organization;

b. Vertical differentiation (VD) describes the number of distinct levels of hierarchy within a police agency;

c. Occupational differentiation (OD) is defined by the degree to which a police agency engages in using nonsworn members or civilians in the organization. Civilianization, which works on the precept of reallocating sworn members back to their core functions of patrol work while supplanting them with nonsworn members, is considered both innovative and cost effective.

d. Professionalization (P) is measured by the educational level required to be hired by the agency; and

e. Agency diversity (AD) is defined by the agency's proportion of nonwhite and female officers in the agency, creating a more heterogeneous workforce. This metric reflects both supply and demand of the diversity market, not just the willingness to hire minorities.

4) External environmental factors include the following variables:

a. Centralization of power (CP) is measured by the type of governmental structure from the jurisdiction in which the police agency operates. The city/county manager system, as explained previously, concentrates power and provides an environment more committed to change than an executive-council system that decentralizes the power, creating more potential obstacles to implementation because of the multiple sources of decision-making.
b. Minority representation (MR) is based on the proportion of minorities in the community served by the police agency; and

c. Violent crime rate (VCR) is defined by the rate of UCR violent crimes per 100,000 residents and dividing that by the mean of the rates per 100,000 residents for the same crimes for the communities served by the agencies in the sample.

Inclusiveness

Four questions from the survey measure the agency's inclusiveness. (See Appendix B). The four questions asked in the survey did not consistently capture the same stakeholders across the survey. However, when taken in aggregate, they can be used to define indicators for the measure of involvement. The responses for involvement were obtained by allowing the respondent agency to select from seven predefined categorical responses of types of stakeholders and one open-ended response. The selections are listed a-h in column 1 of Table 4 for clarification.
Table 4

**Stakeholder Involvement Response Categories**

<table>
<thead>
<tr>
<th>Question 8 Development</th>
<th>Question 14 Training on Implementation</th>
<th>Question 15 Regular Meetings on Implementation</th>
<th>Question 20 Provided a Formal Report</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Members of the city government</td>
<td>a) Sworn supervisory personnel (sgts or above)</td>
<td>a) Sworn supervisory personnel (sgts or above)</td>
<td>a) Police chief</td>
</tr>
<tr>
<td>b) Community organizations</td>
<td>b) Police officers</td>
<td>b) Police officers</td>
<td>b) Command staff</td>
</tr>
<tr>
<td>c) Police administrators</td>
<td>c) Police civilian employees</td>
<td>c) Police civilian employees</td>
<td>c) Middle level supervisors</td>
</tr>
<tr>
<td>d) Rank-and-file officers</td>
<td>d) Community organizations</td>
<td>d) Community organizations</td>
<td>d) Police officers</td>
</tr>
<tr>
<td>e) Police union representatives</td>
<td>e) Community residents</td>
<td>e) Community residents</td>
<td>e) Community organizations</td>
</tr>
<tr>
<td>f) Civilian employees</td>
<td>f) City agencies/employees</td>
<td>f) City agencies/employees</td>
<td>f) Community residents</td>
</tr>
<tr>
<td>g) University researchers</td>
<td>g) Other</td>
<td>g) Other</td>
<td>g) Other</td>
</tr>
<tr>
<td>h) Any others not listed above</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The four categorical response lists vary in both order and type of stakeholder; however, when viewed from time and the stakeholder perspective, they can provide a measure of stakeholder involvement throughout the strategic-planning process along with a type of stakeholder involvement. By using an additive scale from each question’s response, the level of stakeholder involvement in each phase of the strategic-planning process can be distinguished. Each positive response to the options of these four questions is coded 1, while a negative response, or lack of involvement, is coded 0. If a respondent answered with a “don’t know” that was also coded 0. A response level of 29 would be an indication of the highest levels of stakeholder involvement or inclusiveness.
Additionally, the types of stakeholders can be separated into two distinct categories for measurement: internal and external. This measurement is also best defined in the aggregate of each positive response to the types of stakeholders involved.

**Stakeholder involvement over time and by type**

The data provides for two measures of stakeholder involvement: one over the time frame of the strategic-planning process, and the other from the type of stakeholder involved, and whether external or internal to the agency. From the data explained above, four distinct time frame measures and two distinct stakeholder type measures have been identified. These measures are designed to determine whether the agencies maintained inclusiveness at each step of the planning process and whether they considered both internal and external influences.

Conceptually, strategic planning relies on consistent involvement from all stakeholders throughout the process to have a successful implementation of the plan. Open systems theory depends on the input from the environment of internal and external stakeholders.

Respondents provided information about the type of stakeholders that were “actively involved” in the development or creation of the strategic plan. The variety and number of stakeholders involved or asked to provide input into the strategic planning of the organization indicates the willingness of the agency to be inclusive; thus, the more stakeholders involved, the higher the first inclusiveness measure of this variable. The number of responses from the respective agencies at each time frame will be measured separately to create a variable defined as “Stakeholders Involvement Timeframes 1–4.”

The survey asked the respondents to supply information about which stakeholders were involved at four distinct times:

1) during the development of the strategic-planning process;
2) when the agency provided “in-service training” regarding the implementation of the strategic plan: the providing of training can be seen as a positive step that the agency would take to provide a more involved group of stakeholders;

3) when the agency conducted regular meetings on the implementation of the strategic plan; and

4) when the agency provided a formal progress report regarding the implementation of the strategic plan.

Stakeholder time 1 (SHT1) is the total number of stakeholders involved with the development or creation of the strategic plan. Stakeholder time 2 (SHT2) is the total number of stakeholders who are provided training on the implementation of the strategic plan. Stakeholder time 3 (SHT3) is defined by the total number of stakeholders who are involved with meetings on implementation of plan. Finally, Stakeholder time 4 (SHT4) indicates the total number of stakeholders who were provided with a formal copy of the strategic plan.

Types of involved stakeholders

The types of stakeholders are critical to the assessment of the proposition that police agencies are open systems. Having involvement by stakeholders, both internally and externally, provides insight into the influence of the environment on the strategic-planning implementation. The responses from the Zhao, Thurman, & Ren (2008) survey provide the necessary data to define two types of stakeholders who have contributed to the strategic-planning process of the responding police agencies. The types are, quite simply, internal and external stakeholders.

As with the involvement over time measures, response options to questions 8, 14, 15, and 20 in the Zhao, Thurman, & Ren (2008) survey provides these two types of stakeholders. The internal stakeholders involved in the strategic-planning process are command, supervisory, and civilian personnel, along with rank-and-file officers.
The external stakeholders who contributed to the strategic-planning process, according to the responding police agencies, are citizens, community organizations, and other government agencies. While there could be overlap in members of community organizations being employed by government agencies or citizens being included in community organizations, there is enough distinction to provide separate and distinct measures.

**Scope of performance measures (AM)**

Similar to the inclusiveness measure created from the Zhao, Thurman & Ren (2008) survey, a measure that indicates the improvements or changes associated with the strategic-planning process can be created. Each response to these questions provides the ability to define a distinct set of indicators measuring scope of performance. Table 5 provides the information regarding the questions and possible responses.
Table 5

Scope of Performance Measures Response Table

<table>
<thead>
<tr>
<th>Question 9</th>
<th>Question 17</th>
<th>Question 19</th>
</tr>
</thead>
<tbody>
<tr>
<td>Were any of the following methods used in developing the strategic plan?</td>
<td>During the implementation phase, have any of the following types of data been used to assess whether the specific goals identified in the strategic plan have been achieved (such as reducing crime, enhancing citizen satisfaction, etc.)?</td>
<td>What are the methods used to assess whether the objectives of the strategic plan are being achieved?</td>
</tr>
<tr>
<td>a) community survey to assess residents' needs</td>
<td>a) jurisdiction-wide crime data</td>
<td>a) jurisdiction-wide crime data</td>
</tr>
<tr>
<td>b) employee survey to assess the needs of officers and nonsworn agency personnel</td>
<td>b) district-specific crime data</td>
<td>b) district-specific crime data</td>
</tr>
<tr>
<td>c) looking at strategic planning information from other agencies</td>
<td>c) community survey</td>
<td>c) use of a statistical package to analyze the crime data</td>
</tr>
<tr>
<td>d) formally education employees about what a strategic plan is</td>
<td>d) employee survey</td>
<td>d) use of a case study to document the progress of a specific unit</td>
</tr>
<tr>
<td>e) formally educating community representative as to what a strategic plan is</td>
<td>e) other</td>
<td>e) citizen survey</td>
</tr>
<tr>
<td>f) creation of a task force to coordinate community organizations and police officers so together they can give input about the strategic plan</td>
<td></td>
<td>f) employee survey</td>
</tr>
<tr>
<td>g) other</td>
<td></td>
<td>g) other</td>
</tr>
</tbody>
</table>

Question 9 asks the respondents about the methods used to develop a strategic plan from a categorical list. A positive response to a method used by an agency is coded as a 1, while a negative response, signifying the agency did not use that method in developing the strategic plan is coded as a 0. Thus, responses to question 9 provide the ability to score the individual agencies on a scale of 0 to 7, with 7 being the highest possible score in the development stage and labeled as AM9.
In line with the strategic-planning process, the Zhao, Thurman, & Ren (2008) survey asked about the use of other measures to identify whether the goals of the strategic plan had been achieved during the implementation phase. The responses to question 17 provided a categorical list of five choices, which include two responses about jurisdiction-wide and district-specific crime data. These responses are appropriate to identify whether the specific goals are being achieved and fall into a category of scope of performance measures for a police agency. Police agencies rely on crime data in almost every facet of their decision-making. The scale will range from 0 to 5, with 5 indicating that the agency is most receptive to using scope of performance measures. This variable will be labeled as AM17.

Finally, in question 19, the Zhao, Thurman, & Ren (2008) survey asked the individual agencies in the sample to provide information about what mechanism was used to assess whether the objectives of the strategic plan were being met. This predefined categorical response list contains the possibility of seven responses. Therefore, the scale of the measure will be from 0 to 7, with 7 indicating the agency was most apt to use scope of performance measures to understand the influence of the innovation, and this variable will be labeled as AM19.

Like the inclusiveness variable, these questions provide an opportunity to develop an aggregate variable, defined as AMTotal. This measure will incorporate all possible responses to the types of scope of performance measures that the agency will use to develop, measure, and assess the strategic plan. The ability to measure the agency’s use of scope of performance measures as the strategic-planning process is occurring or to obtain feedback as it is being implemented is significant in understanding how an agency maintains stakeholder involvement. It is linear in that the measure can be used to identify whether the agencies are using the same considerations throughout the process of strategic planning. For instance, an agency that
conducts a citizen survey to develop a strategic plan yet does not conduct one to assess whether the objectives of the plan are being met seems to be engaging in more rhetorical and inconsistent behavior. This has been identified and discussed in the literature review section of this research as an issue with American police agencies and their commitment to innovation. The lack of consistency throughout the process is akin to what I would term as the “911 phenomenon.”

American police agencies receive a call or complaint, respond to the complaint, receive information from the complainant/victim, and resolve the issue with very little feedback or input other than the initial contact. On the other hand, strategic planning relies on the cyclical approach to stakeholder feedback and consistent measures to determine success at each step of the process.

The previous constructs are new and rely heavily on the responses provided by the respondents in the Zhao, Thurman, & Ren survey. The next set of independent variables deal with both internal organizational factors and external environmental factors that have been established in the literature as measures consistent with the goals of this research. First, I will define the internal organizational factors of the agencies in the sample, followed by the external environmental factors that the agency exists within.

**Internal organizational factors**

Innovation literature has established that the larger the organization, the greater the ability to mobilize more resources toward innovation and have the capability to institute the changes of a radical innovation such as strategic planning (Morabito, 2010; Rogers, 2003; Wilson, 2004). The Zhao, Thurman, & Ren (2008) survey provides the measure for agency size. This measure is defined as the number of officers and civilian members working for the agency.
full time and will be considered in both its raw form and in logged format to determine whether there is skewness.

**Vertical differentiation (VD)**

Police organizations are structured in a quasi-military fashion with distinct levels or ranks between the basic patrol officer or deputy and the chief of police, commissioner, or sheriff. This distance from bottom to top can vary depending on the size of the organization, with smaller agencies being flatter and larger ones more hierarchical (Maguire, 1997; Zhao, 1994). More levels are thought to impede innovation by making communication difficult between those levels, impeding the flow of ideas and creating bureaucratic obstacles to the implementation of strategic planning (Bayley, 1994; Damanpour, 1991; Moore, 1992).

Several different metrics are available to calculate the vertical differentiation of an organization accurately, such as the number of members distributed throughout the various rank levels or the number of rank levels (Maguire, 1997). Another means is by the standardized pay differential (Langworthy, 1985a; Maguire, 1997; Wilson, 2003). It has been cited that the “number of ranks varied from four to 12 depending on the organization” and the constructs of pay differential and number of ranks were synonymous (Wilson, 2003, p. 289). Therefore, this research will measure the variable of vertical differentiation by the difference of the minimum salary of the executive (e.g., chief or sheriff) and the minimum entry level-salary divided by the minimum entry-level salary, as captured by the LEMAS 2003 data.

**Professionalization (P1)**

Professionalization of a police organization can be defined by the educational level required to be hired by the agency is indicating the agency’s commitment to hire personnel with advanced education, as noted earlier.
The LEMAS survey and web site searches will be the source of the data for the professionalization measure. In reverse order, the level of education required of a potential hire indicates the degree to which an organization strives to be seen as legitimate in the hiring of quality employees (Wilson, 2003). Agencies typically require varying levels of formal education of their recruits to be hired in the index of 0 = no formal educational requirement, 1 = high school degree or equivalency, 2 = associate’s degree/minimum 60 credits, or 3 = four-year degree required. The higher the ranking, the more professional an organization can be considered. This measure is defined as ($P_1$).

**Agency diversity (AD)**

While police agencies have been resistant to change historically, the level of diversity could signal a shift in thinking by the organization that signifies innovative thinking (Zhao, 1994). The higher the proportion of the female and nonwhite members of the police organization, the more progressive the organization can be considered. More diverse thinking and acting by the agency should have a positive correlation to change. Though an argument can be made that mandated levels of diverse members through affirmative action will influence this measure, there is no solid data from the surveys that would indicate any required levels of minority or female members. This variable will be measured by the proportion of white members to nonwhite members of each agency as found in the LEMAS 2003 data.

**Environmental factors**

The external environment of an American police agency influences the decisions and means by which it carries out its tasks. As explained in the literature review section, the relationship between the external environmental factors is also significant in the strategic planning for an agency. In fact, strategic planning has a major component that derives many of
its facets from an environmental scan that includes both internal and external factors. A police agency engaging in strategic planning would have to consider the following factors in developing and implementing their strategic plans: the structure of the government, community heterogeneity, and the violent crime rate. These will all be used as variables that have an influence on the strategic-planning implementation process of police departments.

Centralization of power (CP)

Those political structures with multiples levels of elected officials such as mayor, council or county commissioners, or county executive can be problematic to the implementation of innovation because their power and authority is dispersed. The concentration of this power in a county commissioner or city manager will enable innovation (Morabito, 2010; Stucky, 2003). The 2000 USA.gov/2000 Governments Integrated Directory (GID) will provide the data illustrating whether the agency operates within a mayor/council or county council/county executive, which will be scored with a 0, while the other political environments such as the county commissioner or city manager arrangement will be scored with a 1. This binary measure will allow for comparison of agencies whether they fall into a municipal political structure or county political arrangement. Only one state agency did not fall into one of the two listed categories; it was removed from the sample.

Minority representation (MR)

Heterogeneity of a population within a specific jurisdiction plays a role in the ability of a police agency to institute change in an interestingly positive relationship. While diversity may signal change within the organization, the heterogeneity of a community is not an external obstacle to innovation because the differing viewpoints that inhibit centralized power means that the adoption of an innovation will not face concentrated opposition from the outside (Dewar &
Dutton, 1986; Morabito, 2010). Thus, the higher the measure of minority representation, the more able the agency is to being able to implement strategic planning. Census data provides the population distribution of the specific areas covered by the police agencies in the sample. The variable is operationalized by the total population minus the white population, divided by the total population from the 2000 U.S. Census. A racially heterogeneous community thus would be scored as 0.5, indicating an even distribution of white/nonwhite residents (Smith, 1986). The closer to 0 indicates a homogenous white population, while a variable closer to 1 would indicate a racially nonwhite population.

Violent crime rate (VCR)

The Violent crime rate of a jurisdiction has been found to be a determinant in the ability of a police agency to adopt change (Morabito, 2010; Wilson, 1968). Higher levels of violent crime contribute to higher workloads for the police, reducing their time for innovation as well as increasing the community’s demand to revert to traditional and tougher crime-fighting activities. Thus, it can be concluded that there will be an inverse relationship between violent crime rates and the implementation of a strategic plan. In the context of this study, the violent crime variable will be informed by the 2003 UCR data and will be developed by establishing the violent crime rate per 100,000 residents.

Summary

Each variable described above is listed in Table 6 below. The table provides the name of the variable, its corresponding description, and source data.
<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
<th>Source/Corresponding Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dependent variable</td>
<td>Binary variable; 1=Yes, 0=No</td>
<td>Zhao, Thurman, &amp; Ren (2008) Survey data</td>
</tr>
<tr>
<td>Implementation as planned (IP)</td>
<td></td>
<td>Zhao, Thurman, &amp; Ren (2008) Survey data</td>
</tr>
<tr>
<td>SHt1</td>
<td>Stakeholder involvement at development of plan→Sum of positive responses Q8</td>
<td>Zhao, Thurman &amp; Ren (2008) Survey data</td>
</tr>
<tr>
<td>SHt2</td>
<td>Stakeholder involvement w/training in implementation of plan→Sum of positive responses Q14</td>
<td>Zhao, Thurman &amp; Ren (2008) Survey data</td>
</tr>
<tr>
<td>SHt3</td>
<td>Stakeholder involvement with meetings on implementation of plan→Sum of positive responses Q15</td>
<td>Zhao, Thurman, &amp; Ren (2008) Survey data</td>
</tr>
<tr>
<td>SHt4</td>
<td>Stakeholders receiving formal report of plan→Sum of positive responses Q20</td>
<td>Zhao, Thurman &amp; Ren (2008) Survey data</td>
</tr>
<tr>
<td>Inclusiv</td>
<td>Additive measure of Q8, 14, 15, and 20</td>
<td>Zhao, Thurman &amp; Ren (2008) Survey data</td>
</tr>
<tr>
<td>Scope of performance measures (AM)</td>
<td></td>
<td>Zhao, Thurman &amp; Ren (2008) Survey data</td>
</tr>
<tr>
<td>AM9</td>
<td>Sum of positive responses to Q9-method(s) used by an agency to develop a strategic plan</td>
<td>Zhao, Thurman &amp; Ren (2008) Survey data</td>
</tr>
<tr>
<td>AM17</td>
<td>Sum of positive responses to Q17-methods used to educate stakeholders on implementation of a strategic plan</td>
<td>Zhao, Thurman &amp; Ren (2008) Survey data</td>
</tr>
<tr>
<td>AM19</td>
<td>Sum of positive responses to Q19-method(s) used by an agency to assess whether the objectives of the strategic plan were being met</td>
<td>Zhao, Thurman &amp; Ren (2008) Survey data</td>
</tr>
<tr>
<td>AMTotal</td>
<td>Additive measure of Q9, Q17, and Q 19</td>
<td>Zhao, Thurman &amp; Ren (2008) Survey data</td>
</tr>
<tr>
<td>Agency size (AS) C</td>
<td>Number of sworn and civilian full-time employees</td>
<td>Zhao, Thurman &amp; Ren (2008) Survey data</td>
</tr>
</tbody>
</table>
| Vertical differentiation (VD) C | Minimum CEO salary—Minimum entry salary/minimum entry salary | LEMAS 2003 Survey Data  
Q20 (V137) - Q20 (V141)/Q20(V141)  
| Professionalization (P) | P→ Scale of 0 to 3 indicating level of education required for hiring:  
0 = no formal educational requirement,  
1 = high school degree or equivalency,  
2 = associate's degree/min 60 credits,  
3 = four-year degree required | LEMAS 2003 Survey Data  
Q10 (V69)  
Revised:  
| Agency diversity (AD) I | Proportion of white members to nonwhite members of each agency | LEMAS 2003 Survey Data  
Q17 a+b/  
Q17c+d+e+f+g+h+i+j+k+l+m+n  
(variables 111–124)  
| Centralization of power (CP) C | 0 = executive/legislative structure  
| Minority representation (MR) C | Proportion of minorities in a given population | 2000 U.S. Census data  
| Violent crime rate (VCR) C | UCR violent crime rate per 100,000 residents (additive scale) | 2003 UCR data  

**Limitations**

As with any social science research, there are limitations. This dissertation is no different.

This research relies on a cross-sectional, nonexperimental design. The limitation behind the design is due to the limitation of the ex post facto methodology. The research method does not allow the researcher to manipulate the intervention; therefore, the temporal order of causality
cannot be satisfied. Additionally, spuriousness of the causality may present an issue since there is no randomness to the assignment of the intervention or the control groups. This is the only available design because of the data limitations.

In this research, I was not able to control for the engagement in or implementation of the innovation of strategic planning by the police agencies. Nor could I control for the environment in which it was attempted or which agencies chose to implement the strategic plan. While these limitations are important to keep in mind, post hoc research may have the benefit of helping overcome the pro-innovation bias mentioned earlier by providing a comparison of agencies that have implemented the innovation and those that have not during the same period (Rogers, 2003). Unfortunately, this information is not available.

Limitations from the data sources include the lack of randomness in the selection of agencies in the Zhao, Thurman, & Ren (2008) study. This also creates the inability to establish a causal relationship. Additionally, the LEMAS data has missing data from agencies with fewer than 100 members. Because of this, there may be sampling error. LEMAS also conceded, "The survey data are also subject to response and processing errors (LEMAS, 2003)." Further limitation stems from the inability to conduct experimental treatment as this is a post hoc review. This limitation challenges the internal validity (Campbell & Stanley, 1963). An additional limitation of the data and treatment is that of generalizability. As with most studies, the ability to infer that the results of the analysis found herein will apply to another sample or study not using the exact data and analysis is difficult (Campbell & Stanley, 1963).

Process for Analysis

The goal of this research was to understand what factors influence or affect a police agency's ability to implement an innovation. In this study, measures of an agency's ability to be
inclusive and its ability to use scope of performance measures were created to determine the
effect on implementation. Other considerations from both internal and external environmental
factors were considered.

The research employed a linear model of direct effects. This allowed me to test the direct
influence on the dependent variable's goodness of fit of a causal model (Morabito, 2005). Using
the Statistical Package for Social Sciences (SPSS) for the analysis provided a sound statistical
course of action by understanding that the initial analysis consists of bivariate correlations. To
ensure robustness of my findings, multivariate logit analyses were conducted using Mplus to
view the model in a multivariate manner.
CHAPTER 4

FINDINGS

This chapter presents the results of data analyses to test the hypotheses that inclusiveness and the use of scope of performance measures by police agencies will influence the implementation of an innovation. In this study, the implementation of a strategic plan is the innovation under investigation. Table 7 illustrates and defines the variables that were analyzed with SPSS and Mplus. Descriptive statistics for each of the variables will be presented next. These descriptive statistics include minimum and maximum values, means, standard deviations, and skewness. Following this will be the presentation of the bivariate correlations among variables to lay the foundation for the multivariate analyses that follow. The chapter will conclude with the results of the multivariate analyses. Descriptive statistics and bivariate analyses were conducted using SPSS, and multivariate analyses were conducted using Mplus.
### Table 7

**Variable Definitions**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Variable Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>IP</td>
<td>Implementation as planned (D/V)</td>
</tr>
<tr>
<td>Inclusiv</td>
<td>Total number of types of stakeholders involved in strategic-planning process</td>
</tr>
<tr>
<td>SHt1</td>
<td>Types of stakeholders included in creation of strategic plan</td>
</tr>
<tr>
<td>SHt2</td>
<td>Types of stakeholders included in training on implementation of strategic plan</td>
</tr>
<tr>
<td>SHt3</td>
<td>Types of stakeholders included in meetings on implementation of strategic plan</td>
</tr>
<tr>
<td>SHt4</td>
<td>Types of stakeholders provided with a formal report of strategic plan</td>
</tr>
<tr>
<td>IntSH</td>
<td>Total responses of types of stakeholders involved with strategic-planning process from within police agency</td>
</tr>
<tr>
<td>ExtSH</td>
<td>Total responses of types of stakeholders involved with strategic-planning process external to the police agency</td>
</tr>
<tr>
<td>AM9</td>
<td>Scope of performance measures used by agency to develop strategic plan</td>
</tr>
<tr>
<td>AM17</td>
<td>Scope of performance measures used</td>
</tr>
<tr>
<td>AM19</td>
<td>Scope of performance measures used to assess whether objectives of plan are being met</td>
</tr>
<tr>
<td>AMTotal</td>
<td>Total number of types of measures used to develop or assess strategic plan</td>
</tr>
<tr>
<td>AS</td>
<td>Agency size</td>
</tr>
<tr>
<td>VD</td>
<td>Vertical differentiation of police agency</td>
</tr>
<tr>
<td>P1</td>
<td>Professionalism</td>
</tr>
<tr>
<td>AD</td>
<td>Agency diversity</td>
</tr>
<tr>
<td>CP</td>
<td>Centralization of power</td>
</tr>
<tr>
<td>MR</td>
<td>Minority representation</td>
</tr>
<tr>
<td>VCR2</td>
<td>Violent crime rate 2003</td>
</tr>
</tbody>
</table>
Descriptive Statistics

This section presents the results of the univariate analysis or descriptive statistics for all of the variables used in the bivariate and multivariate analyses that follow. Descriptive statistics are presented for all independent variables and the dependent variable, as illustrated in Table 8.

All of the variables, with the exception of agency size and agency diversity, are relatively symmetrical and do not suffer from skewness. The effect of the skewness on the analysis should not affect the results of my analyses since I am using nonparametric correlation and multivariate logit analysis to determine relationships. For the agency size distribution variable, the sample contains agencies with a range from 25 to 2,617 members and a mean of over 190 members. The skewness may be explained by the fact that there are more larger agencies (>100 members) than smaller agencies.\(^5\) Agency diversity reflects the number of white officers compared to minority officers; the range presented agencies with no minority representation to 34% minority representation. The skewness is a result of more agencies with higher nonminority representation found, and the skewness may be explained by the lack of minorities in the agencies captured in the sample, though this is not abnormal for U.S police agencies.\(^6\)

\(^5\) This was not entirely indicative of police agencies across the United States, where the average size of the 15,717 local and sheriff’s departments totaled 468,988 full-time sworn members for a median of 29 full-time members (BJS, 2006, p. 7).

\(^6\) In 2003, U.S. police agencies reported that minorities composed 23.6% of agency staffing.
<table>
<thead>
<tr>
<th>Variable</th>
<th>Label</th>
<th>N</th>
<th>Min.</th>
<th>Max.</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Skewness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implementation as planned (D/V)</td>
<td>IP</td>
<td>99</td>
<td>0</td>
<td>1</td>
<td>0.82</td>
<td>0.39</td>
<td>-1.68</td>
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<tr>
<td>Total number of types of stakeholders involved in strategic-planning process</td>
<td>Inclusiv</td>
<td>101</td>
<td>2</td>
<td>27</td>
<td>13.55</td>
<td>5.87</td>
<td>0.14</td>
</tr>
<tr>
<td>Types of stakeholders included in creation of strategic plan</td>
<td>SHt1</td>
<td>103</td>
<td>1</td>
<td>8</td>
<td>4.69</td>
<td>1.52</td>
<td>-0.09</td>
</tr>
<tr>
<td>Types of stakeholders included in training on implementation of strategic plan</td>
<td>SHt2</td>
<td>101</td>
<td>0</td>
<td>7</td>
<td>2.81</td>
<td>2.33</td>
<td>0.09</td>
</tr>
<tr>
<td>Types of stakeholders included in meetings on implementation of strategic plan</td>
<td>SHt3</td>
<td>103</td>
<td>0</td>
<td>7</td>
<td>2.35</td>
<td>2.11</td>
<td>0.36</td>
</tr>
<tr>
<td>Types of stakeholders provided with a formal report of strategic plan</td>
<td>SHt4</td>
<td>103</td>
<td>0</td>
<td>7</td>
<td>3.63</td>
<td>2.34</td>
<td>-0.01</td>
</tr>
<tr>
<td>Total responses of types of stakeholders involved with strategic-planning process from within police agency</td>
<td>IntSH</td>
<td>103</td>
<td>1</td>
<td>14</td>
<td>8.92</td>
<td>3.40</td>
<td>-0.18</td>
</tr>
<tr>
<td>Total responses of types of stakeholders involved with strategic-planning process external to the police agency</td>
<td>ExtSH</td>
<td>103</td>
<td>0</td>
<td>12</td>
<td>4.12</td>
<td>3.07</td>
<td>0.66</td>
</tr>
<tr>
<td>Scope of performance measures used by agency to develop strategic plan</td>
<td>AM9</td>
<td>103</td>
<td>0</td>
<td>7</td>
<td>3.59</td>
<td>1.54</td>
<td>0.09</td>
</tr>
<tr>
<td>Scope of performance measures used</td>
<td>AM17</td>
<td>91</td>
<td>0</td>
<td>5</td>
<td>2.77</td>
<td>1.33</td>
<td>-0.38</td>
</tr>
<tr>
<td>Variable</td>
<td>Label</td>
<td>N</td>
<td>Min.</td>
<td>Max.</td>
<td>Mean</td>
<td>Std. Deviation</td>
<td>Skewness</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>-------</td>
<td>----</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>----------------</td>
<td>----------</td>
</tr>
<tr>
<td>Scope of performance measures used to assess whether objectives of plan are being met</td>
<td>AM19</td>
<td>101</td>
<td>0</td>
<td>7</td>
<td>3.34</td>
<td>1.76</td>
<td>-0.19</td>
</tr>
<tr>
<td>Total number of types of measures used to develop or assess strategic plan</td>
<td>AMTotal</td>
<td>89</td>
<td>1</td>
<td>17</td>
<td>9.88</td>
<td>3.65</td>
<td>-0.25</td>
</tr>
<tr>
<td>Agency size</td>
<td>AS</td>
<td>103</td>
<td>25</td>
<td>2617</td>
<td>194.88</td>
<td>347.67</td>
<td>5.31</td>
</tr>
<tr>
<td>Vertical differentiation of police agency</td>
<td>VD</td>
<td>64</td>
<td>0.24</td>
<td>3.92</td>
<td>1.50</td>
<td>0.80</td>
<td>0.93</td>
</tr>
<tr>
<td>Professionalism</td>
<td>P1</td>
<td>64</td>
<td>0</td>
<td>3</td>
<td>1.31</td>
<td>0.56</td>
<td>1.08</td>
</tr>
<tr>
<td>Agency diversity</td>
<td>AD</td>
<td>64</td>
<td>0.34</td>
<td>100</td>
<td>14.32</td>
<td>18.27</td>
<td>2.83</td>
</tr>
<tr>
<td>Centralization of power</td>
<td>CP</td>
<td>103</td>
<td>0</td>
<td>1</td>
<td>0.63</td>
<td>0.49</td>
<td>-0.55</td>
</tr>
<tr>
<td>Minority representation</td>
<td>MR</td>
<td>103</td>
<td>0.03</td>
<td>0.91</td>
<td>0.25</td>
<td>0.17</td>
<td>1.10</td>
</tr>
<tr>
<td>Violent crime rate 2003</td>
<td>VCR2</td>
<td>72</td>
<td>0</td>
<td>4.63</td>
<td>0.99</td>
<td>0.86</td>
<td>2.10</td>
</tr>
</tbody>
</table>
Bivariate Correlations

Correlation coefficients can be used to show simple relationships between variables. This is key for two reasons. First, the relationships between the independent variables provides a preliminary assessment of collinearity and helps to identify discriminant validity issues, where two variables are so highly correlated that they may be measuring the same thing. Second, this initial assessment provides a rudimentary analysis of the relationship between the dependent variable and each independent variable. This will provide a preliminary assessment of the hypotheses in my theoretical model. It is preliminary because weak simple bivariate correlations can mask stronger relationships that emerge using multivariate analysis.

I rely on two types of nonparametric bivariate correlations: Kendall’s tau-b and Spearman’s rho. These correlations are more appropriate than the more commonly used Pearson’s $r$ because most of the variables in my model are either ordinal or non-normally distributed and therefore violate the assumptions of using a linear correlation coefficient such as Pearson’s $r$. The use of Spearman’s rho is appropriate because it allows me to use ordinal data and see correlations between variables that have different levels of measurement. The use of Kendall’s tau allows me to measure variables with larger numbers (for instance, agency size) without categorizing the data. Blalock (1979, p. 444) suggests that given the prevalence and ease of using computerized data analysis, such as with the use of SPSS, considering correlations from both analyses would “usually” not make any difference to the conclusions. These were run with no significant differences found in the results.
Table 9 contains two different nonparametric correlation coefficients summarizing the bivariate relationships between each independent variable and the dependent variable (IP).

Bolded coefficients are statistically significant at the .05 level or better.\textsuperscript{7}

\textsuperscript{7} The use of a two-tailed test was completed even though I predicted direction in my variables. Using a more conservative approach was determined to be more suitable.
Table 9

Nonparametric Correlations

<table>
<thead>
<tr>
<th>Correlations</th>
<th>Inclusiv</th>
<th>SHt1</th>
<th>SHt2</th>
<th>SHt3</th>
<th>SHt4</th>
<th>IntSH</th>
<th>ExtSH</th>
<th>AM9</th>
<th>AM17</th>
<th>AM19</th>
<th>AM Total</th>
<th>AS</th>
<th>VD</th>
<th>P1</th>
<th>AD</th>
<th>CP</th>
<th>MR</th>
<th>VCR2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kendall's tau_b</td>
<td><strong>.226</strong></td>
<td>.101</td>
<td>.127</td>
<td><strong>.221</strong></td>
<td><strong>.209</strong></td>
<td>.287</td>
<td>.071</td>
<td>.117</td>
<td>.117</td>
<td>.053</td>
<td>.125</td>
<td>.085</td>
<td>.039</td>
<td>.005</td>
<td>-.048</td>
<td>.059</td>
<td>-.004</td>
<td>-.032</td>
</tr>
<tr>
<td>IP Correlation Coefficient</td>
<td>Sig. (two-tailed)</td>
<td>.008</td>
<td>.261</td>
<td>.159</td>
<td>.013</td>
<td>.018</td>
<td>.001</td>
<td>.413</td>
<td>.190</td>
<td>.224</td>
<td>.553</td>
<td>.176</td>
<td>.305</td>
<td>.711</td>
<td>.971</td>
<td>.654</td>
<td>.561</td>
<td>.960</td>
</tr>
<tr>
<td>N</td>
<td>97</td>
<td>99</td>
<td>97</td>
<td>99</td>
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<td>99</td>
<td>88</td>
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<td>61</td>
<td>99</td>
<td>99</td>
<td>69</td>
<td></td>
</tr>
<tr>
<td>Spearman's rho</td>
<td><strong>.270</strong></td>
<td>.113</td>
<td>.144</td>
<td><strong>.251</strong></td>
<td><strong>.240</strong></td>
<td>.337</td>
<td>.083</td>
<td>.132</td>
<td>.130</td>
<td>.061</td>
<td>.147</td>
<td>.104</td>
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<td>.005</td>
<td>-.058</td>
<td>.059</td>
<td>-.005</td>
<td>-.039</td>
</tr>
<tr>
<td>IP Correlation Coefficient</td>
<td>Sig. (two-tailed)</td>
<td>.008</td>
<td>.264</td>
<td>.160</td>
<td>.012</td>
<td>.017</td>
<td>.001</td>
<td>.416</td>
<td>.192</td>
<td>.226</td>
<td>.556</td>
<td>.177</td>
<td>.308</td>
<td>.715</td>
<td>.971</td>
<td>.658</td>
<td>.564</td>
<td>.960</td>
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<td>61</td>
<td>61</td>
<td>99</td>
<td>99</td>
<td>69</td>
<td></td>
</tr>
</tbody>
</table>

*Note: Correlation is significant at the 0.05 level or better (two-tailed).*

90
Table 9 reveals a significant positive correlation between the dependent variable (IP) and the combined measure of inclusiveness, suggesting that implementation is enhanced by inclusiveness. Based on this bivariate evidence alone, the null hypothesis that there exists no relationship between inclusiveness and implementation as planned can be rejected.

The combined measure of inclusiveness can also be broken down into the different stages of the strategic-planning process. Since stakeholders are involved in each step of the strategic-planning process, their influence at each level may indicate of when best to involve them for affecting the implementation of the plan. The analysis looked at all four stages of stakeholder involvement: 1) the development of the strategic plan, 2) training on implementation of the strategic plan, 3) regular meetings on implementation of the strategic plan, and 4) the provision of a formal report of the strategic plan to stakeholders.

Table 9 reveals that when these individual measures are examined, significant correlations emerge between the dependent variable (IP) and the number of stakeholders involved with meetings on the implementation of the strategic plan (SHT3) and the number of stakeholders that are provided a formal report of the strategic plan (SHT4). These findings show that there is a relationship with the involvement of stakeholders at the later stages of the strategic-planning process and implementation. Correlations between implementation and measures of the first two stages of inclusiveness were not significant. These bivariate results suggest that it is important to include stakeholders in the later stages of the implementation process.

---

8 A factor analysis was run and all seven variables were loaded on one factor (sht1) and held together. This variable explained 64.4% of the variance. An alpha was run and the result was 0.885.
The analyses also present an opportunity to understand which type of stakeholders, internal or external, influence the implementation of the strategic plan. In keeping with the open systems theory concept, both types should have an influence on implementation of the strategic plan. As indicated in Table 9, involving internal stakeholders does influence the implementation of the strategic plan, while the nonsignificant correlations for external stakeholders suggest that their importance is limited. While this finding is contrary to the open systems theory and the hypothesis that external stakeholders influence a police agency's implementation of a strategic plan, this finding may be attributable to the parochialism of police agencies, as will be discussed in chapter 5.

One item of concern exists with the variables and that is the possibility of multicollinearity between the variables measuring stakeholders and scope of performance measures, as well as those variables measuring social disorganization and violent crime rate. Because the stakeholder data measured inclusively and individually is created from the same series of responses from the Zhao, Thurman, & Ren (2008) survey, there is a possibility that the variables will measure the same thing. The same can be said for the scope of performance variables, in aggregate and individual measures. They are derived from the same survey data responses. Violent crime rate and social disorganization have the potential to measure the same thing. A close eye will be kept to ensure that they are addressed as the analyses continue.

To understand whether the effect of the individual measures of inclusiveness or stakeholder involvement over time (SHt1-4) and the individual measures of scope of performance will remain significant, I estimate bivariate correlations between those measures. Table 10 reflects the analysis if the aggregate measures are substituted for the individual measures.
Another analysis was conducted using the aggregate measures of inclusiveness and scope of performance measures to determine whether by looking at them separately their influence would remain significant.
Table 10

**Nonparametric Correlations with Individual Inclusiveness and Scope of Performance Measures**

<table>
<thead>
<tr>
<th>Individual Bivariate Correlations</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Kendall's tau b</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IP Correlation Coefficient</td>
<td>1</td>
<td>0.101</td>
<td>0.127</td>
<td><strong>.221</strong>*</td>
<td><strong>.209</strong>*</td>
<td><strong>.287</strong>*</td>
<td>0.071</td>
<td>0.117</td>
<td>0.117</td>
<td>0.053</td>
<td>0.085</td>
<td>0.039</td>
<td>0.005</td>
<td>-0.048</td>
</tr>
<tr>
<td>Sig. (two-tailed)</td>
<td>.</td>
<td>0.261</td>
<td>0.159</td>
<td>0.013</td>
<td>0.018</td>
<td>0.001</td>
<td>0.413</td>
<td>0.19</td>
<td>0.224</td>
<td>0.553</td>
<td>0.305</td>
<td>0.711</td>
<td>0.971</td>
<td>0.654</td>
</tr>
</tbody>
</table>

| **Spearman's rho**              |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| IP Correlation Coefficient       | 1 | 0.113 | 0.144 | **.251*** | **.240*** | **.337*** | 0.083 | 0.132 | 0.13 | 0.061 | 0.104 | 0.048 | 0.005 | -0.058 | 0.059 | -0.005 | -0.03 |
| Sig. (two-tailed)                | .  | 0.264 | 0.16 | 0.012 | 0.017 | 0.001 | 0.416 | 0.192 | 0.226 | 0.556 | 0.308 | 0.715 | 0.971 | 0.658 | 0.564 | 0.96 | 0.7 |

**Notes:**

* Correlation is significant at the 0.05 level (two-tailed).
** Correlation is significant at the 0.01 level (two-tailed).
*** Correlation is significant at the 0.001 level (two-tailed).
Table 11

Nonparametric Correlations with Aggregate Inclusiveness and Scope of Performance Measures

<table>
<thead>
<tr>
<th></th>
<th>IP</th>
<th>Inclusiv</th>
<th>AMTotal</th>
<th>AS</th>
<th>VD</th>
<th>P1</th>
<th>AD</th>
<th>CP</th>
<th>MR</th>
<th>VCR2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Kendall's tau_b</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>IP</td>
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<td>0.125</td>
<td>0.085</td>
<td>0.039</td>
<td>0.005</td>
<td>-0.048</td>
<td>0.059</td>
<td>-0.004</td>
<td>-0.032</td>
<td></td>
</tr>
<tr>
<td>Sig. (two-tailed)</td>
<td></td>
<td>0.008</td>
<td>0.176</td>
<td>0.305</td>
<td>0.711</td>
<td>0.971</td>
<td>0.654</td>
<td>0.561</td>
<td>0.96</td>
<td>0.747</td>
</tr>
<tr>
<td>N</td>
<td>99</td>
<td>97</td>
<td>86</td>
<td>99</td>
<td>61</td>
<td>61</td>
<td>61</td>
<td>99</td>
<td>99</td>
<td>69</td>
</tr>
</tbody>
</table>

| **Spearman's rho** |    |          |         |     |     |      |      |      |      |      |
| IP               | 1  | 0.147    | 0.104   | 0.048| 0.005| -0.058| 0.059| -0.005| -0.039|
| Sig. (two-tailed)|   | 0.008    | 0.177   | 0.308| 0.715| 0.971 | 0.658| 0.564| 0.96 | 0.75 |
| N                | 99 | 97       | 86      | 99  | 61  | 61   | 61   | 99   | 99   | 69   |

**Notes:**
* Correlation is significant at the 0.05 level (two-tailed).
** Correlation is significant at the 0.01 level (two-tailed).
As Table 10 indicates, there is clear significance for three measures of inclusiveness in the analysis. Similar to the findings in Table 9, the correlation between internal stakeholder involvement and the dependent variable (IP). This bears out that including these stakeholders will increase the likelihood of implementation. Table 10 also reveals that when these measures are examined, significant correlations emerge between the dependent variable (IP) and the number of stakeholders involved with meetings on the implementation of the strategic plan (SHt3) and the number of stakeholders that are provided a formal report of the strategic plan. These findings continue to support that there is a relationship with the involvement of stakeholders at the later stages of the strategic-planning process and implementation. Correlations between implementation and measures of the first two stages of inclusiveness were still not significant. These bivariate results suggest that it is important to include stakeholders in the later stages of the implementation process.

Table 11 reveals a significant positive correlation between the dependent variable (IP) and the combined measure of inclusiveness, similar to the findings in Table 9. This continues to support the findings that suggest that implementation is enhanced by inclusiveness. In this specific analysis, no other significant correlations between the dependent variable and any other measure exist.

In addition to examining nonparametric correlations between the dependent variable and all independent variables, I also estimated a series of bivariate logit models to examine these same relationships. Table 12 presents standardized logit coefficients (beta) and significance levels summarizing the effect of each independent variable on the dependent variable. I limit my interpretation of these results to the signs of the coefficients and their statistical significance.
Table 12

*Bivariate Logit Coefficients*

<table>
<thead>
<tr>
<th>I.V.</th>
<th>Beta</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inclusiv</td>
<td>0.432</td>
<td>0.003</td>
</tr>
<tr>
<td>SHt1</td>
<td>0.020</td>
<td>0.896</td>
</tr>
<tr>
<td>SHt2</td>
<td>0.189</td>
<td>0.242</td>
</tr>
<tr>
<td>SHt3</td>
<td>0.345</td>
<td>0.017</td>
</tr>
<tr>
<td>SHt4</td>
<td>0.422</td>
<td>0.003</td>
</tr>
<tr>
<td>IntSH</td>
<td>0.482</td>
<td>0.000</td>
</tr>
<tr>
<td>ExtSH</td>
<td>0.134</td>
<td>0.368</td>
</tr>
<tr>
<td>AM9</td>
<td>0.223</td>
<td>0.147</td>
</tr>
<tr>
<td>AM17</td>
<td>0.183</td>
<td>0.230</td>
</tr>
<tr>
<td>AM19</td>
<td>0.077</td>
<td>0.608</td>
</tr>
<tr>
<td>AMTotal</td>
<td>0.240</td>
<td>0.126</td>
</tr>
<tr>
<td>AS</td>
<td>0.479</td>
<td>0.061</td>
</tr>
<tr>
<td>Logsize</td>
<td>0.177</td>
<td>0.174</td>
</tr>
<tr>
<td>VD</td>
<td>0.087</td>
<td>0.657</td>
</tr>
<tr>
<td>P1</td>
<td>0.035</td>
<td>0.842</td>
</tr>
<tr>
<td>AD</td>
<td>-0.026</td>
<td>0.859</td>
</tr>
<tr>
<td>CP</td>
<td>0.082</td>
<td>0.557</td>
</tr>
<tr>
<td>MR</td>
<td>-0.070</td>
<td>0.652</td>
</tr>
<tr>
<td>VCR2</td>
<td>-0.208</td>
<td>0.152</td>
</tr>
</tbody>
</table>

*Note:* Beta = standardized logit coefficient
The bivariate logit analysis estimates the statistical relationship between the dependent variable (IP) and each of the independent variables individually. This test is conducted to see whether the findings from the earlier correlation analyses persist using a different estimation method. This will help in determining the robustness of these relationships. As with the nonparametric correlations presented in Tables 9, 10 and 11, the variables of inclusiveness (Inclusiv), stakeholder involvement in training on implementation (SHt3), stakeholder involvement on regular meetings on implementation (SHt4), and internal stakeholders (IntSH) continued to indicate a significant relationship with the dependent variable, implementation as planned. What is interesting in these findings and the previous nonparametric analyses is that the involvement of the stakeholders early in the process of strategic planning did not have a significant correlation with implementation. Also, interestingly enough, the involvement of external stakeholders does not influence implementation. This seems to be contrary to a core principle of community policing: the importance of community involvement in police processes. Also, in this bivariate analysis, none of the control variables, either from contingency theory or institutional theory, evidenced a significant relationship with the dependent variable.

I conducted a series of analyses, and each analysis rendered consistent findings. These findings show that the model is robust, and we know that inclusiveness plays a role in implementation. The next step will be to include the control variables to determine whether inclusiveness will maintain its significance in a multivariate analysis.

**Multivariate Analyses**

Table 13 presents a multivariate logit analysis of the variables. This analysis maintains the variable inclusiv as the combined measure of stakeholder involvement, but I removed the variables that measure stakeholder involvement at each step of the strategic-planning process.
The objective for this analysis is to determine the level of influence of overall stakeholder involvement on implementation. I also removed the variables that measured internal and external stakeholder involvement since including them would have introduced perfect multicollinearity into the model (because the variables used to measure the involvement of internal and external stakeholders were also used to measure overall stakeholder involvement). I also removed the overall performance measure variable (AMTotal) to avoid a multicollinearity problem. Instead, I included separate variables measuring different aspects of scope of performance measurement (AM9, AM17, and AM19). See Appendix C for a complete description of the variance inflation factors for this model.

This table also does not include the control variable of violent crime rate (VCR2). The inclusion of the violent crime rate generated two problems for the analysis. First, because it was only available for 72 of the 103 cases (70%), it caused missing data problems. Second, including it in the full multivariate model caused a problem with multicollinearity with the variable measuring minority representation (MR). Because the minority representation variable retained the data from all 103 agencies and showed strong collinearity with the violent crime rate, it was decided to keep the minority representation variable.

---

9 Perfect multicollinearity would have resulted from including the composite variable measuring scope of performance measurement (AMTotal) in the same model as the individual variables used to compute it.
Table 13

Multivariate Logit Analysis (Inclusiveness)

Multivariate logit results: Uses separate performance measurement variables (AM9, AM17, and AM19)
STDYX Standardization

<table>
<thead>
<tr>
<th>IP</th>
<th>ON</th>
<th>Estimate</th>
<th>S.E.</th>
<th>t-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>INCLUSIV</td>
<td></td>
<td>0.412</td>
<td>0.175</td>
<td>2.351</td>
<td>0.019</td>
</tr>
<tr>
<td>AM9</td>
<td></td>
<td>0.110</td>
<td>0.122</td>
<td>0.906</td>
<td>0.365</td>
</tr>
<tr>
<td>AM17</td>
<td></td>
<td>-0.030</td>
<td>0.143</td>
<td>-0.210</td>
<td>0.834</td>
</tr>
<tr>
<td>AM19</td>
<td></td>
<td>-0.045</td>
<td>0.177</td>
<td>-0.252</td>
<td>0.801</td>
</tr>
<tr>
<td>AS</td>
<td></td>
<td>0.632</td>
<td>0.285</td>
<td>2.216</td>
<td>0.027</td>
</tr>
<tr>
<td>VD</td>
<td></td>
<td>0.108</td>
<td>0.255</td>
<td>0.423</td>
<td>0.673</td>
</tr>
<tr>
<td>P1</td>
<td></td>
<td>-0.132</td>
<td>0.198</td>
<td>-0.667</td>
<td>0.505</td>
</tr>
<tr>
<td>AD</td>
<td></td>
<td>-0.122</td>
<td>0.120</td>
<td>-1.012</td>
<td>0.312</td>
</tr>
<tr>
<td>CP</td>
<td></td>
<td>0.175</td>
<td>0.099</td>
<td>1.763</td>
<td>0.078</td>
</tr>
<tr>
<td>MR</td>
<td></td>
<td>-0.325</td>
<td>0.132</td>
<td>-2.470</td>
<td>0.014</td>
</tr>
</tbody>
</table>

Note: This analysis uses “full information maximum likelihood” to retain the cases with missing data on the independent variables.

These multivariate logit findings show that three of the nine variables that were in the model emerged as significant. Inclusiveness and agency size are found to be in the predicted direction, while the effects of minority representation were unexpectedly negative. This is contrary to the hypothesis that minority representation will have a positive influence on implementation. Similar to the previous model, inclusiveness continued to exert a significant
positive effect. Agency size also had a significant positive relationship with implementation.\textsuperscript{10} Minority representation had a significant negative effect on implementation as planned. Size has the largest effect, with a standardized coefficient of 0.632; next is inclusiveness, with a coefficient of 0.412. Minority representation has the smallest effect of the significant variables, with a standardized coefficient of -0.325.

Table 13 provides the analysis of the aggregate measure of inclusiveness and the individuated variables of scope of performance measures. To determine the influence on the dependent variable if both inclusiveness and scope of performance measures are treated as composite measures, I conducted another multivariate logit analysis. This analysis also includes as independent variables agency size, vertical differentiation, professionalism, agency diversity, centralization of power, and minority representation. Violent crime rate was removed for the collinearity issues mentioned previously.

\textsuperscript{10} Agency size was analyzed under two specifications: one in its raw form and one in a log-transformed form. While the log-transformed form would be helpful for OLS regression to reduce the variation between very large and very small agencies in the data set, logit analysis does not require a normal distribution for analysis. Thus, the raw form fit better in the multivariate logit model.
Table 14

Multivariate Logit Analysis (Aggregate Measures)\(^{11}\)

Multivariate logit results: Uses aggregate inclusiveness (Inclusiv) and scope of performance measurement variables (AMTotal)
STDUYX Standardization

<table>
<thead>
<tr>
<th>IP ON</th>
<th>Estimate</th>
<th>S.E.</th>
<th>t-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inclusiv</td>
<td>0.369</td>
<td>0.172</td>
<td>2.147</td>
<td>0.032</td>
</tr>
<tr>
<td>AMTotal</td>
<td>0.109</td>
<td>0.222</td>
<td>0.493</td>
<td>0.622</td>
</tr>
<tr>
<td>AS</td>
<td>0.648</td>
<td>0.272</td>
<td>2.379</td>
<td>0.017</td>
</tr>
<tr>
<td>VD</td>
<td>0.115</td>
<td>0.209</td>
<td>0.549</td>
<td>0.583</td>
</tr>
<tr>
<td>P1</td>
<td>-0.161</td>
<td>0.185</td>
<td>-0.868</td>
<td>0.385</td>
</tr>
<tr>
<td>AD</td>
<td>-0.119</td>
<td>0.113</td>
<td>-1.050</td>
<td>0.294</td>
</tr>
<tr>
<td>CP</td>
<td>0.190</td>
<td>0.108</td>
<td>1.763</td>
<td>0.078</td>
</tr>
<tr>
<td>MR</td>
<td>-0.339</td>
<td>0.139</td>
<td>-2.431</td>
<td>0.015</td>
</tr>
</tbody>
</table>

Note: This analysis uses "full information maximum likelihood" to retain the cases with missing data on the independent variables.

Consistent with the findings from Table 13, the analysis of composite measures of inclusiveness (Inclusiv) and scope of performance measures (AMTotal) found that three of the nine variables that were in the model emerged as significant. Inclusiveness and agency size (AS) were found to be in the predicted direction, while minority representation (MR) indicated a negative direction, as in Table 13. The negative direction of the MR variable is contrary to my original hypothesis that higher rates of minority representation will have a positive influence on

\(^{11}\) Note: This analysis uses "full information maximum likelihood" to retain the cases with missing data on the independent variables.
implementation. Similar to the previous model in Table 13, inclusiveness maintained its significance in a positive direction. Agency size also indicated a significant relationship exists with the variable implementation.\textsuperscript{12} Agency size, similar to the findings in Table 13, has the largest effect, with a standardized coefficient of 0.648, slightly higher than in Table 13’s analysis. Inclusiv, with an estimate of 0.369, was next in significance, though its value dropped compared to Table 13. Minority representation (MR) has the smallest effect of the significant variables, with an estimate of -0.339, which is a slightly higher standardized coefficient than found in Table 13 (though in a negative direction). The consistency of the estimates found in this analysis and those in Table 13 provide solid evidence that the inclusion of stakeholders has a robust influence on the implementation of a strategic plan.

The inclusion of all stakeholders in the analysis from Tables 13 and 14 does not differentiate between the types of stakeholders involved in the strategic-planning process and thus would not allow a discussion around the importance of involving specific types of stakeholders in the implementation of a strategic plan. Further analysis was conducted substituting the combined measure, Inclusiv, with the two variables that defined the stakeholders: internal (IntSH) or external (ExtSH). It is hoped that analyzing these two categories of stakeholders will provide some evidence about the types of stakeholders to involve in the strategic-planning process to best assure its implementation. Table 15 illustrates this analysis.

\textsuperscript{12} Agency size was analyzed under two specifications: one in its raw form and one in a log-transformed form. While the log-transformed form would be helpful for OLS regression to reduce the variation between very large and very small agencies in the data set, logit analysis does not require a normal distribution for analysis. Thus, the raw form fit better in the multivariate logit model.
Table 15

*Multivariate Logit Analysis (Internal and External Stakeholders)*

Multivariate logit results: Uses separate internal and external stakeholder measures and composite scope of performance measures
STDYX Standardization

<table>
<thead>
<tr>
<th>IP ON</th>
<th>Estimate</th>
<th>S.E.</th>
<th>t-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>IntSH</td>
<td>0.531</td>
<td>0.186</td>
<td>2.848</td>
<td>0.004</td>
</tr>
<tr>
<td>ExtSH</td>
<td>-0.181</td>
<td>0.190</td>
<td>-0.955</td>
<td>0.340</td>
</tr>
<tr>
<td>AMTotal</td>
<td>0.011</td>
<td>0.196</td>
<td>0.056</td>
<td>0.956</td>
</tr>
<tr>
<td>AS</td>
<td>0.441</td>
<td>0.308</td>
<td>1.432</td>
<td>0.152</td>
</tr>
<tr>
<td>VD</td>
<td>0.101</td>
<td>0.258</td>
<td>0.392</td>
<td>0.695</td>
</tr>
<tr>
<td>P1</td>
<td>-0.087</td>
<td>0.267</td>
<td>-0.326</td>
<td>0.744</td>
</tr>
<tr>
<td>AD</td>
<td>-0.159</td>
<td>0.137</td>
<td>-1.165</td>
<td>0.244</td>
</tr>
<tr>
<td>CP</td>
<td>0.152</td>
<td>0.119</td>
<td>1.278</td>
<td>0.201</td>
</tr>
<tr>
<td>MR</td>
<td>-0.257</td>
<td>0.174</td>
<td>-1.478</td>
<td>0.139</td>
</tr>
</tbody>
</table>

These multivariate logit findings show that the variable internal stakeholders (IntSH) is significant and in the predicted positive direction. No other variable reached significance when viewed in this model. This is slightly different from the first multivariate model in Table 13, which measured the influence of overall stakeholder involvement. The differentiation between those stakeholders that were internal or external demonstrates the importance of the involvement of the members of the agency in the implementation of the strategic plan. It is clear that the variable IntSH drives inclusiveness, thus eliminating the effects of agency size and minority representation. This is consistent with what was found in the bivariate analysis.
To determine whether IntSH will continue to have an effect on the dependent variable, one last analysis was considered. This multivariate logit was conducted using the individualized measures of scope of performance measures. Also, both internal and external stakeholders were used in the model. The other variables considered were agency size, vertical differentiation, professionalism, agency diversity, centralization of power, and minority representation. Table 16 provides the analysis.

Table 16

*Multivariate Logit Analysis (Individualized All)*

Multivariate logit results: Uses separate performance measurement and inclusiveness measures
STDDYX Standardization

<table>
<thead>
<tr>
<th>IP</th>
<th>ON</th>
<th>Estimate</th>
<th>S.E.</th>
<th>t-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>IntSH</td>
<td>0.569</td>
<td>0.211</td>
<td>2.691</td>
<td>0.007</td>
<td></td>
</tr>
<tr>
<td>ExtSH</td>
<td>-0.156</td>
<td>0.208</td>
<td>-0.754</td>
<td>0.451</td>
<td></td>
</tr>
<tr>
<td>AM9</td>
<td>0.160</td>
<td>0.121</td>
<td>1.319</td>
<td>0.187</td>
<td></td>
</tr>
<tr>
<td>AM17</td>
<td>-0.062</td>
<td>0.159</td>
<td>-0.391</td>
<td>0.696</td>
<td></td>
</tr>
<tr>
<td>AM19</td>
<td>-0.107</td>
<td>0.213</td>
<td>-0.502</td>
<td>0.616</td>
<td></td>
</tr>
<tr>
<td>AS</td>
<td>0.442</td>
<td>0.349</td>
<td>1.268</td>
<td>0.205</td>
<td></td>
</tr>
<tr>
<td>VD</td>
<td>0.040</td>
<td>0.246</td>
<td>0.162</td>
<td>0.871</td>
<td></td>
</tr>
<tr>
<td>P1</td>
<td>-0.165</td>
<td>0.248</td>
<td>-0.668</td>
<td>0.504</td>
<td></td>
</tr>
<tr>
<td>AD</td>
<td>-0.126</td>
<td>0.153</td>
<td>-0.820</td>
<td>0.412</td>
<td></td>
</tr>
<tr>
<td>CP</td>
<td>0.145</td>
<td>0.112</td>
<td>1.294</td>
<td>0.196</td>
<td></td>
</tr>
<tr>
<td>MR</td>
<td>-0.249</td>
<td>0.168</td>
<td>-1.483</td>
<td>0.138</td>
<td></td>
</tr>
</tbody>
</table>
Again, as in Table 15, the multivariate logit findings indicate that the variable internal stakeholders (IntSH) is significant and in the predicted positive direction. Once more, no other variable reached significance when viewed in this model. The differentiation between those stakeholders that were internal or external demonstrates the importance of the involvement of the members of the agency in the implementation of the strategic plan. It is clear that the variable IntSH drives inclusiveness, thus eliminating the effects of agency size and minority representation. This is consistent with what was found in the bivariate analysis.

Consistent throughout the models analyzed, the variables that were created to measure the relationship between scope of performance measures used in the strategic-planning process and implementation were not statistically significant. This was true when the scope of performance measures were measured individually (AM9, AM17, and AM19) as well as when the data was combined into one composite measure (AMTotal).

In each model, there is no significant relationship between the structural variables of vertical differentiation, level of professionalism, agency diversity, concentration of power, and the dependent variable of implementation as planned.

During the course of running all the various models and analyses, the hypotheses that various classes of stakeholders being included in the planning process will have a positive effect on implementation of the strategic plan were supported. Table 13 presents the combined inclusiveness variable, which is significant; however, when the distinction between internal and external stakeholders is analyzed, the significance remains only with the internal stakeholders (See Table 14). This would be contrary to the open systems model and my hypotheses that both types of stakeholders would play a significant role in implementation.
It would be simple to allow the analysis of the combined inclusiveness measure (Table 13) to be the foundation of the findings for future discussion in this dissertation and even garner support for the open systems theory as hypothesized. However, this would do a disservice to the reality of the process by which a police agency engages its stakeholders during strategic planning. Distinguishing between the internal and external stakeholders, as in Table 14, provides a much more realistic, and useful, tool for determining just what type of stakeholder is most appropriate to determine implementation. This is important because most, if not all, agencies have limited resources by which to conduct a strategic-planning effort. Determining which group of stakeholders to focus on to ensure implementation, in this case internal stakeholders, provides a more efficient use of these resources. Table 15 indicates the results of the hypotheses presented in chapter 2; the indication of support for the individual hypotheses is shown in the far right column.
### Summary of Results

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Support</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>H1:</strong> Inclusiveness will have a positive effect on implementation as planned.</td>
<td><strong>Supported</strong></td>
</tr>
<tr>
<td>a) The total number of stakeholders involved will increase the ability of the agency to implement strategic plan as proposed.</td>
<td><strong>Supported</strong></td>
</tr>
<tr>
<td>b) Internal and external stakeholders should have a like influence on implementation of the strategic plan as planned.</td>
<td><strong>Mixed results</strong></td>
</tr>
<tr>
<td><strong>H2:</strong> The use of scope of performance measures to develop, implement, and assess a strategic plan will have a positive effect on implementation of the strategic plan as planned.</td>
<td><strong>Unsupported</strong></td>
</tr>
<tr>
<td><strong>H3:</strong> Institutional (structural) characteristics of the police agency will positively influence the implementation of a strategic plan as proposed.</td>
<td><strong>Mixed results</strong></td>
</tr>
<tr>
<td>a) Agency size will play a role in the implementation of the strategic plan as proposed. The larger the agency, the greater the likelihood that the plan will be implemented as proposed.</td>
<td><strong>Supported</strong></td>
</tr>
</tbody>
</table>

---

13 Based on all of the multivariate logit models, inclusiveness plays a significant role in implementation of the strategic plan.

14 Based on all the multivariate logit models, inclusiveness plays a significant role in implementation of the strategic plan.

15 Based on all the multivariate logit models, internal stakeholders had significance, however external stakeholder involvement showed no influence on implementation.

16 Based on the multivariate logit model in Tables 15 and 16, scope of performance measures showed no significance in either the individual, time related measures or combined measures.

17 Based on the multivariate logit model in Table 13, agency size showed significance in the multivariate logit analysis, however vertical differentiation, professionalism or agency diversity had any impact on the implantation. When viewed in Table 15 and 16, none of the variables showed any significance.

18 Based on the multivariate logit model in Table 13, agency size indicated significance in a positive direction as hypothesized; however, when analyzed in the multivariate model in Tables 15 and 16, there was no indication of influence on implementation.
<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>b) The greater the separation between the top ranks and rank-and-file members of the police agency (vertical differentiation), the less likely the plan will be implemented as proposed.</td>
<td>Unsupported</td>
</tr>
<tr>
<td>c) The more professional the organization, in terms of advanced education required for hiring, the greater the likelihood that the plan will be implemented as proposed.</td>
<td>Unsupported</td>
</tr>
<tr>
<td>d) The more diverse the agency, indicating progressive and innovative actions, the more likely the agency will be able to implement a strategic plan as proposed.</td>
<td>Unsupported</td>
</tr>
<tr>
<td>H4: External characteristics from the environment that the police agency operates in will influence the implementation of the strategic plan.</td>
<td>Unsupported</td>
</tr>
<tr>
<td>a) The type of political structure, centralization of power, will influence the implementation of the strategic plan.</td>
<td>Unsupported&lt;sup&gt;19&lt;/sup&gt;</td>
</tr>
<tr>
<td>b) Minority representation will have a positive relationship with the ability of the agency to implement the plan as proposed.</td>
<td>Unsupported</td>
</tr>
<tr>
<td>c) The violent crime rate of the area will have an inverse influence on the implementation of the plan.</td>
<td>Unsupported&lt;sup&gt;20&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

<sup>19</sup> Based on the multivariate logit model in Table 13, minority representation showed significance (negatively) in influencing the implementation of the strategic plan, however when analyzed in the multivariate model in Table 15 and 16, there was no indication of influence on implementation.

<sup>20</sup> Violent crime rate was dropped from the analyses due to collinearity issues with minority representation.
CHAPTER 5
SUMMARY

Contributions and Importance of Findings

From the outset of this research, the main goal was to answer the question, What factors explain the variation in the level of organizational commitment to change, as indicated by the agency implementing a strategic plan as proposed? In answering this question, I undertook a literature review of strategic planning, organizational theory, and policing to develop and test a model of the factors influencing implementation of a strategic plan by American police agencies. The creation of variables that measured inclusiveness and scope of performance measures developed by an agency, as well as the structural and contextual environment of the agency, was presented in a model shown in Figure 1. The view that police agencies operate as open systems was the bedrock for the development of the hypotheses that these variables would influence implementation of a strategic plan. Thus, the success of those agencies in adopting an innovation such as a strategic plan would indicate the commitment by those agencies to cultural change. The literature suggests that modern police agencies in America have instilled a mind-set of accepting innovation in all facets of their operations (King, 2000).

With fewer than 10 prior empirical studies of the determinants of organizational innovation in the police worldwide since 1998 (Darroch and Mazerolle, 2013), my research contributes to the study of innovation and policing in several ways. First, the identification of the factors that can lead to successful implementation of an innovation, such as strategic planning, will be important to police agencies in focusing their scarce resources on areas that enhance realization. Secondly, the use of my conceptual model could allow for the research to be generalized to other innovation implementations by police agencies.
As explained in chapter 1, strategic planning can be identified as an example of a radical innovation, subjecting the agency to cultural change. Strategic planning is also a mechanism that agencies can use to bring about other changes, so its importance is twofold. This research also illustrates that contingency theory and institutional theory can be linked. Consideration of both of these theoretical underpinnings can pay dividends in research by developing realistic models for analysis.

Given the dearth of support for my original hypotheses, perhaps what is most telling is what was not supported by the analyses. After conducting this research and analyzing the results of various statistical models, I was surprised to find that external stakeholders did not have significance in the implementation of a strategic plan. This finding is strengthened by the fact that the measures of the influence of centralization of power, meaning external political leadership structure, showed no effect in any of the analyses. This speaks to several issues. The first is that the parochialism of police agencies may play a larger role in ensuring successful implementation than that of the external stakeholders’ influence. Second, the command and control establishment endemic to policing can work to overrule external influences on critical cultural changes. Third, there seems to be a dichotomy between what is preached and what is practiced in the realm of community policing. Recent events in Ferguson and Baltimore illustrate how this problem manifests itself in lack of trust in the police. Finally, as alluded to in the earlier chapter, the “911 phenomenon” may be prevalent in all aspects of police organizations. This would mean that the police agency takes the same approach to implementing an innovation as it would providing a core service. The police organization takes the input (call for service) from the stakeholder (complainant), processes the information, and provides an output (resolution) with very little feedback or assessment of the actions taken from the stakeholder.
The findings give credence to the view that police organizations may actually be more akin to closed systems than open ones.

Two elements of importance, agency size and minority representation, were evident when the analysis did not include internal stakeholders as a measure. In these specific analyses, agency size was a positive predictor of implementation. This suggests that the larger the agency, the more likely it will be to implement an innovation such as strategic planning. This is in line with the literature on agency innovation, where the slack resources and ability to bring those resources to bear on the adoption of the innovation is important (Wilson, 2006). However, the fact that the influence of agency size was diminished when compared to the impact brought on by internal stakeholders’ involvement speaks to other public management theories that suggest that agency size does not play a role in adopting strategic planning (Berry, 1994). This inconsistency in findings is not surprising and is reflected by innovation studies where one camp suggests that the size of an organization would have a positive influence on innovation because these organizations are able to take risks associated with innovation and employ more skilled workers that can assist with implementation of the innovation (Damanpour, 1996; Dewar & Dutton, 1986). Alternative to this thought is that a larger organization creates a more bureaucratic and formal structure that inhibits innovation and thus has a negative effect on implementation (Damanpour, 1996).

It was hypothesized that a heterogeneous population served by the police agency, measured by minority representation, would create competing values, thus not allowing any strong influence to emerge to interrupt the work of the police agency in implementing an innovation. The opposite was found. Thus, it would seem that competing values and political views may actually work to assist a police agency to implement a strategic plan. This may be the
result of a police agency that understands its constituency and is able to consider differing points of view when undertaking a strategic-planning process. Most police agencies are usually adept at considering input from multiple sources, whether at the core function level or at the policy level.

Another interesting finding in this research was that the measures that an agency uses to develop, educate, and assess whether the objectives of the strategic plan were being met were not significant. In the strategic-planning realm, the development of these types of measures is critical to a properly formatted environmental scan. The strategic-planning literature demands the proper identification of measures for development of a strategic plan as well as the identification of those measures to educate and assess the strategic plan, whether through a SWOT analysis or other means (Bryson, 2004). The measures developed in this research around the scope of performance measures used for these purposes never showed significance in the actual implementation of the strategic plan, whether individually or in aggregation.

What is clear is that inclusiveness, specifically inclusiveness of the internal stakeholders, by a police agency is the most important factor in successful implementation of a strategic plan. This is critical because American police agencies have varied and complex organizational structures and many competing demands. The ability to identify factors that will assist in implementing a decided-upon change affects efficiency and effectiveness. Ensuring that internal stakeholders are involved in the development, training, meeting about, and feedback on strategic planning should be a focus to ensure success. 21

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21 The early analysis in Table 10 indicated that there was significance when an agency involved stakeholders throughout the process temporarily, which is interesting since in raw numbers that is when the diminishing numbers of involved stakeholders occurs. This specifically speaks to the importance of the stakeholders in the process of strategic planning but not necessarily in the implementation of the actual plan.
These findings do not negate that police agencies must still consider their external environment. While my findings suggest that the influence on implementation of the strategic plan does not necessarily involve external stakeholders, their role may be more significant in the development and assessment phases. There should be consideration for the role played by the external environment on a police agency.

**Policy Implications**

What should a police agency do when undertaking the development of a strategic plan when this research indicates that the input from the external environment may play no role in the final implementation of that plan? First, all is not lost in considering the American police agency as an open system. While this research shows that internal stakeholders, those within the agency itself, play the most important role in implementation of an innovation, this research does not discount the role of the external environment or the stakeholders outside of the agency in the creation, development, and assessment of the innovation.

What is also important for police leaders to consider when reviewing this research is the power of internal stakeholders. The findings in this research place the power for successful implementation squarely with those within the organization itself. This is consistent with organizational and marketing implementation research, which found that employees are critical to the success of innovation implementation (Cadwallader, et. al., 2010; Hrebeniak, 2006; Klein & Knight, 2005). The findings are further supported by community policing literature that recommends obtaining employee commitment to ensure that the implementation of new strategies occurs (Ford, Wessbein, & Plamondon, 2003; King, 2003).

Certainly, involvement of those internal members of an organization are important in the implementation of an innovation, but they can also use this power as an obstacle to the
implementation of the innovation. In times where an organization may need to undertake the implementation of a radical innovation such as strategic planning, the established power structure will play a role in the success, or failure, of the implementation (Hrebeniak, 2006). For police agencies, the failure of the innovation due to poor implementation can result in employee dissatisfaction and reluctance to engage in future change efforts (Bell, Dean, & Gottschalk, 2010). More important, as seen in recent events across America, the lack of support by internal stakeholders could doom the change and produce a rhetorical issue, where the agency professes that change is occurring, while the internal stakeholders are not implementing the changes. In order to overcome this problem, gaining the individual buy-in from the internal members, from leadership to line officers, is critical to the success of the innovation and ensures that members are supporting the new strategies. Successful implementation of a new strategy can be strengthened by leadership though increased support of the strategy; “police chiefs and their command staff must ‘walk the talk’ if they are to get employees to commit to the strategy and perform in a manner consistent with the strategy” (Ford, Wessbein, & Plamondon, 2003; p. 177-178).

Future Research

The limitations of this research were documented previously, but in order to develop the next steps for future research, several items need to be addressed. First, this research was a post-hoc research design that did not allow for the manipulation of the intervention. Second, the sample of agencies was restricted to those agencies that had engaged in the strategic planning process thus not allowing me to develop an understanding of what factors influenced an agency to begin their involvement in an innovation such as strategic planning. Third, the sample size
was small which could affect generalizability for other research. Finally, the fact that there was missing data due to the ex post facto research could work to undermine the findings.

With those limitations for consideration, the study of the implementation of innovations, especially in government agencies like the police, is a field of study rife with possibilities. The understanding of how and why a police agency commits to a change through innovation is important in making those agencies more efficient and effective. Future research should not only delve into the means by which a police agency implements an innovation, but also why that agency chooses that innovation in the first place. For instance, while not measured in this research, the impact of diffusion of an innovation may play a role in the ultimate implementation of that innovation. Public administration literature suggests that adoption of strategic planning was strongly correlated with regional diffusion. This meant that the agencies were more likely to adopt a strategic plan if neighboring jurisdictions were also engaged in strategic planning (Berry, 1994). Along those same lines, more research is needed into the means by which a police agency measures the level of implementation or institutionalization of the innovation. By understanding that internal stakeholders play an important role in implementation research can be developed to determine if they have the same impact on the institutionalization of that innovation.

The data used in this survey comes from a source that placed the engagement of strategic planning in the context of a management practice of police agencies engaging in community policing (Zhao, et. al., 2003). Thus, the survey questions on which this research was based focused on community policing, not innovation studies. While the link between strategic planning and community policing is certainly a solid one, my research indicates that strategic planning fits more into the innovation studies. A more comprehensive survey, with questions
aimed at the stages of innovation; development, implementation, assessment and institutionalization would create a sound study on the factors that influence each stage.
APPENDIX A

SURVEY INSTRUMENT

PLEASE READ BEFORE TELEPHONE INTERVIEW

Hi, my name is Suzanne Godboldt, and I am calling you because I am a researcher with the University of Nebraska at Omaha Department of Criminal Justice. I am working on a research project funded by the COPS office to learn more about the extent to which police departments across the country have adopted strategic planning. This study is really very important to the field of law enforcement, because no other study has ever been done on this subject. Out of over 3,600 law enforcement agencies across the country, 75 agencies have been randomly selected. Your department was one of those agencies randomly selected and is eligible to participate, if you would be willing to give me about 15 minutes of your time. It should actually go pretty fast, since I have a preprinted form and can just go down the list and ask you the questions. All agencies are asked exactly the same questions. Your participation in this survey is completely voluntary, but would be greatly appreciated. Also, once the project is completed, we would be happy to provide you with a copy of the final report.

Any information you shared would be completely anonymous and your individual answers will be kept completely confidential. Although there is no attempt to collect sensitive information during this interview, the utmost care will be taken to ensure the anonymity of all those involved. The data will be recorded so that no responses will be linked to an individual agency. When the results are published no specific names or agencies will be identified. If you wish, you can elect to stop the interview at any time.

STRATEGIC PLAN:

TELEPHONE INTERVIEW QUESTIONNAIRE

Agency Name ____________________ Phone Number __________________

SECTION I: GENERAL QUESTIONS

Before we begin, I would like to share with you a definition of a strategic plan that we are using for this interview. A strategic plan is generally a written strategy for implementing change within an agency, often occurring over several years’ time and involving the entire department, and often involving a department-wide change in the overall philosophy of the organization. For example, if an organization decides to formally implement community policing, they might develop a “community policing strategic plan” that specifically defines community policing, its elements, implementation issues and goals, and details specific ways to achieve those goals. Furthermore, this plan might be implemented on a department-wide basis.

Q.1. Does your agency have a strategic plan or something similar?
   a. Yes (Go to Q.1.b)       b. No (Go to Q.1.n.)
Q.1a. If NO, what were the primary reasons that your agency does not have one?

Reasons ____________________________________________________________
__________________________________________________________

In addition, is your agency in the process of developing a strategic plan?

a. Yes ______  b. No ______ (Stop)  c. Don't know ______

Q.1b. What is the main reason that your agency has or is developing a strategic plan?

__________________________________________________________
__________________________________________________________

Q.2. Do you know what year the strategic planning process first began?

__________________________________________________________

Q.3. Since that date, has the plan been implemented? If YES, when?

__________________________________________________________

Q.4. Could you give me a few examples of goals set forth in the strategic plan?

Example 1. ____________________________________________________________

Example 2. ____________________________________________________________

Q.5. Is Community Oriented Policing a goal in your strategic plan?

a. Yes ______  b. No ______ (Go to Q.6)  c. Don't Know ______
Q. 5.a. With respect to other goals in the strategic plan, which of the following statements is most accurate about the plan's goal of community policing?

   a) there are no other goals, community policing is the only goal of our strategic plan
   b) plan has other goals but they are all considered less important than the goal of community policing
   c) plan has other goals which are more important than community policing
   d) plan has other goals which are considered equally as important as the goal of community policing

If answer is a) or b), then ask Q.5.b below.

Q. 5.b. According to strategic plan documents, what is the rationale for making COP a major goal of your plan?

__________________________________________________________________________

Q. 6. Does your department have an anti-terrorism plan?

   a. Yes  b. No (Go to Q.7)  c. Don't know

Q. 6.a. If your answer is YES, has the anti-terrorism plan been part of the overall strategic plan from the beginning or has it been recently incorporated?

   a. Part of plan from beginning  b. Recently incorporated into plan  c. Don't know
SECTION 2: FORMATION OF THE STRATEGIC PLAN

I would like to ask just a few questions about the formation or development of your agency's strategic plan.

Q.7. Were any of the following reasons that your department developed a strategic plan? Please answer “yes” “no” or “don’t know.”

a. ____ to implement Community Oriented Policing  
b. ____ to control social disorder  
c. ____ to reduce crime  
d. ____ to let the rank-and-file know what is expected for the future of the department  
e. ____ to meet community demands  
f. ____ to meet the requirements from the city government  
g. ____ to serve as a management tool for upper and middle level managers  
   (to provide a vision for how their subordinates should be doing the job & facilitate evaluation of subordinates  
h. ____ any reason not listed above

Q.8. Now I'd like to ask you about some of the people who were actively involved in the development of the strategic plan in your agency? As I list these groups, please answer “yes” “no” or “don’t know” as to whether they were involved.

a. ____ Mayor  
b. ____ City Council  
c. ____ Community Organizations  
d. ____ Police Administrators  
e. ____ Rank-and-File Police Officers  
f. ____ Police Union Representatives  
g. ____ Civilian Employees  
h. ____ University Researchers  
i. ____ Any others not listed above
Q. 5. Were any of the following methods used in the developing the strategic plan? Please answer "yes" "no" or "don't know."

a. __ community survey to assess residents' needs
b. __ employee survey to assess the needs of officers and non-sworn agency personnel
c. __ looking at strategic planning information from other agencies
d. __ formally educating employees about what a strategic plan is
e. __ formally educating community representatives as to what a strategic plan is
f. __ creation of a task force to coordinate community organizations and police officers so together they can give input about the strategic plan
g. __ other

Q. 10. About how long did it take your agency to develop a written strategic plan?

__________________________ Months ___________________ Don't Know

Q. 11. Was an external consultant hired to facilitate the development of your strategic plan?

a. Yes
b. No (Skip to Q. 12)
c. Don't know (Skip to Q. 12)

Q. 11a. Were any of the following services provided by the outside consultant in the development of your strategic plan? Please answer "yes" "no" or "don't know."

a. __ facilitate the planning process
b. __ provide training for department employees
c. __ provide training for local community organizations and residents
d. __ participate in final decision making regarding the plan
SECTION B: THE IMPLEMENTATION OF THE STRATEGIC PLAN

Q.12. Has your department's strategic plan been implemented as planned?
   a. Yes __________ (Skip to Q.13)
   b. No __________ (Skip to Q.13)
   c. Don't know __________

Q.12 a. If your answer was NO, do you know why it wasn't implemented as planned?

________________________________________________________________________

Q.13. Which of the following parties was designated as responsible for the implementation of your strategic plan? Please answer "yes" "no" or "don't know."

   a. __________ police chief
   b. __________ one of the command staff members (e.g., deputy chief)
   c. __________ research and planning unit
   d. __________ a special position that is created for that purpose
   e. __________ other

Q.14. Does your department provide ongoing in-service training regarding the implementation of the strategic plan for any of the following groups? Please answer "yes" "no" or "don't know."

   a. __________ supervisory level personnel (sergeants or above)
   b. __________ police officers
   c. __________ police civilian employees
   d. __________ community organizations
   e. __________ community residents
   f. __________ city agencies/employees
   g. __________ other
Q.15. Does your department organize regular meetings regarding the implementation of the strategic plan for any of the following groups? Please answer "yes" "no" or "don't know."

b. police supervisors (sergeants or above)
   ______

c. police officers
   ______

d. police civilian employees
   ______

e. community organizations
   ______
   ______
   ______

Q.16. Has the strategic plan been revised during the implementation process?

a. Yes
   ______
   ______
   ______

b. No
   ______
   (Skip to Q.17)

c. Don't know
   ______
   (Skip to Q.17)

Q.16a. What was the most recent revision and what was the reason for revising it?

Q.17. During the implementation phase, have any of the following types of data been used to assess whether the specific goals identified in the strategic plan have been achieved (such as reducing crime, enhancing citizen satisfaction, etc.)?

Please answer "yes" "no" or "don't know" to each of the following:

a. jurisdiction-wide crime data
   ______

b. district-specific crime data
   ______

c. community survey
   ______

d. employee survey
   ______

e. other
   ______

Q.18. Which unit or person in the organization is responsible for keeping track of the data collected to assess the plan?

   ______
Q.19. How frequently is the progress of the plan formally assessed (e.g., written report to the Chief or City Council, etc.)?

__________________________ Months ___________________ Hasn’t been done

Q.19.a. What are the methods used to assess whether the objectives of the strategic plan are being achieved? Please answer “yes” “no” or “don’t know.”

a. ___ jurisdiction-wide crime data
b. ___ district-specific crime data
c. ___ use of a statistical package to analyze the crime data
d. ___ use of case study to document the progress of a specific unit
e. ___ citizen survey
f. ___ employee survey
g. ___ other

Q.20. If the department has a progress report ask: Which of the following parties is formally provided a copy of the progress report? Please answer “yes” “no” or “don’t know.”

a. ___ police chief
b. ___ command staff
c. ___ middle level supervisors
d. ___ police officers
e. ___ community organizations
f. ___ community residents
g. ___ other government agencies

Q.21. If the department has a progress report ask: Has the progress report been a useful assessment tool for influencing specific changes that have occurred in light of report findings?

a. Yes _____ b. No _____ c. Don’t know _____

Q.22. Is the implementation of Community Oriented Policing addressed in the progress report?

a. Yes
b. No (Skip to Q.23)
c. Don’t know (Skip to Q.23).
Q.22a. Could you give me an example of measures used to assess the implementation of COP?

SECTION 4: OVERALL EVALUATION OF THE STRATEGIC PLAN

Q.23. Has the Strategic plan changed the way that your department does business (such as an increase in the number of officers assigned to foot patrol, greater emphasis on officer-initiated problem solving at the community level, etc.)?

a. Yes
b. No (Skip to Q.24)
c. Don’t know (Skip to Q.24)

Q.22b. If your answer is YES, please give me a few examples of these changes:

Q.24. Do you think the strategic plan has made it easier to implement COP in your department?

a. Yes
b. No (Skip to Q.25)
c. Don’t know (Skip to Q.25)

Q.24a. If your answer is YES, could you please give me a few examples:

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Q24 b. If your answer is NO, it would be very helpful if you could give me a few reasons why you think it hasn’t.


Q25. What do you think is the major strength of your department’s strategic plan in terms of either the plan itself or the way it was implemented?


Q26. What do you think is the major weakness your department’s strategic plan in terms of either the plan itself or the way it was implemented?


Q27. If you were to guide other agencies interested in developing and implementing a strategic plan, what are the top 3 recommendations you would give to them?

1. 

2. 

3. 

Q28. Would it be possible to get a copy of your department’s strategic plan. It would be very helpful for us to get some more detailed information about the specifics of strategic plans across the nation. [If they are willing to send it, be sure to give them our mailing address or e-mail address].

10
We have come to the end of the survey, but I was wondering if you would mind just giving me a bit of demographic information about yourself. It would be helpful to know the background of the person answering the survey for each department involved in the study. They are simple questions and I will be brief. For example,

Q.29. What is your name?

__________________________

Q.30. What is your official title and division with which you are affiliated?

__________________________

Q.31. Would this be the correct phone number, in case I would need to contact you again because of any missing information, or if you have a direct number, would you mind giving it to me?

__________________________

Thank you so much for answering my questions. Is there anything else that you think is important for us to know that we may have forgotten to ask you?

__________________________

13
### APPENDIX B

### INCLUSIVENESS SURVEY QUESTIONS

<table>
<thead>
<tr>
<th>Survey Question</th>
<th>Importance</th>
</tr>
</thead>
<tbody>
<tr>
<td>8) Who were some of the people who were actively involved in the development of the strategic plan in your agency?</td>
<td>Shows stakeholder involvement at development stage of strategic-planning process. Illustrated by the variable SHt1.</td>
</tr>
<tr>
<td>a) Members of the city government</td>
<td></td>
</tr>
<tr>
<td>b) Community organizations</td>
<td></td>
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<tr>
<td>c) Police administrators</td>
<td></td>
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<tr>
<td>d) Rank-and-file officers</td>
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<tr>
<td>e) Police union representatives</td>
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<tr>
<td>f) Civilian employees</td>
<td></td>
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<tr>
<td>g) University researchers</td>
<td></td>
</tr>
<tr>
<td>h) Any others not listed above</td>
<td></td>
</tr>
<tr>
<td>14) Does your department provide ongoing in-service training regarding the implementation of the strategic plan for any of the following groups?</td>
<td>Shows stakeholder involvement with training on implementation of strategic-planning process. Illustrated by the variable SHt2.</td>
</tr>
<tr>
<td>a) Sworn supervisory personnel (sgts or above)</td>
<td></td>
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<tr>
<td>b) Police officers</td>
<td></td>
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<tr>
<td>c) Police civilian employees</td>
<td></td>
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<tr>
<td>d) Community organizations</td>
<td></td>
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<tr>
<td>e) Community residents</td>
<td></td>
</tr>
<tr>
<td>f) City agencies/employees</td>
<td></td>
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<tr>
<td>g) Other</td>
<td></td>
</tr>
<tr>
<td>15) Does your department organize regular meetings regarding the implementation of the strategic plan for any of the following groups?</td>
<td>Shows stakeholder involvement at through regular meetings on the implementation of the strategic plan. Illustrated by the variable SHt3.</td>
</tr>
<tr>
<td>a) Sworn supervisory personnel (sgts or above)</td>
<td></td>
</tr>
<tr>
<td>b) Police officers</td>
<td></td>
</tr>
<tr>
<td>c) Police civilian employees</td>
<td></td>
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<tr>
<td>d) Community organizations</td>
<td></td>
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<tr>
<td>e) Community residents</td>
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<tr>
<td>f) City agencies/employees</td>
<td></td>
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<tr>
<td>g) Other</td>
<td></td>
</tr>
<tr>
<td>Survey Question</td>
<td>Importance</td>
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<td>--------------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>20a-g) For those agencies that had a progress report, which of the following parties is formally provided a copy of the progress report?</td>
<td>Shows stakeholder involvement in formal provision of progress reports of the strategic plan. Illustrated by the variable SHt4.</td>
</tr>
<tr>
<td>a) Police chief</td>
<td></td>
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<td>b) Command staff</td>
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<tr>
<td>c) Middle level supervisors</td>
<td></td>
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<tr>
<td>d) Police officers</td>
<td></td>
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<tr>
<td>e) Community organizations</td>
<td></td>
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<tr>
<td>f) Community residents</td>
<td></td>
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<tr>
<td>g) Other government agencies</td>
<td></td>
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</tbody>
</table>
### APPENDIX C

#### SCOPE OF PERFORMANCE MEASURES SURVEY QUESTIONS

<table>
<thead>
<tr>
<th>Survey Question</th>
<th>Importance</th>
</tr>
</thead>
<tbody>
<tr>
<td>9) Were any of the following methods used in developing the strategic plan?</td>
<td>Indicates the types of scope of performance measures used at the development phase of the strategic-planning process. Illustrated by the variable AM9.</td>
</tr>
<tr>
<td>a) community survey to assess residents’ needs</td>
<td></td>
</tr>
<tr>
<td>b) employee survey to assess the needs of officers and nonsworn agency personnel</td>
<td></td>
</tr>
<tr>
<td>c) looking at strategic-planning information from other agencies</td>
<td></td>
</tr>
<tr>
<td>d) formally educating employees about what a strategic plan is</td>
<td></td>
</tr>
<tr>
<td>e) formally educating community representative as to what a strategic plan is</td>
<td></td>
</tr>
<tr>
<td>f) creation of a task force to coordinate community organizations and police officers so together they can give input about the strategic plan</td>
<td></td>
</tr>
<tr>
<td>g) other</td>
<td></td>
</tr>
<tr>
<td>17) During the implementation phase, have any of the following types of data been used to assess whether the specific goals identified in the strategic plan have been achieved (such as reducing crime, enhancing citizen satisfaction, etc.)?</td>
<td>Indicates the types of scope of performance measures used at the goal assessment phase of the strategic-planning process. Illustrated by the variable AM17.</td>
</tr>
<tr>
<td>a) jurisdiction-wide crime data</td>
<td></td>
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<tr>
<td>b) district-specific crime data</td>
<td></td>
</tr>
<tr>
<td>c) community survey</td>
<td></td>
</tr>
<tr>
<td>d) employee survey</td>
<td></td>
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<tr>
<td>e) other</td>
<td></td>
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<tr>
<td>Survey Question</td>
<td>Importance</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------</td>
</tr>
<tr>
<td>19) What are the methods used to assess whether the objectives of the strategic plan are being achieved?</td>
<td>Indicates the types of scope of performance measures used at the objective measurement phase of the strategic-planning process. Illustrated by the variable AM19.</td>
</tr>
<tr>
<td>a) jurisdiction-wide crime data</td>
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<tr>
<td>b) district-specific crime data</td>
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<tr>
<td>c) use of a statistical package to analyze the crime data</td>
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</tr>
<tr>
<td>d) use of a case study to document the progress of a specific unit</td>
<td></td>
</tr>
<tr>
<td>e) citizen survey</td>
<td></td>
</tr>
<tr>
<td>f) employee survey</td>
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<td>g) other</td>
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### APPENDIX D

**VARIANCE INFLATION FACTORS**

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<th>AM2</th>
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<th>AS</th>
<th>VD</th>
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BIBLIOGRAPHY


strategy commitment: Linking officers commitment to community policing to job
behaviors and satisfaction. *Justice Quarteerly, 20* (1), 159


Publishing.

McGraw-Hill.

Cornell University Press.

Goldstein, H. (2003). On further developing problem-oriented policing: The most critical need,
the major impediments, and a proposal. In J. Knutsson (Ed.), *Problem-oriented policing
From innovation to mainstream* (Vol. 15) (pp. 13–47). Monsey, NY: Criminal Justice
Press.

Greene, J. R. (2000). Community policing in America: Changing the nature, structure, and

theory and evaluation. In J. R. Greene & S. D. Mastrofski (Eds.), *Community policing:

130
commission summary. United States Department of Justice.
http://hdl.handle.net/2027/mdp.39015024863410

Henry, V. E. (2003). *The COMPSTAT paradigm: Management accountability in policing,

Hrebinia, L. G. (2006). Obstacles to effective strategy implementation. *Organizational
Dynamics, 35* (1), 12-31, ISSN 0090-2616

Katz, C. M. (2001). The establishment of a police gang unit: an examination of organizational


Kimberly, J. R. (1981). *The organizational life cycle: issues in the creation, transformation, and

*Police Quarterly, 2*(3): 338-364


*Current Directions in Psychological Science, 14* (5), 243-246


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