ABSTRACT

Title of Thesis: COMMUNITY POLICING AND CHANGING

CRIME RATES: DOES WHAT POLICE DO

MATTER?

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Community policing is one of the most significant transformations in American policing (Maguire and King, 2004). While many assert that community policing played a significant role in the decline of national index crime over the last decade, research has yet to fully explore the contribution of community policing activities to aggregate crime trends (Eck and Maguire, 2001; GAO, 2005; Levitt, 2004; Zhao and Thurman, 2004). To fill this gap, this study assessed police involvement in eight community policing activities between 1997 and 2000. Focusing on subgroups of jurisdictions determined to be the most different on the basis of index crime rate change between the four year period of study, the research tested whether police involvement in community policing distinguished jurisdictions measuring improvement from those measuring worsened total,

property, and violent index crime rates. Overall, the study found no discernible relationships between police involvement in the community policing activities of interest and improvements in index crime rates within the subgroups of jurisdictions and time period examined. These findings suggest community policing alone will unlikely affect crime change and emphasizes the need for improving measures of community policing practices in support of studies of effectiveness.

# COMMUNITY POLICING AND CHANGING CRIME RATES: DOES WHAT POLICE DO MATTER?

by

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Thesis submitted to the Faculty of the Graduate School of the University of Maryland, College Park in partial fulfillment of the requirements for the degree of Master of Arts

2006

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#### CHAPTER I. INTRODUCTION

Police strategies are in the midst of progressive transformation. Beginning as early as the 1980's, innovations such as problem-oriented policing (Eck and Spelman, 1987; Goldstein, 1987), hot spots policing (Sherman and Weisburd, 1995), Compstat (Bratton, 1998), community policing (Kelling and Moore, 1988; Wilson, 1968), third party policing (Buerger and Mazerolle, 1998), evidencebased policing (Sherman, 1998), broken windows policing (Wilson and Kelling, 1982), and policing in "pulling levers" approaches in criminal justice (Kennedy et al., 1996) emerged as promising methods of crime control and prevention. While most agencies continue to practice traditional tactics as their primary method of policing (e.g. random patrol and responding to calls for service), police nationwide report increasing involvement in these innovative strategies; many highlighted by police practitioners and scholars alike for their capacity to improve police effectiveness (Committee to Review Research, 2004; Hickman and Reeves, 2001; Maguire and King, 2004; Sherman, 1997; Weisburd and Eck, 2004; Zhao and Thurman, 2004). 1 Despite these advancements in police practices, the effectiveness of these strategies on overall crime remains an understudied area in police research (Beckman et al., 2005; Committee to Review Research, 2004; Eck and Maguire, 2001; Sherman, 1997; Weisburd and Eck, 2004).

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<sup>&</sup>lt;sup>1</sup> Zhao and Thurman first released study findings in 2001. Since 2001, revisions of the report were published in an academic journal (2002) and by the COPS Office (2004). I cite the most recent publication throughout the manuscript

Community policing is by far the most widespread of these innovative strategies (Maguire and King, 2004; Hickman and Reaves, 2001). Between 1997 and 2000, police agencies - regardless of size of population served - reported an increase in full-time community policing officers. This growth translated into an overall increase of full-time community policing officers by 66% between 1997 and 2000; raising the national average of community policing officers per agency from 3 to 12 (Hickman and Reaves, 2003; Reaves and Goldberg, 2000). The institution of specialized personnel alone does not constitute the advancement of community policing, this model is also reflected in the policies, programs, and activities put into practice. From time-honored activities such as foot patrol to more progressive tactics such as problem-solving and neighborhood-based deployment, the diversified approaches offered by community policing have undoubtedly established it as a sound byte synonymous to police innovation (Weisburd and Eck, 2004).<sup>2</sup>

The advancement in community policing is due in part to the support of local, federal, and state funding programs (GAO, 2005; Worrall and Zhao, 2003). Since 1994, the federal government alone allocated 11.3 billion dollars in training support, hiring, and innovative program funding to over 118,768 police agencies across the country (Office of Community Oriented Policing Services, 2005c;

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<sup>&</sup>lt;sup>2</sup> While there is a distinct difference between community policing and problem-oriented policing on the basis of expected outcome, problem solving is often cited as a tool of the community policing model (Eck and Maguire, 2000; Goldstein, 1990; Office of Community Oriented Policing Services, 2005b). As such, I include problem solving as a community policing activity in the study.

GAO, 2003).<sup>3</sup> Recent research indicates that these investments are associated to improvements in aggregate crime trends (Zhao and Thurman, 2004; GAO, 2005). However, knowledge of the impact of specific community policing activities is surprisingly limited; leaving many questions unanswered.

One reason for this gap in knowledge is the ambiguity of community policing. The community policing model is arguably an elastic concept with a wide range of practical applications; a quality which inhibits assessment of effectiveness at the macro level (Bayley, 1994; Eck and Maguire, 2000; Greene and Mastrofski, 1988; Maguire, 2002; Weisburd and Braga, forthcoming). Prior research attempts to address this problem of definition, operationalizing community policing as federal funding programs (police hiring, innovative projects, and enhancements in police technology and equipment) (Zhao and Thurman, 2004; GAO, 2005), the presence of a community policing plan, and a summated index of police involvement in problem solving and community activities (MacDonald, 2002).<sup>4</sup> Although these measures are a step in the right direction they are not without limitations.

The first two measures (federal funding and presence of community policing plan) do not represent tangible community policing activities. Rather

<sup>&</sup>lt;sup>3</sup> These estimates reflect funding allocated through the Public Safety Partnership and Community Act of 1994, Title 1 of the Violent Crime Control and Law Enforcement Act, Office of Community Oriented Policing Services. Other law enforcement funding sources in support of similar programmatic elements include the Police Hiring Supplemental and the Byrne Grant program (GAO, 2005).

<sup>&</sup>lt;sup>4</sup> This focus of this study is on the macro-level benefits of community policing. The term macro infers a nationally representative study sample. Conversely, a micro-level assessment would focus on a single city, police jurisdiction or police organization. While there are many lessons to be

they are facilitators that encourage police involvement in community policing; support in the form of organizational policy, additional police, or technological advances to streamline police work and free officer time for involvement in community policing. While these facilitators are positively related to police involvement in community policing, knowledge of specific activities implemented by police as a result of these facilitators are unknown (GAO, 2005; Roth et al., 2000; Langworthy, 2002).

The community policing measure used by Mac Donald (2002) is the first to include actual police practices in a macro-level assessment of community policing. However, this measure is also limited in that the index lumps two separate types of community policing activities (problem solving and community meetings) into one single indicator of innovation. Therefore, the measure does not allow an assessment of distinct community policing activities. Further, unlike the measures used in prior research, Mac Donald's measure of community policing is limited to a one year period of study (GAO, 2005; Mac Donald, 2002; Zhao and Thurman, 2004). As the community policing model is highly dynamic both in interpretation and implementation, and is almost never implemented on a large scale, extended periods of study would provide a more accurate picture of the continuity of police involvement in specific activities as they relate to aggregate crime trends (Langworthy, 2002; Rosenbaum and Lurigio, 1994).

learned from micro-level studies, the primary focus of the manuscript is on macro-level assessments of community policing.

Better measures of community policing practices exist. Survey research examining the implementation of community policing provides a wealth of information on its practical application at the aggregate level (Bureau of Justice Statistics, 1997; Maguire and Katz, 2002; Maguire and Mastrofski, 2000; Rosenthal et al., 2002; Roth et al., 2000). We now know that the operational application of the community policing model can vary by the type, size, and geographic location of the police organization (Mastrofski and Maguire, 2000; Wycoff, 1994). These data have been vastly underutilized for the purpose of discerning police involvement in specific community policing practices over time and in studies seeking to assess the impact of these activities on aggregate crime outcomes (Langworthy, 2002; Maguire and Uchida, 2000).

Other reason for the limited knowledge on the macro level benefits of community policing relates to the analytic challenges inherent to this level of analysis (Eck and Maguire, 2001). The natural quasi-experimental conditions offered by the crime decline over the last decade offers a unique research opportunity to investigate the relationship between community policing and aggregate crime trends (Blumstein and Wallman, 2000; Levitt, 2004). While the quasi-experimental design is not without limitations, Weisburd et al. (2001) note that carefully designed quasi-experiments can yield statistically powerful studies

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<sup>&</sup>lt;sup>5</sup> See Maguire and Uchida (2000) for a review of survey research in community policing.

and offer the best alternative in situations where experimental designs are not feasible.<sup>6</sup>

Employing a quasi-experimental design, the current study examines the association between community policing and aggregate crime trends. It differs from prior research in three distinct ways. First, the analytic strategy is narrowly defined. The study focused on police jurisdictions vastly different from each other on the basis of crime rate change. This specification provided study conditions optimal for detecting whether a relationship between police involvement in the community policing activities and crime change exist. In essence, I hypothesized that if police involvement in community policing effected index crime rates, evidence of such would be highest if I compared community policing practices within jurisdictions measuring the greatest improvements in index crime rates to those with the most worsened. The study also differs from prior research by way of its measure of community policing. It defines community policing as police involvement in eight distinct activities; representing different dimensions of the community policing model. Additionally, the measure of police involvement in the activities of interest extends over a four year time period. Finally, the study analyzed each of the eight community policing activities individually, as well as a summated index, across total, property and violent index crime rate change.

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<sup>&</sup>lt;sup>6</sup> Quasi-experimental design defined as, "a comparison between multiple units with and without the program, controlling for factors, or a non-equivalent comparison group has only minor differences evident," merits a four on the Maryland five-point scientific methods scale (Sherman, et al., 1997:2.19).

The impact of community policing on crime continues to be of political and academic interest (Committee to Review Research, 2004; Eck and Maguire, 2000; GAO, 2003; GAO, 2005; Levitt, 2004; Mulhausen, 2001; Weisburd and Eck, 2004; Zhao and Thurman, 2004). The analytic strategy of the study offered an opportunity to shed light on this understudied phenomenon (Maguire and Uchida, 2000; Nagin, 1998; Sherman et al., 1997; Weisburd et al., 2001). The chapters that follow provide the conceptual framework, methodology, and findings of the research. The report concludes with a discussion on the implications of the findings on policy and future research.

#### CHAPTER II. COMMUNITY POLICING: DEFINITION AND PRACTICE

Community policing is arguably an ambiguous concept (Bayley, 1994; Correia, 2000; Crank and Langworthy, 1996; Greene and Mastrofski, 1988). As such, a large portion of the community policing literature is dedicated to the debate surrounding the meaning of community policing and the state of knowledge regarding the practical application of the philosophy by police organizations. The following sections review the issues surrounding the problem of definition of community policing; highlighting the value of focusing on police involvement in specific activities in studies of effectiveness.

#### The Problem of Definition

In the simplest of terms, community policing is the idea that strong police-citizen relationships yield positive public safety benefits (Kelling and Coles, 1996; Wilson, 1968). The translation of this idea, however, into a lucid and generally applicable definition has not been as straightforward. The most comprehensive definition of community policing is that put forth by the Department of Justice, Office of Community Oriented Policing Services (COPS, 2005b):

Community policing focuses on crime and social disorder through the delivery of police services that includes aspects of traditional law enforcement, as well as prevention, problem solving, community engagements and partnerships. The community-policing model balances reactive responses to calls for service with proactive problem solving centered on the causes of crime and disorder. Community policing requires police and citizens to join together as partners in the course of both identifying and effectively addressing these issues.

This definition highlights four components or "ingredients" of the community policing model: (1) crime prevention, (2) problem solving, (3) community engagement, and (4) partnerships. While each of these four components is not always labeled in exactly the same matter across definitions of community policing put forth by police practitioners and scholars alike, there is a general consensus that these components represent the core elements of a community policing model (Mastrofski and Ritti, 2000; Sherman and Eck, 2002).

Beyond the conceptualization of community policing, however, there is considerable debate surrounding the operational definition of community policing. What does community policing look like in practice? The debate over the problem of definition can be viewed from two perspectives – one positive and one negative. Looking at the positive, the operational definition of community policing is everything the model proposes it should be – elastic (Maguire and Katz, 2002; Weisburd and Braga, Forthcoming). In essence, the model allows police to build upon their collective experiences to create the right "recipe" of "ingredients" reflecting what community policing means in their community. Consequently, community policing can look very different across police organizations and even within police organizations over time. Thus efforts to construct a universal measure of community policing is further muddled by the variety of "ingredients" of individual police agency's community policing "recipe", with some agencies involved in more diverse types and numbers of

specific activities than others (Maguire and Mastrofski, 2000; Maguire and Katz, 2002).

Many agree that the elasticity of community policing is one of its greatest strengths (Green and Mastrofski, 1988; Maguire and Katz, 2002). Others, holding the negative side of the coin facing up, view the ambiguity and incongruence of community policing's definition is a major threat to its principles, claiming they are nothing more than conjecture (Bayley, 1988; Crank and Langworthy, 1996; King and Lab, 2000; Rosenbaum and Lurigio, 1994; Skolnik and Bayley, 1988). Bayley (1988) writes, "Despite the benefits claimed for community policing, programmatic implementation of it has been very uneven. Although widely, almost universally, said to be important, it means different things to different people. . .community policing on the ground often seems less a program than a set of aspirations wrapped in a slogan" (p. 225).

In response to these criticisms, supporters of community policing note that communities vary by way of public safety needs and crime-related challenges. As such, the community policing model cannot offer a universal prescriptive strategy. While there has been little national-level empirical evidence quashing this debate, research studying the implementation of community policing provides us with a clearer picture of what the model looks like in practice and emphasizes the need to focus on police involvement in specific community policing activities in inquires of effectiveness (Maguire and Katz, 2002).

#### **Community Policing in Practice**

Early studies of community policing focus on the practical application of the model. Methods of collecting these data include intensive cases studies (Skogan, 1994; Mastrofski et al., 2003; Wycoff and Skogan, 1993), surveys (Bureau of Justice Statistics, 1997, 1999, 2000; Maguire et al., 1997; Roth et al., 2000), and systematic observations (Mastrofski et al., 2003; Skogan et al., 2002). The findings of these studies illustrate the breadth of community policing activities across all levels of the police organization and offer insight into patterns of participation. Using the classification scheme put forth by Sherman and Eck (2002) as a framework, the following sections discuss the specific activities associated with community policing. The categorization is based upon areas of the police organization under which police implement community policing: (1) internal policies and procedures, (2) external patrol tactics, (3) proactive prevention strategies, and (4) community involvement.

#### **Internal Policies and Procedures**

Police agencies adopt new policies and procedures to shift organization focus towards community policing. Examples include redefining mission statements, developing community policing plans, requiring community policing training for new-recruits and in-service personnel (both sworn and non-sworn). Police also modify performance evaluation criterion to include community-

<sup>7</sup> See Maguire and Mastrofski (2000) for a review of the themes in community policing.

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policing activity measures thereby encouraging police to engage in proactive crime prevention activities.

Police may survey citizens on their perceptions of fear, satisfaction with police services, and other crime related concerns. The community policing philosophy takes this one step further and encourages police agencies to utilize survey information to inform organizational decisions such as alignment of resources, prioritization of crime problems, providing information to field officers, etc. Any use of citizen survey information by police fosters proactive and informed decisions in policy, procedures, and strategies.

To improve police-citizen contacts, agencies dedicate full-time sworn personnel to serve as community policing officers. Community policing officers often act as a liaison between the police organization and the community.

Examples of roles for community policing officers include identifying and prioritizing community crime problems and initiating and managing problemoriented solutions to these problems (Farrell, 1988). Although the role of a community policing officer may vary greatly by police jurisdiction (Weisburd, 1988), designation of full-time sworn personnel as community policing officer sends a message that the community is important to the agency. In theory, the officer's time is also designated to the implementation and coordination of activities consistent with the community policing philosophy (e.g. proactive crime prevention, community engagement, etc.).

Agencies also decentralize organizational management structures to foster organizational capacity to engage in proactive crime prevention strategies. For

example, many give middle managers and patrol officers more authority to make decisions at the community level. Decentralization, including the creation of neighborhood substations (mobile or fixed), improves the accessibility of police to the community, thereby improving the quality and quantity of police-citizen contact. Increasing police manager's control over field operations has been shown to improve morale (Wycoff and Skogan, 1993) and improve department standing with other agencies (Bayley and Shearing, 2001).

#### **External Patrol Tactics**

Police use alternative patrol tactics to increases opportunities for interactions with the community. Supplementing traditional vehicle patrol with foot patrol removes officers from patrol cars. This exposure can reduce opportunities for crime and increase opportunities for communications with citizens (Sherman and Eck, 2002). Interactions with the community can elevate perceptions of safety and increase opportunities for information sharing and coordination of additional police resources (e.g. civilian volunteers, partnerships) (Kelling and Coles, 1996). Communities may differ in the feasibility of implementing alternative patrols strategies. In some cities, or areas of cities, foot patrol is not a pragmatic approach (e.g. suburban areas). Bicycles have allowed these jurisdictions to benefit from this type of patrol tactic. Many urban areas use both bike and foot patrol. These activities not only increase opportunities for police-citizen interaction, but provide a vehicle for information sharing and partnership building.

While police historically utilize geographic boundaries for deployment purposes, community policing encourages police to re-define deployment boundaries to increase contact with the community. Structuring patrol beats into smaller units based on neighborhoods rather than standardized boundaries such as census tracts increases police services to citizens. Additionally, regular assignment to a specific area or beat allows police to build familiarity with community residents and build knowledge on persistent crime problems in their area. These assignments also provide an opportunity for the development of partnerships and relationships with the community that can foster proactive responses and identification of alternative resources (e.g. intelligence, in-kind services) (Wycoff and Skogan, 1993). The better police understand the community they serve, the less they base decisions (e.g. arrests, use of force) on objective characteristics (race, social class) and empirical generalizations between those characteristics and causes of crime and disorder (Bayley, 1988; Tyler, 2004).

#### **Proactive Crime Strategies**

Police agencies utilize the tools of problem solving to develop proactive crime strategies in partnership with the community (Eck and Spelman, 1987).

Problem-solving partnerships provide an opportunity for police to engage community stakeholders and develop collaborative responses to crime problems.

The Office of Community-Oriented Policing Services sponsored the development and dissemination of problem-solving guidebooks. The guidebooks follow the SARA model (Scan, Analyze, Response, Assess) developed by Goldstein (1990).

The four-step framework provide police and citizens assistance in developing solvable solutions to specific crime problems including vehicle theft, robbery, assaults in and around bars, among others.<sup>8</sup>

Police organizations may enter into problem solving 'contracts' with community partners. These informal agreements demonstrate a commitment to formulating and executing proactive responses to crime. Successes in problem solving strengthen police ambition to seek out other 'solvable' community crime problems. Additionally, problem-solving activities promote the development of partnerships with community stakeholders, including other criminal justice agencies (federal, state and local), social service organizations, community advocacy groups and schools.

Proactive police strategies benefit from the technological advances in recent years (Bratton, 1998). Crime mapping and analysis have provided police with the capability to collect and analyze data faster and more reliably than ever before. Although some studies examining community policing effectiveness include crime analysis as a community policing activity (GAO, 2005), it is viewed here more as a facilitator to community policing - informing place-based, community driven responses to crime problems - and not a distinctive community policing activity.

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<sup>&</sup>lt;sup>8</sup> Information on the problem solving guidebooks is available at http://www.popcenter.org.

<sup>&</sup>lt;sup>9</sup> Problem solving contracts are informal agreements among partners. The purpose of the 'contract' is to define the goals and objectives of the project as well as expectations of the collaboration.

#### **Community Involvement**

Police engage in many activities that foster interaction with the community including neighborhood watch and meetings with community groups. The intensity of community group involvement may vary over time. However, the commitment of the police to meet with citizens and community groups creates a mechanism to build relationships. Examples of the types of community groups police meet with include advocacy groups, school groups, business groups, and faith-based organizations. These meetings offer an opportunity for police to survey citizens to gauge satisfaction, perceptions of safety, and crime experiences. The resources expended by the police to attend these meetings are minimal, yet the potential for information sharing, and the discussions and relationships that stem from them, can produce proactive solutions that yield crime reduction benefits and promote positive police-citizen interactions.

Civilian volunteers trained in community policing provide valuable assistance to police in identifying crime concerns and developing proactive solutions to crime problems. Civilians also serve as a liaison or spokesperson between the community and the police.

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#### CHAPTER III. COMMUNITY POLICING AND CRIME

Community policing is the most widely cited explanation for the decline in index crime rates over the last decade (Levitt, 2004). The following section reviews the research evidence on the effect of community policing on aggregate crime; highlighting the gaps in knowledge and the methodological challenges that contribute to the paucity of evidence in studies of this kind.

#### **Evidence of Community Policing Effectiveness**

Accolades of community policing effectiveness are based in small part to a handful of correlational studies and more largely to assessments conducted by long-term research partnerships and anecdotal accounts of police practitioners. While there is strong empirical evidence supporting community policing improves citizen satisfaction with police and decreases citizen fear of crime and perceptions of disorder, research supporting the model's impact on aggregate crime trends remains inconclusive (Committee to Review Research, 2004; Sherman 1997; Eck and Maguire, 2001; Weisburd and Eck, 2004).<sup>10</sup>

Recent reviews of the evidence suggest community policing is most effective when efforts are targeted and include community involvement in priority setting or focus on improving police legitimacy (Sherman, 1997; Weisburd and Eck, 2004). Door-to-door visits, for example, are found to be effective in

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Eck, 2004). The following section draws heavily on the findings of these reviews.

<sup>&</sup>lt;sup>10</sup> The motivation to unravel the causes of the crime drop in America elevated interests surrounding the possible contributions of police to this decline (Blumstein and Wallman, 2000; Eck and Maguire, 2000; Levitt, 2004). As a result, the field has taken pause to reflect on the research evidence to date, assessing the status of what is known of the effects of police on crime (Committee to Review Research, 2004; Eck and Maguire, 2002; Sherman, 1997; Weisburd and

reducing crime and disorder. Research on foot patrol is mixed with some studies finding both positive (Trajanowicz, 1986) and negative effects on crime (Bowers and Hirsch, 1987; Police Foundation, 1981) while others only detecting benefits in reducing citizen fear of crime (Kelling, 1981). The research evidence is strongest for problem solving (Committee to Review Research, 2004; Sherman, 1997; Weisburd and Eck, 2004). The strategy provides a framework for police to develop focused responses to specific crime problems and has repeatedly demonstrated effectiveness in reducing violent and property crimes (Eck and Spelman, 1987; Kelling and Sousa, 2001), domestic violence (Sherman and Strang, 1996), gun violence (Braga et al., 2001), and general disorder (Eck and Spelman, 1987).

Most studies of community policing effectiveness assess outcomes within relatively short time periods of implementation. For example, in the most rigorous examination of foot patrol, the evaluation period was 12 months (February 1978-January 1979) (Kelling, 1981). Comparatively, long-term studies of community policing, such as the six-year evaluation of the Chicago Alternative Policing Program (CAPS) program, provide valuable insight on the relationship between community policing and crime over time. While not based on rigorous research, the observations of these studies on the overall impact of community policing should not be discounted. In their evaluation of the CAPS program, Skogan et al. (2002) note, "[a]s evidenced by the impact of CAPS in the original prototype districts and a set of matched comparison areas, the evaluation indicated that the program did reduce crime in those districts, including burglary and auto

theft in one district, street crime in another, and gang and drug problems in two other districts" (p. 23). In another long-term study (3 years) of community policing in Madison, Wisconsin, Wycoff and Skogan (1993) conclude that organizational changes in support of community policing (i.e. coordinated policing and decentralized decision making) is associated with reductions in crime and citizen's concern for crime. Mazerolle et al. (1998) also conclude that community policing is likely to reduce crime over time. These research studies illustrate that community policing is a plausible explanation to improvements in aggregate crime rates at the micro-level.

To date, three studies focus on the macro-level crime benefits of community policing. Zhao and Thurman (2004) analyzed the effect of federal community policing funding programs on macro-level crime. <sup>11</sup> Using six years of panel data, the analyses found that federal hiring grants and innovative grant programs were significantly and positively related to improvements in violent and property crime. Specifically, the study found that for every dollar of police hiring funding received per resident, there was a decline of 5.26 incidents of violent crime and 21.63 incidents of property crime per 100,000 residents. Innovative grant programs had higher crime reduction benefits. For every dollar of innovative funding received, there was a decline of 12.93 violent incidents of

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<sup>&</sup>lt;sup>11</sup> COPS funding programs include police hiring, innovative projects, and technology. The \$7.32 billion of funding allocation analyzed by GAO included \$4.69 in hiring grants (GAO, 2005:8). The remainder was technology and innovative grant programs. Notably, innovative grant programs accounted for only 5% of all funding (Zhao and Thurman, 2004).

violent crime and 41.93 incidents of property crime per 100,000 residents. Technology programs were not found to be significantly related to crime.

The study conducted by Zhao and Thurman (2004) was the first of its kind to examine the macro-level benefits of community policing. This undoubtedly draws a spotlight upon its methodological approach and subsequent findings. The Government Accountability Office was commissioned to review the study for its technical merit. Their assessment of the methodology employed by Zhao and Thurman concluded that, due to inconsistent findings by city size and inappropriate model specification, the research should be interpreted with caution (GAO, 2003).

In 2005, the GAO reported preliminary findings of their analyses of the Zhao and Thurman data. In their study, the GAO improved upon cited methodological weaknesses by adding controls for other police expenditures and participation in community policing regardless of programmatic funding received (GAO, 2003, GAO, 2005). While their analyses did not find an effect of community policing as large as Zhao and Thurman (2004), the GAO study supports the proposition that community policing funding programs contributed to improvements in index crime rates. Specifically, examining crime rate change between 1993 and 2000, COPS grants allocated up to 1998 (\$785M) could account for approximately 8% of the total decline in crime and 13% of the decline in violent crime (GAO, 2005). While these findings suggest community policing played a role in the declining crime rates, they do not provide us with sufficient

knowledge of the benefits of specific community policing strategies on study outcomes.

Mac Donald (2002) improves the measure of community policing in macro-level research; defining community policing as police involvement in specific strategies – presence of a community policing plan and an index of community policing activities. The summated index of community policing activities reflected police involvement in two types of community activities problem-solving and community activities. In his analysis he compared the effectives of the community policing measures to aggressive enforcement tactics in reducing occurrences of robbery and homicide. Overall, MacDonald's findings contradict those of the previous studies that used broadly defined measure of community policing (funding programs) (Zhao and Thurman, 2004; GAO, 2005). While the findings support the effectiveness of aggressive enforcement in rates of robbery, the defined community policing activities were not significantly related to reduction in robbery or homicide. These findings support the view that focused police practices can produce positive outcomes when targeted to specific crimes. More importantly, however, the research demonstrates the importance of studies of community policing in utilizing clearly defined measures of community policing to uncover its true relationship to crime change.

In sum, the research on the effectiveness of community policing on aggregate crime trends remains inconclusive. Prior studies suggest that effectiveness of community policing can vary by type of crime, (higher for total crime), element of community policing activity (higher for innovative grant

programs), and size of policing jurisdiction (higher for agencies serving populations greater than 10,000) (GAO, 2005; Zhao and Thurman, 2004). To date, research has yet to confirm the extent to which police involvement in community policing activities relate to aggregate crime trends. Most importantly, prior research indicates that the effectiveness of community policing disappears when studies utilize more narrowly defined measures of community policing across different lengths of study; emphasizing the challenges inherent to studies of this kind.

#### **Methodological Challenges in Macro-Level Studies**

#### Reliable, Valid Measures of Police Practices

Measurement criteria of a highly dynamic concept such as community policing is challenging (Maguire and Uchida, 2000; Uchida et al., 1986). Many organizations tailor community policing practices to local jurisdictions.

Subsequently, similarly labeled activities are often implemented quite differently between agencies (Maguire and Mastrofski, 2000; Wycoff, 1994). As such, the validity and reliability of the measurement of community policing in macro-level studies should be carefully considered. Further, the importance of clear and neutral measures is paramount (Langworthy, 2002; Maguire, 2002; Uchida et al., 1986).

Survey research offers a practical source for measures of police practices at the aggregate level. <sup>12</sup> In fact, numerous national surveys of community policing by various interest organizations, including non-profit research organizations, universities and the federal government, are in existence (Maguire and Uchida, 2000). Although these data offer the best means by which to study variation in community policing practices in the larger context, they are not without limitations. The unit of analysis is an organization as opposed to an individual. In these cases, survey questions must be framed with clear, concrete responses to reduce the likelihood of perceived value judgments and control for informant bias to improve the quality and reliability of the data (Maguire, 2002).

Multi-wave surveys can control for many potential biases by using consistent questions in the survey instrument (Uchida et al., 1986). An example of this type of survey is the Bureau of Justice Statistics (BJS) Law Enforcement Management Administrative Statistics Survey (LEMAS). BJS administered the first wave of the LEMAS in 1987. Subsequent administrations occurred in 1990, 1993, 1997, 1999, 2000, and 2003. With a consistently high response rate, the resulting databases house information on police personnel, operations, expenditures, equipment, the use of technology, and activities of over 3,412

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<sup>&</sup>lt;sup>12</sup> See Maguire and Uchida (2000) for an overview of national level surveys of community policing conducted in the United States.

<sup>&</sup>lt;sup>13</sup> The findings of the 2003 administration of the LEMAS survey are scheduled for released in 2006. (Personal communication with author.)

publicly-funded state and local law enforcement agencies nation-wide (Reeves and Goldberg, 2000).<sup>14</sup>

In collaboration with the Office of Community Oriented Policing Services (COPS), BJS added a community policing section to the 1997 LEMAS survey. This section questions respondents on specific community policing practices. For example, respondents report the number of police officers serving as full-time community policing officers. Questions indicating participation in specific community policing practices such as bike patrol and foot patrol are also included. The community policing section has appeared in every administration of the survey since its introduction in 1997.

Another benefit of multi-wave survey data is that it provides a mechanism to assess police participation in specific activities over time. These measures allow researchers to assess whether a police agency instituted the activity as a permanent policy or tactic or was simply a passing phase (Eck and Maguire, 2000; King, 2000; Roth et al., 2000; Uchida et al., 1986). To date, these data have been vastly underutilized in assessing the effectiveness of police practices. As interest in police administrative data moves beyond its traditional use in descriptive analysis towards use in explanatory research, longitudinal data collected by these surveys will be pivotal in assessing the sustainability of

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<sup>&</sup>lt;sup>14</sup> See Langworthy (2002) and Uchida et al. (1986) for overviews of Law Enforcement Management Statistics. See Reaves and Hickman (1999) for the detailed discussion of the methodology of the BJS LEMAS survey.

discernible, distinct, evident marked patterns of police practices (Langworthy, 2002; Uchida et al., 1986).

Overall, multi-wave surveys of police practices offer the best aggregate level measure of police involvement in community policing activities. Despite these advancements, these data do not provide the researcher with enough information to discern both the scope of reported activities (which crimes they focus on and where) or the dosage of each activity (how much they practice it) (Maguire and Katz, 2002; Maguire and Uchida, 2000). Although there have been many appeals in the literature for more effective data collection in support of police research, aggregate studies on the implementation of community policing remains an understudied area in policing (Alpert et al., 2001; Maguire and Uchida, 2000; Sherman and Eck, 2002; Wycoff, 1994).

#### Analytic Strategy

In social science research, unraveling the relationship between the defined explanatory variables and confounding factors can be challenging (Eck and Maguire, 2000; Nagin, 1998). In fact, model misspecification is one of the most cited weaknesses in analyses of the macro-level outcomes of police effectiveness (Eck and Maguire, 2000; GAO, 2003; GAO, 2005; Weisburd and Eck, 2004). The study conducted by Zhao and Thurman (2004) was the first of its kind to examine the macro-level benefits of community policing. This undoubtedly draws a spotlight upon its methodological approach and subsequent findings.

Advanced modeling techniques such as fixed-effect or random effect modeling can adjust for some of the specification error inherent to aggregate

studies of this kind (GAO, 2005; Mac Donald, 2002; Zhao and Thurman, 2004). Additionally, including variables in the explanatory model to control for systematic non-random variation not accounted for by the defined explanatory variables can further reduce specification errors (Marvell and Moody, 1996; Nagin, 1998). Examples of additional or instrumental variables used by prior macro-level assessments of police outcomes include electoral cycles (Levitt, 1997) and place-level dummy variables (GAO, 2005; Zhao and Thurman, 2004). While these techniques do result in better defined models, alternative analytic strategies have yet to be fully explored (Langworthy, 2002; Levitt, 2004).

The current research takes a different approach from those traditionally taken in studies of police effectiveness. As in prior research, the analyses sought to identify factors related to shifts in aggregate crime rates. However, the current study is different than prior research in that the quasi-experimental designed allowed the analytic strategy to focus on jurisdictions determined to be vastly different on the basis of crime. In essence, the research questioned whether police in jurisdictions measuring decreases in crime were more likely to implement community policing than jurisdictions measuring increases in crime? If so, which activities? Does the number of community policing activities make a difference?

#### **Does What Police Do Matter?**

Research assumes an important role in identifying effective methods of policing (Sherman, 2004; Weisburd and Eck, 2004). While it is unrealistic to assume that the practice of community policing is in isolation of other plausibly

effective policing methods (e.g. other innovative police strategies, specialized enforcement, increases in police strength) or place-based social and economic phenomenon unrelated to police work (e.g. shifts in demographics and economics), we now know that police can affect crime depending on what they do (Sherman, 1995; Sherman, 1997; Weisburd and Eck, 2004). However, while community policing is one of the most cited explanations to the decline in national crime rates, there is limited evidence supporting whether a relationship truly exists (Blumstein and Wallman, 2000; Committee to Review Research, 2004; Levitt, 2004; Maguire and Eck, 2000; Weisburd and Eck, 2004). Considering the methodological challenges inherent to macro-level assessments of police practices, the analytic strategy of the current research provides a necessary step towards uncovering a clearer picture of the relationship between community policing and declining crime rates. The study builds upon existing knowledge by focusing attention on the relationship between police involvement in specific community policing activities and improvements in index crime rates over time.

#### CHAPTER IV. METHODOLOGY

#### Overview

Research on the explanation of police effectiveness at the macro-level commonly suffers from model misspecification issues as well as measurement inaccuracies (Eck and Maguire, 2000; GAO, 2003; Marvell and Moody, 1996; Nagin, 1998). The model misspecification problem lies in the nature of research on aggregate crime. Many factors may influence changes in crime rates, such as economics, demographic changes, culture shifts, legitimacy of social institutes and police practices (LaFree, 1998; Messner and Rosenfeld, 1994; Eck and Maguire, 2000; Blumstein and Wallman, 2001). Consequently, it is extremely difficult to include all relevant variables in the explanatory model. While this limitation is common in studies of this kind, specification difficulties contribute to the likelihood of aggregation biases in explanatory models of crime change (Eck and Maguire, 2002; Nagin, 1998). As in other studies, the current research sought to identify potential unmeasured confounding factors and their impact on study outcomes.

The inaccuracy of the measurement, however, is related to the quality of data itself. Indeed, the reliability and validity of data on police practices and the actual content of what has been measured influence the quality of measurement (Uchida et al., 1986; Maguire and Uchida, 2000; Maguire, 2002). Recent research demonstrates that multi-wave establishment surveys of police practices reduce these inaccuracies (Maguire, 2002; Maguire and Katz, 2002). However, much of these data have yet to be examined for their utility in discerning police

involvement in specific activities over time or police effectiveness (Langworthy, 2000). In consideration of the challenges in aggregate studies of community policing effectiveness, the research offers a creative approach from those traditionally taken.

The study differs from earlier work in several important ways. First, while the study utilizes a quasi-experimental design, the focus is very narrow. I theorized that if a relationship between community policing and crime existed, evidence of such would be highest if I compared community policing practices between police jurisdictions determined to be vastly different on the basis of crime rate change. Rather than using straight differences in crime rate change as my dependent variable, regression techniques allowed me to create the best possible conditions to detect whether a relationship between community policing and improvements in aggregate crime rates exist.

I defined an OLS regression model of crime rate change based on predictors commonly associated with crime (e.g. employment, population demographics); the residual (U) of this model representing all additional explanations relating to variation in the dependent variable (e.g. confounds, specification error) (Hanushek and Jackson, 1977). For the purpose of this study, I refer to the residual (U) as "unexplained" crime change. The research relied on the assumption that the residual would also capture any effect of police on crime change. I created the analysis subgroups based on this indicator of "unexplained" crime change. In essence, all else being equal (population demographics,

economics), these subgroups represent jurisdictions within the sample measuring the highest amount of unexplained crime change within the period of study.

The second point of departure of the current study from prior research is its definition of community policing. It is the first to utilize measures of police involvement in distinct community policing activities over an extended period of time. Specifically, the study assessed police involvement in eight community policing activities. Utilizing multi-wave panel data of police practices, I created measures of community policing I believed to be the best measure of what police do in support of community policing. These activities include external patrol tactics, proactive crime strategies, and community involvement. Linking survey responses indicating the sample's participation in each activity in 1997, 1999, and 2000, I created an indicator that allowed me to discern the extent of involvement in each of the activities across the four year period of study. I then tested whether there was an association between membership in the six defined subgroups of crime rate change (improved/worsened total, property and violent index crime rates) and police involvement in the community policing activities of interest.

While recognizing the issues surrounding aggregate studies of police practices, the research fills the gap in knowledge on whether community policing activities are related to aggregate crime trends. The following sections provide the details of the research methodology. First, it describes the sample upon which the subgroups were drawn and the data sources for the measures of police activities, aggregate crime rates, and structural level indicators. The next section provides the analysis procedures of the research. It begins with how I defined the

analysis subgroups and the meaning of the indicator of "unexplained" crime rate change. Next, I define the community policing activities of interest and the analyses performed to test the association between the two indicators of community policing involvement and membership in the defined crime rate change subgroups.

## **Sample**

The study sample represents the population (N=454) of jurisdictions policed by large, self-reporting, municipal-level, local police agencies as reported by the 1996 Bureau of Justice Statistics Census of Local Law Enforcement Agencies (Directory Survey of Law Enforcement Agencies) (Reeves and Goldberg, 1998; Reeves and Goldberg, 1999). Large, self-reporting police agencies are defined as: (1) employment of 100 or more full-time sworn officers as of June 1996; (2) employment of 100 or more full-time sworn officers as of June 1997; (3) employment of 50 or more full-time uniformed sworn officers with regular assigned duties that include responding to calls for service (Reeves and Goldberg 1999: summary tables p. x). Within local law enforcement agencies employing 100 or more officers, municipal agencies are the most prevalent type of local law enforcement agency (69.7%), followed by Sheriff (25.6%) and County police (4.75%) (Reeves and Goldberg, 1999).

While the focus of the research on jurisdictions policed by large, municipal level police agencies limits the generalizability of study findings, it was necessary to do so for important reasons. First, research demonstrates that police involvement in community policing activities varies by the type and size of

policing agency (Bureau of Justice Statistics, 2000; Maguire, et al., 1997; Wycoff, 1994). Municipal police agencies report a higher rate of participation over state or other types of local police departments (Bureau of Justice Statistics, 2000; Reeves and Hickman, 2001; Wycoff, 1994). Secondly, larger agencies generally report rates of involvement in community policing significantly higher than smaller agencies (Hickman and Reeves, 2001). Therefore, to make appropriate comparisons between police agencies it was necessary to limit the analysis to a single category of law enforcement agency.

Data availability also drove the decision to focus on large, municipal agencies. Panel data detailing specific community policing activities of police over several points of time is limited. The LEMAS data represents the only study of this kind administered across multiple waves. Further, while LEMAS is administered to a sample of smaller police agencies, BJS surveys the entire population of large, municipal law enforcement agencies (Reaves and Goldberg, 1999). Thus, the narrow focus simplifies the analyses by avoiding procedures to account for sampling of smaller police agencies. Second, place-level structural data are not readily available for smaller jurisdictions. Although, prior research examining the impact of community policing utilize county-level measures as proxy indicators of these variables, it was not an appropriate strategy for this project in that multiple law enforcement agencies are likely to be active within the same county (GAO, 2005; Mulhausen, 2001; Zhao and Thurman, 2004). Therefore, it would be inappropriate to attribute the police activities of one police agency to fluctuations in county-level crime.

#### **Data**

The dataset created for this project combines four unique sources. (See Table 1.) The 1997, 1999, and 2000 Bureau of Justice Statistics, Law Enforcement Management Statistics Surveys (LEMAS) provided indicators of the sample's community policing practices across the four-year period of study (Bureau of Justice Statistics, 1997, 1999, 2000). (See Appendix D.) The Federal Bureau of Investigation, Uniform Crime Reports provided the 1997 and 2000 total, violent and property index crime rates per 100,000 residents (Federal Bureau of Investigation, 1997, 2000). The 2000 Census and 2000 Bureau of Labor Statistics provided structural-level indicators. Linking multiple data sources undoubtedly raises concern for unmatchable and/or unavailable data. There were circumstances of such in the present study. <sup>15</sup> Of the 474 cases in the full sample, 24 (5%) did not respond to all three waves of the LEMAS survey. An additional 75 (15.8%) had incomplete structural or crime data. <sup>16</sup> The analysis subgroups created for the study were drawn from the remaining sample of 375 large, municipal-level agencies.<sup>17</sup>

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<sup>&</sup>lt;sup>15</sup> I verified successful matching across the seven data sets on a randomly selected group of cases. Additionally, I compared the final dataset to a similar dataset created by Zhao and Thurman (2004) and found that they were comparable. I received the dataset from Thurman Zhao in April, 2003. (Memorandum on file with author.)

<sup>&</sup>lt;sup>16</sup> Maltz (1999) notes that imputation errors such as incomplete reporting, non-reporting, and zero population are inherent to UCR data and can be problematic in studies utilizing these data (1999:26). As such, I coded cases for which UCR data was not based on the full 12 month reporting cycle or had zero-population values as missing.

<sup>&</sup>lt;sup>17</sup> Similar studies report comparable rates of missing data (Zhao and Thurman, 2004; Kelling and Sousa, 2001; MacDonald, 2002).

# **Analysis Procedures**

I divided the analysis procedures into three steps. First, I defined the analysis subgroups. The six subgroups created represent police jurisdictions selected from the full sample based upon their ranking on a measure of "unexplained" change in total, property, and violent index rates between 1997 and 2000. (Step I below provides a detailed explanation of the measure of "unexplained" crime change.) Next, linking survey responses from the 1997, 1999, and 2000 LEMAS, I created indicators of police involvement in eight community policing activities across the four year period of study. Finally, I tested the relationship between membership in the subgroups of crime rate change and continued involvement in the community policing activities of interest.

# **Step I. Defining the Analysis Subgroups**

The analysis subgroups represent cases (police jurisdictions) within the study sample measuring deviant shifts in total, property and violent index crime rates between 1997 and 2000. For the purpose of this study, "unexplained" crime change refers to fluctuations in index crime rates above those explained by traditional factors commonly associated with crime trends (e.g. economic indicators, population demographics). Defining the subgroups required a two-stage procedure. In Step I(a), regression models of index crime rate change allowed me to isolate variation in crime rates explained by the defined model from that left "unexplained" into a single variable - the stochastic or residual (U). In Step I(b), I selected cases from the study sample based on this measure of unexplained crime change. Selecting the outlier cases on the ordered distribution

of the residual (U), the resulting subgroups represent police jurisdictions within the study sample measuring the highest levels of "unexplained" improved and worsened index crime rates between 1997 and 2000.

Step I(a): Isolating Unexplained Change in Crime

OLS Regression Model of Crime Rate Change: Defined

Dependent Variables

The dependent variables equal the difference between total (t), property (p), and violent (v) index crimes rates between 1997 and 2000 (RATEDIF <sub>t,p,v</sub>). The Federal Bureau of Investigation, Uniform Crime Reports provided the 1997 and 2000 total, violent, and property index crime rates per 100,000 population. (See Table 1.) The property crime rate includes larceny-theft, motor-vehicle theft, and burglary. The violent crime rate includes murder, rape, assault, and robbery. Total crime rate equals the combined violent and property crime rates. The equation is as follows:

RATEDIF<sub>t,p,v</sub> = 
$$(1997 \text{ RATE}_{t,p,v}) - (2000 \text{ RATE}_{t,p,v})$$

**Predictor Variables** 

The predictors included in the OLS model of explained crime change include those traditionally used in social science research and studies of aggregate crime including population demographics, economic measures, geographic region, and population density (Allison, 1976; GAO, 2005; Mac Donald, 2002;

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<sup>18</sup> Arson is excluded in both the property and total crime rates.

Kelling and Sousa, 2001; Sampson and Groves, 1989; Zhao and Thurman, 2004). Seven indicators represent data reported by the 2000 Census and 2000 Bureau of Labor Statistics including, percent minority (MINORITY), percent female head of household with children under 18 years of age (FHHC), percent of population between the ages of 15 and 24 (YOUNG), percent living in same house for five years or more (SAMEHS), percent housing owner occupied (OWNER), population density (POPDEN), and percent unemployed (UEMPLOY). In addition, I included the 1997 crime rate (97RATE) to control for regression to the mean (Hanushek and Jackson, 1977). In studies examining change (difference) in a dependent variable, the addition of base rate variable (in this case the 1997 index crime rate) controls for any unexplained deviations above the average rate change for that group.<sup>19</sup>

Research has consistently demonstrated that even within large municipal police agencies, participation in community policing activities varies both by the size of police agency and geographic region (Maguire et al., 2000; Maguire, et al., 2003; Wycoff, 1994; Zhao and Thurman, 2004). Specifically, larger municipal police departments are more likely to engage in community policing, as are those located in western parts of the United States (Wycoff, 1994; Hickman and Reeves, 2001). Accordingly, I included the natural log of full-time equivalent

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<sup>&</sup>lt;sup>19</sup> As the OLS model is used for only as a mechanism for identification and not explanation, I did not strive for a perfectly fit model with a high proportion of explained variance. Therefore, I included only those explanatory variables most commonly associated with crime (Allison, 1976; Sampson and Groves, 1989).

personnel (FTELOG) and the regional location of the police jurisdiction (REGION) to account for this variation.

The resulting equation for the regression model explaining changes in total (t), property (p), and violent (v) crime rates between 1997 and 2000 (RATEDIF) is:

RATEDIF<sub>(t,p,v)</sub> = 
$$\alpha + B_1$$
 (97RATE<sub>t,p,v</sub>) +  $B_2$  (MINORITY) +  $B_3$  (YOUNG) +  $B_4$  (FHHC) +  $B_5$  (OWNER) +  $B_6$  (SAMEHS) +  $B_7$  (EMPLOY) +  $B_8$  (POPDEN) +  $B_9$  (REGION) +  $B_{10}$  (FTELOG) +  $U$ 

The OLS Regression Model of Crime Rate Change: Results

Table 2 reports the crime rates and crime rate changes for the study sample. Notably, a negative rate difference indicates an increase in index crime rates (worsened) between 1997 and 2000. A positive rate difference indicates a decrease (improvement). Overall, the sample averaged a decrease in crime between 1997 and 2000. Total crime rates declined by 16%, violent crime by 19%, and property crime by almost 16%. These changes are consistent with national measures of aggregate crime rate change during the same time period. Between 1997 and 2000 national total index crime rates declined 15.7%, violent index crime rates declined 15.7%, and property index crime rates declined 16.1%.

mean.

<sup>21</sup> Bureau of Justice Statistics, Data On-Line (accessed on March 28, 2005 via the World Wide Web at http://bjsdata.ojp.usdoj.gov/dataonline/). Notably, across all three types of crime change, there were cases measuring increases in index crime rates between 1997 and 2000. Twelve percent of the sample measured increases in total index crime rates between 1997 and 2000; 13%

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<sup>&</sup>lt;sup>20</sup> To ensure that extreme crime rate changes were not due to errors in source data or computation, I plotted the distribution of each crime rate change to identify any usual, outlying cases. I validated all crime rate computations for cases falling within two standard deviations from the

Table 2 also reports the descriptive statistics of the predictor variables included in the OLS regression model. The population in the sample jurisdictions averaged a 6.9 rate of unemployment. Almost half identified themselves as minority (42.8%); 13% were between the ages of 15 and 24. Just over half (55%) resided in owner-occupied housing; half (50%) reported living in the same home for five years or longer. The jurisdictions averaged a population density of 4522 persons per square mile. The sample averaged 572 sworn FTE personnel. Most were located in the South (37.3%), followed by Northeast (23.5%), West (22.9%), and Midwest (16.3%). (Data not shown.) (See Appendix B for region categories.)

Table 3 reports the results of the OLS regressions of change in total, property, and violent index crime rates. All predictors are in the expected direction across the three OLS models and explain between 28 to 37% of the variance in index crime rate change between 1997 and 2000.<sup>22</sup> Overall, the model fit the data relatively well; providing a better prediction of crime rate change than the mean value of crime rate change for the sample examined. I saved the unstandardized residual from each of the three OLS models ( $U_{t,p,v}$ ).

measured increases in property index crime rates and 20% measured increases in violent index crime rates. (Data not shown.) These trends are consistent with other studies examining explanations of changing crime (Zhao and Thurman, 2004) and confirm that not all places in the United States experienced crime declines over the last decade.

<sup>&</sup>lt;sup>22</sup> To support the creation of the analysis subgroups, it was desirable to define an OLS model that allowed a sufficient amount of variance in the residual (U). If the variance was too small, the tails of distribution would be very narrow (resulting in fewer "outlier" cases) thereby risking a loss in the specificity intended by the analysis approach. Step I(b) further explicates the importance of the distribution of the residual in the current study.

# Step I(b): Outliers of Unexplained Crime Change

OLS Residual: An Indicator of Unexplained Crime Rate Change

In OLS regression, the residual (U) represents not only random and measurement error, but also any variation of the dependent variable not fully explained by the predictors included in the defined model (Hanushek and Jackson, 1977). In the case of the current analysis, the predictors included in the OLS models explained approximately 28 to 37% of the variation in crime rate change within the study sample. The stochastic (U) of each of these models represents all factors not explicitly defined in the systematic portion of the model. The research relied on this quality of the stochastic for the analyses. While recognizing that the stochastic reflects all unaccounted confounds, unspecified predictors, and random error within the defined OLS model, we would expect that this variable would also capture any effect of the police on crime rate change. Separating the effect of predictors known to influence crime rate change from that of unknown explanatory variables allowed me to create study conditions well-suited to detect whether a relationship between community policing practices and improvements in crime rates exist.

This approach is not to be confused with residual analysis. In contrast, the error term of the regression model is not subject to analysis. Rather it is strictly used as an indicator to select cases into the analysis subgroups. (See Darlington and Smulders (2001) for a commentary on the use and limitations of residual analysis.)

# Outliers of Unexplained Crime Change

Figure 1 illustrates the distribution of the unstandardized residual of the OLS regression model on crime rate change in violent index crime between 1997 and 2000. The deviant cases on either side of the distribution represent cases (police jurisdictions) measuring the greatest "unexplained" change in violent index crime rates between 1997 and 2000. For the purpose of this study, "unexplained" change is defined as any variation in crime rate change left unaccounted for by the predictors included in the OLS regression of crime rate change. The cases on the left-side of the distribution (-U) represent police jurisdictions within the study sample measuring the greatest "unexplained" increases (worsened) in violent crime rates. The cases to the right represent of the distribution (U+) represent police jurisdictions within the study sample measuring the greatest "unexplained" decreases (improvement) in violent crime rates.

Descriptive analysis of the distribution of the residual helps to clarify what it means to be deviant on the basis of "unexplained" crime change.

Across all three crime change groups, most residual values fell between one to two standard deviations from the mean. Fewer than 10 % of the residual values were greater than two standard deviations from the mean. Essentially, this can be interpreted to mean that the unexplained crime change for each of the subgroups was higher than that of 68% of the sample (Weisburd, 1998). These deviant cases represent jurisdictions with the highest "unexplained crime change" during the period of the study. In essence, all else being equal (i.e. population demographics, employment), these deviant cases represent jurisdictions with

extraordinarily high changes in crime rates compared to other jurisdictions in the sample.

To create the analysis subgroups, I selected the fifty outlying cases on either end of the ordered distribution of the saved OLS residuals. Those to the far right of each distribution (+U) represent cases with the greatest decreases (improvements) in "unexplained" crime change, while those to the far left (-U) represented cases with the greatest increases (worsened). The resulting six subgroups include the outlier cases (n=50) per direction of crime change (improved and worsened) and crime type (total crime, property, and violent). Limiting the analysis to a set number of outlier cases may be cause for concern for the design sensitivity of the research. Weisburd (2000) notes that statistical power is often overlooked in criminal justice research and suggest using Cohen (1988) as a guide in assuring that the sample size yields a statistically powerful study. Accordingly, I conducted power analyses to ensure that the pre-defined breakpoints for inclusion into the subgroups provided the greatest possible statistical power for testing the associations in the final stage of the analysis. (See Step III.)

## **Step II. Community Policing Activities**

#### Choice of Variables

The spirit of this research is centered on the idea that police involvement in community policing will return positive crime outcomes (Maguire and Eck, 2000; Kelling, 1987; Goldstein, 1986). The study makes a distinction between police involvement in community policing (what they do) and facilitators of

community policing (e.g. training and technology); focusing the analysis on whether specific community policing activities relate to improvements in aggregate crime.

LEMAS captures a wide variety of police practices that could be classified as community policing activities. However, comparing police practices at the macro level required special considerations. Therefore, I followed recommendations of research on the reliability and validity of multi-wave police administrative survey data to create the best measures of community policing (Mastrofski, 2000; Uchida et al., 1986). Limited ambiguity in survey questions increases the validity of the measure and increases the reliability between survey administrations (Uchida et al., 1986; Mastrofski, 2000). Typical in surveys where the unit of analysis is an organization rather than an individual, these clear descriptions also increase confidence in the reliability of cases where the respondent for the organization changes from year-to-year (Mastrofski, 2000). While BJS strives for internal validity by keeping LEMAS survey questions clear, concise, and consistent between waves, there were some instances where survey questions were slightly re-worded between administrations. Therefore, I included only those questions worded exactly the same across all three waves (Reeves and Goldberg, 1999). Next, I presented the survey questions to a review panel. The panel assessed the likelihood that activity descriptions would be interpreted to mean the same to all respondents. Of the twenty-two LEMAS questions reviewed, the panel concurred that the eight community policing activities

included in the study were the least ambiguous and would be interpreted with the highest degree of confidence between reporting agencies.

While these criterions resulted in a loss of more than half of the community policing activities captured by LEMAS, I believe it increased confidence that respondents interpreted the activity description consistently and accurately between waves and increases internal validity of the measures (Maguire and Uchida, 2000). As such, I believe the specificity yields the best measures for comparing community policing practices between police organizations across several points in time. The eight community policing activities defined for the research represent a variety of strategies carried out in various dimensions of the police organization including internal policies and procedures, external patrol tactics, community involvement, and proactive crime strategies.<sup>23</sup> The eight activities of interest are:

- (1) Community policing officer(s). Police involvement is defined as at least one full-time sworn officer serving as a community policing officer.
- (2) Use of citizen survey information. Police involvement is defined as an affirmative response to using citizen survey information in support of at least one of the following functions: (a) allocating resources to targeted neighborhoods, (b) prioritizing crime/disorder problems, (c) formulating agency policy and procedures, (d) redistricting beat/reporting areas, or (e) providing information to

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<sup>&</sup>lt;sup>23</sup> See Appendix C for the coding protocol of the community policing activities of interest. See Appendix D for the complete 1997, 1999, and 2000 LEMAS surveys.

patrol officers. Citizen survey information could include satisfaction with police services, perceptions of crime and disorder, and/or personal crime experiences.

- (3) Geographic-based assignments. Police involvement is defined as the giving patrol officers' responsibility for specific areas or beats.
- (4) Routine foot patrol. Police involvement is defined as foot patrol units used in routine patrol.
- (5) Routine bike patrol. Police involvement is defined as bike patrol units used in routine patrol.
- (6) Community group meetings. Police involvement is defined as meeting with at least one type of community group to address crime-related problems.

  Types of groups include neighborhood associations, advocacy groups, business groups, religious groups, youth service organizations, school groups, and tenant's associations.
- (7) Train citizens in community policing. Police involvement is defined as training citizens in community policing such as community mobilization and problem solving.
- (8) Problem solving. Police involvement is defined as problem-solving partnerships with community groups or municipal agencies, or others through specialized contracts or written agreements.

## **Involvement in Community Policing**

#### Sustainability

The main tenet of my thesis is that the sustainability of community policing is inherently linked to the realization of its effectiveness. Prior research

examining the effect of community policing activities on aggregate crime limited the measure of community policing practices to one point in time. Yet, community policing is known to be difficult to implement successfully for extended periods of time (Maguire and Katz, 2002). Linking responses to participation in specific activities across multi-wave panel studies provided an indicator of whether the police organization continually practiced the strategy, tactic, or policy across the four year period of study (1997-2000). I classified involvement in community policing activities as either continual or none. Continual or full involvement indicates that the agency returned affirmative responses (yes) across all three waves of the LEMAS survey. No involvement indicates that the agency did not report participation in any wave of the LEMAS survey.

Table 4 reports police involvement in the community policing activities of interest as reported by the full sample in the 1997, 1999, and 2000 LEMAS surveys. Overall, aggregate rates of participation either increased or remained stable across the three waves for the majority of community activities examined. Notably, police use of survey information and problem solving declined by 16.8% and 22.6% respectively. Continual (full) involvement in each of these activities between 1997 and 2000 is lower than the aggregate annual rates. Activities measuring the highest level of continual involvement include regular meetings

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<sup>&</sup>lt;sup>24</sup> I created an indicator for intermittent participation in specific activities. While this indicator was not used in study analyses, I found the patterns of participation across waves interesting and discuss them throughout the report.

with community groups (96.8%), geographic-based assignments for patrol officers (84%), full-time sworn community policing officer(s) (74.4%), and routine bike patrol (71.5%). On average, less than 50% of the sample reported continual involvement in use of citizen survey information (23.2%), routine foot patrol (46.7%), and problem solving (28.3%). Activities measuring the highest rate of no involvement were surprising. Although many agencies reported intermittent use of survey information, almost one-fifth of the sample did not report using citizen survey information to inform policies or procedures. Additionally, 13% did not implement foot patrol.

Table 5 also reports the distribution of the study samples involvement in the number of the eight community policing activities of interest. Levels of participation across the three waves are relatively consistent; the majority reporting involvement in more than six of the eight activities. Fourteen percent of the sample reported involvement in all eight of the community policing activities in the 1997 administration. The level increased a bit in 1999 to 21.1% and then declined to 15.7% in 2000. Levels of participation diminish when examining the extent to which police agencies report consistent involvement in a specified number of community policing activities across the four year period of study. (See Figure 2.) Over three-quarters (79%) of the sample reported continued involvement in at least four of the eight activities of interest; 26% reported continued involvement in six or more activities. Notably, less than 10% of the sample reported continued involvement more than seven activities; 1.3% reported

involvement in all eight community activities of interest across the four year period of study.

# **Step III. Community Policing and Changing Crime**

I tested the relationship between police involvement in the community policing activities of interest (full or none) and membership in the analysis subgroups (unexplained increase or decrease in index crime rates) using chi-square. (See Step I for description of the analysis subgroups.) I repeated the analysis for the each of the eight community policing activities of interest by crime change subgroups (total, property, and violent). I also examined whether police involvement in the number of specified community policing activities was associated to improvements in crime rates within the subgroups examined.

I assessed whether the design sensitivity of the chi-square test yielded an optimal level of statistical power. Statistical power is an important indicator of the study's capacity to identify a relationship. Weisburd (1998) notes "as the statistical power of a study gets higher, the risk of making Type II error, or failing to identify a relationship, gets smaller (Weisburd, 1998:275). For the chi-square test (df=1, alpha=.05), in order to detect a medium effect size (W=.30), a sample of 100 will reach .85 power (Cohen, 1988). A power score of .85 indicates that there is an 85% chance of detecting an effect and is well within the recommended level of statistical power (Weisburd, 1998). To detect a medium effect size (W=.30) for the chi-square test on the number of community policing activities by crime change group (df=7, alpha=0.5), a sample size of 100 would only yield a power score of .55 (Cohen, 1988). Therefore, in order reach the recommended

level of statistical power of .80 (Weisburd, 1998), I expanded the size of the subgroups for this particular analysis. While increasing the subgroup size may dilute the difference I intended to create between the subgroups, the adjustment improved the design sensitivity. For the chi-square test (df=7, alpha=.05), in order to detect a medium effect size (W=.30), a sample of 180 will reach .80 power. A power score of .80 indicates that there is an 80% chance of detecting an effect.

#### Limitations

While the research offers an alternative approach from those traditionally taken it is not without its limitations. First, the study sample is limited to large, municipal police agencies. While this limits the generalizability of study findings, the sample represents the population of this type and size of police agency at the time of the 1997 LEMAS survey. The study is further narrowed by the focus on cases within the sample determined to be deviant on the basis of "unexplained" crime change. This specification may not provide the optimal level of explanatory power. However, for the purpose of this study, the narrow focus provides the best conditions to detect whether a relationship between police involvement in community policing and improvements in aggregate crime change exist. While this approach does not allow assessment of how much the effects of community policing may vary by other explanatory measures (e.g. population demographics), this is not viewed as a weakness. The primary objective is to focus in on the relationship between police involvement in specific activities and aggregate crime trends irrespective of how they have combined with sociodemographic indicators crime change. Therefore, the use of more sophisticated analytic strategies (e.g. truncated regression models) over the approach taken would not provide any added value.

The study defines community policing as police involvement in eight specific community policing activities. As LEMAS includes many measures of police practices that potentially fall under the rubric of community policing, this limitation may appear to be an opportunity lost. However, many of these measures do not represent tangible community policing activities but rather facilitate community policing practices. For example, community policing training provides police with the knowledge of the goals of objectives of the community policing philosophy. The training may even provide concrete examples of how to implement community policing successfully. However, we do not have measures of what police do as a result of this training. A better measure of community policing would be the activities that police implement in their communities. I believe the activities selected for the analysis represent measures of what police actually do in support of community policing. Further, I believe they are the best measures for macro-level evaluations of effectiveness given available data.

Commentaries on the study of community policing note that the temporal ordering of the advancement of community policing in relation to the crime decline suggests that it is not possible for it be a primary influence (Levitt, 2004; Mulhausen, 2001). While existing data of police practices do not allow us to discern with great confidence the chronological development of community

policing at the macro-level, multi-wave panel studies of police practices conducted within the last decade do allow us to examine these relationships within specific periods of time. Further, it allows us to detect whether differences in specific community practices exist and how they relate to aggregate phenomenon such as crime change.

Another potential drawback of the project is its narrow focus on outcomes of community policing. Although crime rates are a common performance measure of police practices, the benefits of community policing are most evident in outcomes such as citizen satisfaction, fear of crime, and perceptions of disorder (Committee to Review Research, 2004; Sherman, 1997; Weisburd and Eck, 2004). However, recent efforts examining the macro-level benefits of community policing have focused on similar outcome measures (GAO, 2005; MacDonald, 2002; Zhao and Thurman, 2004). As in those studies, this research explored the contribution of community policing to improvements in aggregate crime trends.

The research adds to the current state of knowledge by utilizing the multi-wave LEMAS data. These data have been vastly underutilized for the purpose of discerning police involvement in specific activities over time and macro-level assessments of police effectiveness (Langworthy, 2002; Maguire and Uchida, 2000). As research on community policing indicates that programs are almost never implemented on a large scale, assessments of the continuity of their involvement in specific activities as they related to crime benefits are warranted (Langworthy, 2002; Rosenbaum and Lurigio, 1994).

## CHAPTER IV. RESULTS

Table 5 reports police involvement in the community policing activities of interest across the six subgroups of crime rate change. The subgroups represent cases within the study sample measuring the highest (most different) "unexplained" changes in total, property, and violent index crime rates between 1997 and 2000. For the purpose of this study, unexplained crime change is defined as fluctuations in index crime rates above those explained by traditional factors commonly associated with crime trends. (See Step I of research methodology.) Overall, patterns of participation illustrate there is little difference in police involvement in the community policing activities by direction of crime change (improved vs. worsened) within the subgroups examined. Essentially, police in subgroup jurisdictions with increasing crime report relatively the same rate of participation in community policing as subgroup jurisdictions with decreasing crime. This pattern was consistent across all categories of crime – total, property, and violent index crime. While there is some fluctuation in participation by type and direction of crime pattern, none were found to be statistically significant. Nonetheless, rates of involvement across the various crime change subgroups revealed a few interesting patterns.

The study examined two community policing activities implemented as internal policies or procedures in police organizations - assignment of full-time sworn community policing officer(s) and use of citizen survey information to develop policies and procedures and/or inform allocation of resources. Overall, subgroup jurisdictions measuring increases in crime report higher use of

designated full-time community policing officer(s). For example, the participation rate for agencies with increases in violent crime was 14% higher than those with decreases in violent crime (82% compared to 72%). This trend was consistent across all three crime categories (total, violent, and property). Police use of survey information is generally higher in jurisdictions experiencing decreases in crime with one exception. Notably, the participation rate for agencies with increases in property crime was 22% higher than those with decreases in property crime. This difference may be due to citizen's likelihood to report instances of property crime over violent crime via surveys or that citizen survey information yields more arrests in property related offenses over other types of crime.

The study examined three community policing activities implemented as external patrol tactics – geographic-based deployment, routine foot patrol, and routine bike patrol. Police use of geographic-based deployment was highest in jurisdictions with increasing crime. Notably, agencies with increases in property crime reported participation rates 9% higher than those with decreases. Police participation in bike and foot patrol was fairly consistent across all categories of crime and direction of crime change. Participation rates in bike patrol were approximately 8% higher in jurisdictions with decreases in violent crime than those with increases.

The study examined one community policing activity implemented as proactive crime prevention – problem solving. Interestingly, participation rates in problem solving were 33% higher in subgroup jurisdictions with increases in

violent crime rates compare to those with decreases (32% and 24% respectively). This trend may indicate that police within the subgroups are responding to increasing crime with problem solving strategies. The study examined two community policing activities implemented as community involvement – community groups meetings and citizen community policing training. For police involvement in community group meetings, the participation rate within the subgroup with increases in violent crime was 5% higher than that of the subgroup with decreases in violent crime (98% and 94% respectively). Across all three crime categories, participation rates in citizen training were generally higher within subgroup jurisdictions measuring decreasing crime rates. Participation rates were 7% higher in jurisdictions with decreases in violent crime rates compared to those with increases (30% and 28% respectively). Participation rates were 17.6% higher in subgroup jurisdictions with decreases in total index crime rates compared to those with increases (40% and 34% respectively).

Table 6 reports the distribution of police involvement in community policing activities of interest by number of activities. Overall, patterns of participation across the six subgroups mirror those of the full sample. Regardless of the direction of crime rate change (improved/worsened), almost two-thirds of police within the analysis subgroups reported involvement in at least five of the eight community policing activities of interest. An exception to this trend was within the property crime subgroups. Police reporting continual involvement in seven of the eight community policing activities of interest was 75% higher in subgroups with decreases in property crime rates compared to those with

increases (17% and 10% respectively). However, this association was not found to be statistically significant. Interestingly, none of the police jurisdictions within the analysis subgroups reported involvement in all eight of the activities of interest.

## CHAPTER V. DISCUSSION

Community policing marks a major shift in police practices. Although the definition of community policing is subject to as many criticisms as support, evidence of its advancement both in the number of police agencies reporting involvement in community policing and the breadth of activities implemented illustrates its impact on police practices. As a result, community policing is the most widely cited explanation for the decline in national crime rates over the last decade (Levitt, 2004). However, the existing research on the effectiveness of community policing on macro-level outcomes is limited and subsequently inconclusive (Weisburd and Eck, 2004).

This study sought to extend the current state of knowledge by focusing on how police involvement in specific community policing activities relates to improvements in index crime rates over time. Overall, the study did not find police involvement in the community policing of interest to be significantly related to improvements in total, property or violent index crime rates within the subgroups examined. Most interestingly, police involvement in community policing was found to be comparable regardless of improved or worsening crime rates. These findings lead us to question why this is so.

The specifications of the research methodology intended to provide conditions most optimal for detecting whether a relationship between police involvement in community policing and improvements in crime rates exist.

While the focus on large, municipal police agencies limits the generalizability of study findings, I do not believe the narrowly defined analysis subgroups affected

study outcomes. However, the measures of community policing activities and period of study may have impeded the study's capacity to detect the true relationship between community policing and aggregate crime trends. Further, I am left to question whether macro-level assessments of aggregate crime trends are the most appropriate for assessing community policing effectiveness.

It is difficult to execute an experimental research design evaluating the macro-level benefits of police practices (Eck and Maguire; 2000; Kelling and Sousa, 2001). Quasi-experimental designs offer a pragmatic alternative (Weisburd et al., 2001). Similar to previous studies assessing the effect of community policing on aggregate crime trends, the research utilized regression techniques to differentiate the effect of community policing from explanatory and confounding factors relating to study outcomes (GAO, 2005; MacDonald, 2002; Zhao and Thurman, 2004). The point of departure of the study from prior research is the narrowly defined analysis approach. I defined my dependent variable based on the residual (U) of OLS regressions on change in index crime rates. The research strategy relied on the assumption that the effect of police (if any) on crime would be isolated into this single variable. The decision to define the analysis subgroups on the residual (U) provided a degree of specificity that I believe offset sacrifices in explanatory power. While the study did not seek to model the relationship between community policing practices and crime rate change, the analytic strategy of the research provided a method to identify whether community policing practices varied by direction of crime trends within

the jurisdictions examined and provides a better understanding of the cumulative benefits of community policing to aggregate outcomes.

The study demonstrates that while police are involved in many community policing activities, involvement in particular community policing activities is relatively inconsistent over time. Fewer than half the study sample reported continued involvement in use of citizen survey information, routine foot patrol, citizen training, or problem solving. It is plausible that evidence of effectiveness may be thwarted by the shallow nature of implementation of community policing activities. This is especially the case for problem solving which has the strongest evidence supporting its effectiveness (Weisburd and Eck, 2004). As such, we may be looking for crime benefits absent knowledge on the extent police implement strategies with focus and consistency. Existing macro-level data on community policing practices does not allow us to discern (with great certainty) the status of police involvement in the activities of interest prior to the study period (pre-1997). As LEMAS continues, future research should examine how longer periods of implementation of community policing strategies effect crime. Additionally, future research should examine what factors (i.e. implementation fidelity, funding support, community involvement) influence the sustainability and quality of community policing strategies.

Police implement a variety of community policing strategies. Given the variety of activities commonly associated with community policing, the focus of the study on a select number of activities may not represent a comprehensive measure of its practice at the agency level. However, I believe the measures of

community policing defined in the study maximized available data and improved upon prior measures in aggregate studies of effectiveness. This study demonstrates the value of police administrative data in providing measures of police involvement in specific community policing activities at the macro-level. However, specific findings of the research lead me to question validity of several of the LEMAS survey questions. For example, the study found that the subgroups of jurisdictions measuring increases in crime reported the highest use of geographic-based deployment. However, the data does not allow us to discern whether the motivation for geographic-based deployment was to improve policecitizen contacts (a community policing activity) or directed patrol strategy such as Compstat or Hotspots policing. The study found that police in subgroup jurisdictions measuring increases in violent crime rates reported a higher rate of participation in problem solving compared to jurisdictions within the subgroup measuring decrease in violent crime rates. While problem solving is a well documented concept throughout police literature, the LEMAS survey does not allow us to discern whether respondents define the activity as Goldstein's prescriptive SARA model or utilize a more moderate definition such as those falling within other innovative police strategies including third-party policing and "pulling lever" approaches in criminal justice (Buerger and Mazerolle, 1998; Goldstein, 1987; Kennedy et al., 1996). Future research should concentrate on validating these measures and improving systematic documentation of the interpretation, implementation, and intended outcome of specific community

policing activities. With better measures, we can make more accurate attributions to the extent particular strategies influence police effectiveness.

The study did not find any significant associations between police involvement in community policing and improvements in index crime rates within the subgroups examined. This brings me to question whether perhaps aggregate crime rates are an appropriate measure of effectiveness. The primary objective of community policing is to build strong police-citizen relationships. These relationships, in turn, should yield positive public safety benefits (Kelling and Coles, 1996; Wilson, 1968). As such, outcome measures such as citizen satisfaction fear of crime and perceptions of police legitimacy may be more reasonable indicators of effectiveness. In fact, research evidence to date is strongest in these outcomes (Weisburd and Eck, 2004; Zhao and Thurman, 2004). While not the driving force in improving police effectiveness, perhaps these strategies are indirectly related to reductions in crime (Sherman, 1997). Many speculate that stronger police-citizen relationships enhance community capacity to respond to crime via informal social control mechanisms (e.g. collaborative partnerships, education and awareness) (Kearly and Benson, 2000; Pino, 2000; Sampson et al., 1997). There is little research examining the effect of community policing in strengthening a community's capacity to respond to crime. Future studies on community policing effectiveness should focus on the disentangling the relationship between community policing activities of police and collective efficacy as they relate to crime outcomes.

Micro-level research, focused on a particular city or town, yields different findings than macro-level studies of community policing effectiveness. For example, in their study of the contributions of policing to the decline in crime in New York City, Kelling and Sousa (2001) found problem solving to be positively associated to improvements in crime. Skogan et al. (2002) also supports the role community policing played in decline in index crime rates in the City of Chicago. Wycoff and Skogan (1993) report similar findings in Madison, Wisconsin. Perhaps a macro-level analysis is not an appropriate method for studies of community policing effectiveness. Alternatively, perhaps an explanation for the divergence in study findings is not due to the level of analysis but rather the data used to measure police practices and other relevant analysis variables. Smaller or micro-level studies provide opportunities to collect much better data. Better measures of place-based phenomena (e.g. crime, fear of crime, community health, and social resources) and specific police practices (e.g. observations) provide the researcher with a clearer understanding of the causal mechanism under study. Coordinated, multi-site evaluations would provide a wealth of comparative (standardized) measures and information from which to better study the relationship between the multi-faceted community policing model and crime.

People want community policing to work. As public investments in community policing peak, the importance of research assessing the overall benefits of the strategy is warranted. While the findings of the research do not support that the community policing practices are related to improvements in crime within the subgroups examined, patterns of participation suggest that police

are responding to increasing crime with community policing strategies. Notably, many community policing activities are difficult to execute consistently over time. Short-comings in implementation likely play an important role in effectiveness. Perhaps lengthier study periods, as in those predominate in case studies of community policing, would yield different results than those of the current study. As federal support of community policing decreases it will be interesting to track whether trends in reported participation are affected and how these shifts relate to crime outcomes. However, without advancements in the systematic documentation of police practices, unveiling a more detailed picture of community policing, disentangling the relationship between community policing and aggregate crime trends will continue to be challenging.

## APPENDIX A. TABLES AND FIGURES

Table 1. Analysis Variables by Data Source					
Data Source	<u>Variable</u>				
U.S. Census (2000)	% Minority % Female Head of Household w/ Children under 18 Years of Age	(MINORITY) (FHHC)			
	<ul> <li>% Persons between ages 15 and 24</li> <li>% Living in Same Home 5+ Yrs</li> <li>% Owner Occupied</li> </ul>	(YOUNG) (SAMEHS) (OWNER)			
	Population Density <sup>2</sup>	(POPDEN)			
Labor Statistics (2000)	% Unemployed	(UEMPLOY)			
FBI Uniform	Total Crime Rate per 100,000 residents	(TOTAL)			
Crime Report	Violent Crime Rate per 100,000 residents	(VIO)			
(1997 and 2000)	Property Crime Rate per 100,000 residents Geographic Region	(PROP) (REGION)			
LEMAS	Natural Log FTE Sworn Personnel	(FTELOG)			
(1997, 1999, 2000)	Community Policing Measures				

Notes: All variables are continuous level except regional categories (four categories) and community policing activities. Reference dates for data are: 2000 Census = June 1<sup>st</sup>; UCR = December 31<sup>st</sup>; Labor Statistics = December 31<sup>st</sup>; LEMAS = June 30<sup>th</sup>. Full time equivalent (FTE) sworn personnel = rounded [(# sworn full time employees) + 0.5 \* (# worn part-time employees)] (Reeves and Hickman, 1999). See Appendix B for regional categories. See Appendix C for community policing measures.

Table 2. Descriptive Statistics of Analysis Variables. Full Sample (N=375)

	<u>Min</u>	<u>Max</u>	<u>Mean</u>	<u>SD</u>		
Index Crime Rates						
(per 100,000 residents*)						
Total Index Crime						
- 1997 Rate	1933.02	27157.05	7184.41	3044.34		
- 2000 Rate	1300.27	22057.21	6021.99	2739.98		
- Rate Difference (1997-2000)	-2971.82	9724.86	1162.42	1277.11		
Property Index Crime						
- 1997 Rate	13.67	3689.70	874.03	597.95		
- 2000 Rate	10.91	2781.21	706.95	492.27		
- Rate Difference (1997-2000)	-655.10	1876.30	167.07	287.83		
Violent Index Crime						
- 1997 Rate	1788.79	24939.60	6310.38	2672.87		
- 2000 Rate	1226.31	20009.67	5315.03	2423.84		
- Rate Difference (1997-2000)	-2315.72	8815.50	995.34	1133.75		
Explanatory Variables (2000)						
% Minority	4.91	97.32	42.74	21.54		
% Female HHw/children	8.20	58.31	30.57	10.54		
% Young (15-24 y.o.a.)	3.51	28.61	11.15	3.79		
% Owner Occupied Housing	18.19	88.76	55.12	11.89		
% Same Home 5+ Yrs	28.80	69.43	49.66	7.05		
% Unemployed	1.43	16.11	6.95	2.64		
Population Density	153.32	52978.15	4522.27	5016.16		
FTE Sworn Personnel	96.5	40435.00	571.84	2314.62		
Notes Color and 1000 and 1000 and 1000 and 1000						

Notes: Crime rates difference is equal to the difference between the 1997 and 2000 crime rates (1997Rate – 2000 rate). A positive difference (+) indicates a decrease in crime between 1997 and 2000; a negative difference (-) indicatesan increase in crime rates. Full-time equivalent (FTE) sworn personnel = rounded [(# sworn full time employees) + 0.5 \* (# sworn part-time employees)] (Reeves and Hickman, 1999). Number of FTE in 2000 may be less than the 100 full-time sworn personnel criterion for large, self-reporting agency as defined by LEMAS (Reeves and Hickman, 1999: x). See Table 1 for source information.

Table 3. Effects of Explanatory Variables on Total, Property and Violent Index Crime Rate Differences between 1997 and 2000. Full Sample (N=375)

	m . 13	D . D . CC		<b>D</b> .	D . D:00		T.7' 1	D . D:00	
		Rate Differe			Rate Differ	ence		Rate Differe	ence
	B	SE	T	B	SE	t	B	SE	t
% Unemployed	33.19	36.44	.911	33.59	32.45	1.04	-1.36	7.66	178
% Minority	4.911	3.74	1.31	4.38	3.33	1.32	078	.803	097
% SFHw/CU18	-38.72*	8.68	<b>-</b> 4.46	-35.18*	7.53	<b>-</b> 4.67	-6.42	1.90	-3.37
% Young Persons	-49.12	19.98	-2.46	-43.14	17.78	-2.43	-4.97	4.19	-1.18
% Owner Occupied	-10.168	8.29	-1.23	-8.46	7.40	-1.14	-1.54	1.75	882
Living in Same Home 5+	-18.93	12.06	-1.57	-17.26	10.78	-1.60	-2.14	2.43	881
Population Density <sup>2</sup>	.031	.016	1.93	.030*	.014	2.05	.002	.003	.551
Region	-9.7	60.46	16	-14.63	53.87	272	.463	12.8	.036
Natural Log FTE Sworn	-49.23	70.15	702	-32.00	62.37	513	-23.47	14.82	-1.58
97 Total Crime Rate	.248*	.026	9.58	.240*	.025	9.70	.369*	.030	12.20
Constant	2814.56*	1022.98	2.75	2453.58*	916.61	2.68	488.82	213.01	2.29
	$R^2 = .287$			$R^2 = .280$			$R^2 = .375$		
	Adjusted R F=14.64	$e^2 = .267$		Adjusted I F=14.17	$R^2 = .260$		Adjusted I F=21.84	$R^2 = .358$	

Notes: The dependent variables (RATEDIF <sub>t,p,v</sub>), equal the 1997 index crime rate minus the 2000 index crime rate. Property index crimes include burglary, larceny theft, and motor vehicle theft. Violent index crimes include murder, rape, aggravated assault and robbery. Arson is excluded from both the property crime and total crime rates. Notably, a negative rate difference indicates an increase in crime and a positive rate difference indicates a decrease in crime. Therefore, the resulting OLS coefficients are in the opposite direction expected.

Table 4. Police Involvement in Community Policing Activities of Interest, 1997, 1999, and 2000. Full Sample (N=375)

	]	LEMAS		Extent	t of Involv	ement
Affirmative Response to	Res	ponse Y	ear	betwee	n 1997 and	d 2000
Community Policing Activity:		_				
	<u> 1997</u>	<u> 1999</u>	<u>2000</u>	None	<b>Partial</b>	<u>Full</u>
Uses Survey Information	55.2	50.7	45.9	20.5	56.3	23.2
Geo-Based Assignments	91.5	96.5	92.5	0.8	15.2	84.0
Community Policing Officer	79.2	95.2	92.5	0.8	24.8	74.4
Routine Foot Patrol	54.9	73.3	75.5	13.1	40.3	46.7
Routine Bike Patrol	76.8	89.6	92.8	2.4	26.1	71.5
Meets w/Community Groups	99.5	98.4	98.7	0.0	3.2	96.8
Train Citizens	70.1	77.9	58.9	22.4	39.5	38.1
Problem Solving	69.9	63.5	54.1	9.9	61.9	28.3
Number of Activities:						
None	0.0	0.0	0.0			.003
One	.3	0.0	.5			1.6
Two	1.1	.5	.8			4.3
Three	4.8	.6	2.9			14.4
Four	9.9	5.6	6.9			25.1
Five	18.4	11.5	18.4			27.7
Six	24.8	27.5	28.3			17.3
Seven	26.4	32.3	26.4			8.0
Eight	14.4	21.1	15.7			1.3

Notes: None indicates the % of respondents reporting no involvement in participation across all three waves of LEMAS. Partial involvement indicates the % of respondents reporting affirmative responses of participation in only one or two waves of LEMAS. Full involvement indicates the percent of respondents reporting affirmative responses in all three waves of LEMAS. Reference date for each survey administration is June  $30^{th}$ .

Source: Bureau of Justice Statistics, Law Enforcement Management Administrative Statistics (1997, 1999, 2000) (See Appendix C for coding protocol.)

Table 5. Relationship between Crime Change Subgroup and Police Involvement in Community Policing Activities of Interest, 1997-2000.

				Commu	nity Policin	g Activity of	of Interest		
	N	Citizen Surveys	Geo-Based Patrol	CP Officer(s)	Foot Patrol	Bike Patrol	Group Meetings	Citizen Training	Problem Solving
	375	87	315	279	175	268	363	143	106
Full Sample	100%	23.2%	84.0%	74.4%	46.7%	71.5%	96.8%	38.1%	28.3%
Subgroups									
Total Crime									
-Decreased	50	11	46	36	25	36	49	20	14
	100%	22.0%	92.0%	72.0%	50.0%	72.0%	98.0%	40.0%	28.0%
-Increased	50	8	47	40	24	35	49	17	13
	100%	16.0%	94.0%	80.0%	48.0%	70.0%	98.0%	34.0%	26.0%
Property Crime									
-Decreased	50	9	44	36	24	35	49	17	15
	100%	18.0%	88.0%	72.0%	48.0%	70.0%	98.0%	34.0%	30.0%
-Increased	50	11	48	39	24	35	49	18	14
	100%	22.0%	96.0%	78.0%	48.0%	70.0%	98.0%	36.0%	28.0%
Violent Crime									
-Decreased	50	9	43	36	30	40	47	15	12
	100%	18.0%	86.0%	72.0%	60.0%	80.0%	94.0%	30.0%	24.0%
-Increased	50	7	45	41	31	37	49	14	16
	100%	14.0%	90.0%	82.0%	62.0%	74.0%	98.0%	28.0%	32.0%

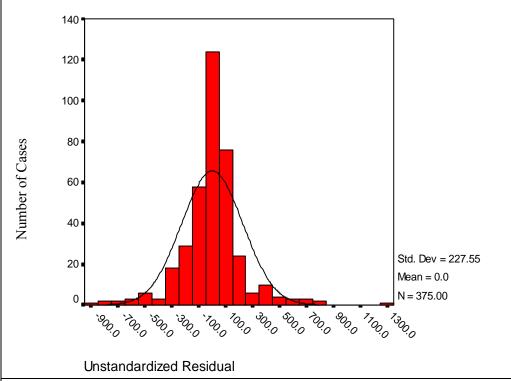
<sup>\*\*</sup> Statistically significant,  $X^2 \ge 3.82$  (df=1, alpha=.05). Violent crime includes murder, rape, robbery and aggravated assault index crime rates. Property crime includes burglary, motor-vehicle theft and larceny index crime rates. Arson is excluded from both the property and total crime rates.

Table 6. Relationship between Crime Change Subgroup and Police Involvement in Number of Community Policing Activities of Interest, 1997-2000.

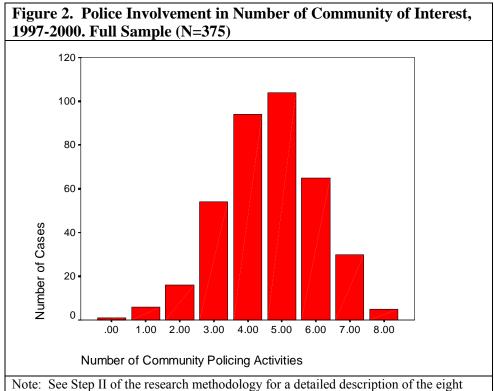
				Nui	mber of C	ommunity	Policing .	Activities		
		None	One	Two	Three	Four	Five	Six	Seven	Eight
	N									
Full Sample	375	1	6	16	54	94	104	65	30	5
•	100%	0.03%	1.6%	4.3%	14.4%	25.1%	27.7%	17.3%	8.0%	1.3%
Subgroups										
Total Crime										
-Decreased	(80)	1	2	1	13	22	19	14	8	0
		1.3%	2.5%	1.3%	16.3%	27.5%	23.8%	17.5%	10.0%	0.0%
-Increased	(80)	0	2	3	10	20	20	17	8	0
	, ,	0.0%	2.5%	3.8%	12.5%	25.0%	25.0%	21.5%	10.0%	0.0%
Property Crime										
-Decreased	(80)	0	2	0	12	23	19	14	14	0
	, ,	0.0%	2.5%	0.0%	15.0%	28.8%	23.8%	17.5%	17.5%	0.0%
-Increased	(80)	0	2	4	11	20	20	15	8	0
	` ′	0.0%	2.5%	5.0%	13.8%	25.0%	25.0%	18.8%	10.0%	0.0%
Violent Crime										
-Decreased	(80)	1	1	2	11	25	17	18	5	0
		1.3%	1.3%	2.5%	13.8%	31.3%	21.3%	22.5%	6.3%	0.0%
-Increased	(80)			2	15	19	22	16	6	0
	` '	0.0%	0.0%	2.5%	18.8%	23.8%	27.5%	20.0%	7.5%	0.0%

<sup>\*\*</sup> Statistically significant,  $X^2 \ge 14.07$  (df=7, alpha=.05). Violent crime includes murder, rape, robbery and aggravated assault index crime rates. Property crime includes burglary, motor-vehicle theft and larceny index crime rates. Arson is excluded from both the property and total crime rates.

Figure 1. Distribution of the Unstandardized Residual (U), OLS Regression on Change in Violent Index Crime Rates between 1997 and 2000 (RATEDIF). Full Sample (N=375)



Note: Violent crime includes murder, rape, robbery and aggravated assault index crime rates.



Note: See Step II of the research methodology for a detailed description of the eight community policing activities.

# APPENDIX B. REGIONAL CATEGORIES

Northeast	Connecticut, Maine, Massachusetts, New Hampshire, New
	Jersey, New York, Pennsylvania, Rhode Island, Vermont
South	Alabama, Arkansas, Delaware, District of Columbia, Florida,
	Georgia, Kentucky, Louisiana, Maryland, Mississippi, North
	Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia,
	West Virginia
Midwest	Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri,
	Nebraska, North Dakota, Ohio, South Dakota, Wisconsin
West	Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana,
	New Mexico, Nevada, Oregon, Utah, Washington, Wyoming
Note: Categori	es defined by the Federal Bureau of Investigation in support of the Uniform Crime
Report program	r (Federal Bureau of Investigation, 1999).

APPENDIX C. CODING PROTOCOL: COMMUNITY POLICING ACTIVITIES

	Community Policing Activity	LEM	IAS Vari	able	Level
		1997	1999	2000	
1	Community Policing Officers				
	"Of the number of full-time sworn personnel	298	189	75	С
	working in field operations, enter the number				
	of uniformed officers whose regular assigned				
	duties include serving as a community policing				
	officers"				
2	Use of citizen survey information				
	For which purposes, does your agency use the				
	citizen survey information?				
	-Allocating resources to target areas	501	237	169	В
	-Prioritizing crime/disorder problems	502	238	172	В
	-Formulating agency policy & procedures	503	239	171	В
	-Re-districting beat/reporting areas	504	240	174	В
	-Providing information to patrol officers	505	241	173	В
3	Geographic-based assignments				
	Does your agency give patrol officers	479	212	146	В
	responsibility for specific geographic				
	areas/beats?				
4	Foot Patrol				
	Does your agency use routine foot patrol?	77	72	239	В
5	Bike Patrol				
	Does your agency use routine bike patrol?	71	66	238	В
6	Community Group Meetings				
	Which of the following groups did your agency				
	regularly meet with to address crime-related				
	problems?				
	-Neighborhood Associations	485	222	155	В
	-Tenant's Associations	486	225	159	В
	-Youth Service Organizations	487	226	160	В
	-Advocacy Groups	488	218	151	В
	-Business Groups	489	219	152	В
	-Religious Groups	490	223	156	В
	-School Groups	491	224	157	В

(continued on next page)

Co	Coding Protocol: Community Policing Activities (continued)								
	Community Policing Activity	LEN	LEMAS Variable						
		1997	1999	2000					
7	Train Citizens in Community Policing								
	Did your agency train citizens in community	468	211	1478	В				
	policing (e.g. community mobilization,								
	problem solving)?								
8	Problem Solving								
	Did your agency form problem-solving	483	216	145	В				
	partnerships with community groups,								
	municipal agencies, or others through								
	specialized contracts or written agreements?								

Notes: C=Continuous; B=Binary (yes/no). For the purpose of the current study, participation in community policing are recoded as a binary yes/no variable. While most LEMAS variables were already coded in this format, in some instances, survey question response options were continuous level or allowed respondents to check numerous responses under one general activity. In these instances, responses were collapsed or recoded to reflect one dichotomous measure of participation. For example, on the measure of Community Group Meetings, respondents were given the option to indicate the types of community groups they met with (e.g. school, business, tenant association, etc.). If the agency met with at least one community group, regardless of type, it was coded as 'yes.' Continuous level variables, such an agency's reported number of community oriented policing, were recoded as well. If an agency responded to having at least one community policing officer, participation was coded as 'yes'.

### APPENDIX D. LAW ENFORCEMENT MANAGEMENT ADMINISTRATIVE

STATISTICS SURVEYS (1997, 1999, AND 2000).

CJ-44

RETURN
TO

Bureau of the Census
1201 East 10th Street
Jeffersonville, IN 47132-0001

PORM CJ-44
(6-19-97)

1997 SAMPLE SURVEY OF LAW
ENFORCEMENT AGENCIES

U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS
ACTING AS COLLECTING AGENT FOR
BUREAU OF JUSTICE STATISTICS
U.S. DEPARTMENT OF JUSTICE
U.S. DEPARTMENT OF JUSTICE
U.S. DEPARTMENT OF JUSTICE

In correspondence pertaining to this report, please refer to the number at the top of the address label

			(Pleas	e ∞rrect any error i	in name, maili	ng address, a	and ZIP Code)				
			- 1	NFORMAT		<b>IPPLIEI</b>	D BY				
Name					Title						
OFFICIAL ADDRESS		Number and	d street or P.O.	box/Route numbe	r ¦C	City	į s	State	ZIP Code		
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		M THE DIREC	CTOR STICE STATISTI	CS							
	cond infor this s prog As in	ucting a san mation on th survey in 198 ram. The sui past years,	nple survey of I he workload an 87 as part of its rvey was repea your agency a	ice Statistics (BJS) law enforcement d resources of the Law Enforcement ted in 1990 and other agencies aw enforcement a	agencies in le Nation's I nt Managen 1993. s in the scie	the United aw enforce nent and Ad entifically se	States. The ment agenci dministrative	survey ies. BJ Statis	/ will obtai S first cond tics (LEMA represent	in current ducted AS) the	
	offici	als will use t	the data to asse	ess the needs of in a series of re	law enforce						
	this or readi	uestionnain ly available, ocopy of vou	e within 3 weel , provide reaso	ollection and pub ks and return it ir nable estimates r eply. If you need 29.	n the enclos marked with	ed envelop an asterisk	e. If answers k (*). You ma	s to qu ay wish	estions are to retain	not a	
	inclu data burd	ding time fo needed, and en estimate,	r reviewing ins d completing ar orany othera	collection of info tructions, search nd reviewing the spects of this col eau of Justice St	ing existing collection o lection of in	data sourc f information, formation,	es, gatherin on. Send cor including su	g and i mment iggesti	maintainin s regardin ons for rec	g the g this lucing	
	infor	mation colle	ction. Although	d Safe Streets Ac n this survey is v sive, accurate, an	oluntary, we						
	Since Jan I Direc	M. Chaiken, I	Chai hu Ph.D.	~							
	Enclo	sures									

	\$	SECTION I - (	OPE	RATIONS		
Enter the number of facilities o headquarters, operated by your				During the 12-month p which of the following agency use? Mark (X) a	types of patrol	
District/Precinct stations		019		,	Routine Spe patrol eve	
Fixed neighborhood/community s	ub-stations	020		Automobile	065 066 068 069	
Mobile neighborhood/community	sub-stations	021		Foot	071 072 074 075	
Other – Specify ⊋				Bicycle	077 078	079
023		022		Marine	080 081	082
2. Indicate the functions for whip PRIMARY responsibility. Exclusionagency performs only upon requesionable in an emergency. Mark (X)  224 Enforcement of traffic laws  225 Traffic direction and control  226 Accident investigations  227 Dispatching calls for service  228 Emergency medical services	de functions wist such as aidi ) all that apply.  040   Court s  041  Jail op  042   Serving  043   Civil do  044   Fire se	nich your ng another security erations g civil process afense rvices	8.	Using the most recent NORMAL patrol activit special events), report for each type deployed longer during the two Enter the sum for ALL ur period, not just for one s 10 one-officer automobil morning shift on Wednes afternoon shift, and 10 ur our should enter 30 in the	ty (excluding holi the number of p i on shifts of 7 h 24-hour days list nits deployed durin hift. For example, e units deployed for sday, 10 units for the nits for the 8-hour	idays and atrol units ours or ed below. g the 24-hour if there were or the 8-hour he 8-hour
029 Vice enforcement 030 Fingerprint processing	045 Animal	control ding to citizen		Type of unit	Wednesday	Saturday
031 Ballistics testing	calls fo	r service		Automobile	083	084
032 Crime lab services	Crime invest	instion for		One-officer units	1005	***
033 Underwater recovery	_	•		Two-officer units	085	086
034 🔲 Bomb disposal	047 Homici			Motorcycle	087	088
035 Search and rescue		violent crimes		One-officer units		
036 School crossing services	049 Arson				089	090
037 Tactical operations (SWAT)	= '	property crimes		Two-officer units	201	
038 Parking enforcement	051 LL Enviro	nmental crimes		Foot	091	092
039 Executing arrest warrants				One-officer units	093	094
3. Does your agency have prima ose enforcement of drug laws in jurisdiction?				Two-officer units Horse One-officer units	095	096
1□ Yes 2□ No				Two-officer units	007	080
				Bicycle	099	100
4. As of June 30, 1997, how man				One-officer units		
have assigned to a special uni to a multi-agency drug enforc				Two-officer units	101	102
	Full-time	Part-time	+	Marine	103	104
	054	055		One-officer units		
a. Special drug enforcement unit				T	105	106
	056	057		Two-officer units  Other – Specify	107	108
b. Multi-agency drug task force				109		
5. Are any persons arrested by	vour agency t	ested for				
os illegal drugs prior to jail adm		cotou ioi		_		
1 Yes 2 No				Does your agency part emergency telephone:		
Enter the number and capaci or lockup facilities, physicall operated by your agency as maximum holding time for a	y separate fro of June 30, 19 dults and juve	om a jail, 197, and the eniles.		units can be dispatched Mark (X) only one.  1 Yes – Basic 911 syste Yes – Expanded 911 No	ed as a result of a	call)?
a. Number of facilities	059	060	10	As of June 30, 1997, v	which of the follo	wing types of
ar Humber of Idollides	061	062	- 10.	systems did your agen		
b. Total capacity			111	3-digit phone numbe	r for non-emergen	cv calls (e.g., 311)
	063	064	112	Phone-based mass n		
c. Maximum holding time	hours	hours		Fax-based mass noti		5,,,

Page 2 FORM CJ.44 (6-19-97)

					eecti.	ONLL	OBER	ATIONS Cont	tinued		
					SECTI	ON I -	OPER	ATIONS - Cont	anuea		
your aç each, e	jency ti	hat orig e numb	inated er that	from a	911 sy	stem, ı	non-en	ergency phone	lls/requests for se number, alarm, d ers from your age	or other source.	by . For
	he sum o			ld equal		Tota	əl	911 system	Non-emergency phone numbers	Alarms	Other
a. Total ca	ills/requ	ests for	service	received				115	116	117	118
b. Calls/re	equests	with offi	cer(s) di	spatche	d 118	9		120	121	122	123
	equests alls hand				ed 124	ı		125	126	127	128
						SECTI	ON II	EQUIPMENT			
b. Which	atrol off s - SKIP	ficers? to quest ollowin	ion 2a	s of sid	earms	does y	our		nal baton 166 on 167 on		
		Calik	oer – Ma	ark (X) a	II that a	pply.		b. Chemical			
Туре	.357	.38/.380	.40	.45	9mm	10mm	Other caliber		issu rspray) 169 [ rs) 171 [	170	ns
(1) Revolver	130	131	132	133	134	135	136	cs		174	
(2) Semi- automatic	137	138	139	140	141	142	143	c. Other non	-lethal weapons/		
1☐ Yes	ere any r agenc s while – Mark – SKIP to	y, for u "on dut (X) all th	se by it ty"? nat appl	ts regul	but no ar field	t suppi I/patroi	lied	178 Hand-he	ng grenade	-stand off (e.g., t	aser)
		Calik	oer – Ma	rk (X) a	II that a	pply.					
Type	.357	.38/.380	.40	.45	9mm	10mm	Other caliber Specify		each vehicle type		
(1) Revolver	145	146	147	148	149	150	151	184 Marked			185
(2) Semi- automatic	152	153	154	155	156	157	158	186 Unmark	ed cars –		187
1 Yes 2 No  3. What a field/pa 160 Field/pa body an 161 Field/pa allowan 162 Field/pa	atrol of ns liste are your atrol offic mor trol offic ce for bo	agency ficers? ers supp ers giver dy armo	y's bod Mark (X lied with  n cash or	y armoi	r polici r polici er line. All S	f the	None 3	183	e number operated ers – e number operated e number operated in vehicles (ATV) d vehicles command post vehicles motorized vehicles		189 191 193
(					_						

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	SECTION II – EQUI	PMENT - Continued
6a.	Does your agency allow officers to take marked vehicles home?	8. Does your agency use any of the following technologies on a regular basis? Mark (X) all that apply.
	1  Yes 2  No − SKIP to question 7	Video Camera Night Vision/Electro-Optic
	Does your agency allow marked vehicles to be driven by officers for personal use during off-duty hours?	207
	2 No	Digital Imaging Vehicle Stopping/Tracking
7.	Enter the number of animals regularly maintained by your department for use in activities related to law enforcement.	211 Fingerprints 219 Tire deflation spikes 212 Mug shots 220 Electrical/engine disruption
	205 206	213 Suspect composites 221 Stolen vehicle tracking (e.g., LoJack)
	Dogs Horses	222 Other
	SECTION III – COMPUTERS A	ND INFORMATION SYSTEMS
1.	Indicate whether your agency does or does not	4a. Does your agency have exclusive or shared ownership
	use each computer type listed below. Mark (X) one per line.	263 of an Automated Fingerprint Identification System (AFIS) that includes a file of digitized prints? Mark (X) only one box.
	Type of computer uses does not use	1 ☐ Yes - Exclusive 3 ☐ No
223	a. Mainframe computer	₂ ☐ Yes – Shared
224	b. Mini-computer	b. Does your agency operate an AFIS terminal that
225	c. Personal computer (PC)/ or Microcomputer	264 has access to a remote AFIS site?
226	d. Laptop computer (in-field) 1 2	1  Yes 2
227	e. Car-mounted mobile digital/ data terminal (MDT) 1	5. Which of the following types of data does your agency geocode and map? Mark (X) one per line.
228	f. Car-mounted mobile digital/ data computer (MDC) 1 2	Yes No
229	g. Hand-held digital terminal 1 2	265 Calls for service
230	h. Other – Specify	266 Arrests 1 2 2 267 Incidents 1 2
	231	
2.	Mark (X) the functions for which your agency uses computers.	Do your agency's patrol officers have direct access to the following types of information via computer while in the field? Mark (X) one per line.  Yes No
232	Crime analysis 237 ☐ In-field communications	Yes No 268 Motor vehicle records 1 □ 2 □
	☐ Crime mapping 238 ☐ In-field report writing	269 Driving records
	☐ Criminal investigations 239 ☐ Internet access ☐ Dispatch (CAD) 240 ☐ Records management	270 Criminal history records 1 2
	☐ Fleet management 241 ☐ Resource allocation	271 Linked files for crime analysis 1 2         272 Calls for service
3.	Mark (X) the types of computerized files maintained by your agency.	7. How is field report data primarily transmitted to the department's central information system?
242	☐ Alarms 254 ☐ Stolen vehicles	Mark (X) one per column.
243	☐ Arrests 255 ☐ Stolen property other	Criminal incident Traffic accident reports reports
244	Calls for service than vehicles	273 274 Paper report
245	☐ Criminal histories     256 ☐ Summonses       ☐ Department inventory     257 ☐ Traffic accidents	Wireless transmission
247	Driver's license information 258 Traffic citations	(e.g., cellular, UHF) 2
248	☐ Evidence 258 ☐ Uniform Crime Reports — Incident-Based (NIBRS)	Computer medium
249 250	☐ Field interview information ☐ Incident-Based (NIBRS) ☐ Incident reports ☐ 260 ☐ Uniform Crime Reports —	(e.g., disk transfer) 4 4 4 Data device
251	Linked files for crime Summary	(e.g., laptop download) 5 🗆 5 🗆
252	Payroll 282 Warrants	8. Does your agency maintain an official site (i.e., 275 "Home Page") on the World Wide Web/Internet?
253	Personnel	1 ☐ Yes 2 ☐ No

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	SECTION IV - PE	RSONNEL				
			Swori	n personnel	Nonsworn	personnel
			Full-time	Part-time (2)	Full-time (3)	Part-time (4)
1	Total authorized positions on June 30, 1997		276	277	278	279
	Enter the actual number of full-time and part-time agency er during the pay period that included June 30, 1997. Sum of lin		280 f.	281	282	283
a.	Administration - Chief of police or sheriff, assistants, and other p work in an administrative capacity. Include finance, personnel, and		284 S.		285	
b	Field operations – Police officers, deputies, detectives, inspectors supervisors, and other personnel providing direct law enforcement Include traffic, patrol, investigations, and special operations.	3, t services.	286		287	
c.	Technical support – Dispatchers, records clerks, data processors personnel providing support services. Include communications, flemanagement, and training.	, and other eet	288		289	
d	Jail operations – Correctional officers, guards, cooks, janitors, an personnel who work in the jail.	d other	290		291	
e.	Court operations - Bailiffs, security guards, process servers, etc.		292		293	
f.	Other, (e.g., crossing guards, parking monitors, etc.) – Specify $\chi$		294		295	
3.	Of the total number of FULL-TIME sworn personnel working operations (2b(1) above), enter the number of uniformed off regular assigned duties included:					
a.	Responding to calls for service		297			
b	Serving as a Community Policing Officer		298			
c.	Serving as a School Resource Officer		299			
4.	Enter the number of FULL-TIME agency employees BY RACE		Sworr	personnel	Nonsworn	personnel
	SEX during the pay period that included June 30, 1997. If connot available from records, indicate estimates with an asterisk (*).	ounts are	Male (1)	Female (2)	Male (3)	Female (4)
a.	. Total number of full-time agency employees – Sum of lines be	through fholo	300	301	302	303
		nrougn i beiol	W.			
	White not of Hignanic origin	nrough i belov	W. 304	305	306	307
	White, not of Hispanic origin	mrough i beloi		305	306	307
	White, not of Hispanic origin  Black, not of Hispanic origin	nrough i beloi	304			
c.		mough i beloi	304	309	310	311
c.	Black, not of Hispanic origin	mougn i belo	304 308 312 316	309 313 317	310 314 318	311 315 319
c. d.	Black, not of Hispanic origin  Hispanic origin	mough i beloi	304 308 312	309	310	311
c. d.	Black, not of Hispanic origin  Hispanic origin   American Indian/Alaskan Native		304 308 312 316 320	309 313 317 321	310 314 318	311 315 319
c. d. e. f.	Black, not of Hispanic origin  Hispanic origin   American Indian/Alaskan Native  Asian/Pacific Islander  Persons of Mexican, Puerto Rican, Cuban, Central or South Ameriorigin, excluding Brazilian, Jamaican, and Haitian  For applicants (sworm positions only), regular field/patrol officers, and nonsworn personnel, indicate the types of drug testing programs that are authorized by your agency's	can, or other S Universal (all are tested)	304 306 312 316 320 Spanish cult Random selection	309 313 317 321 ure or  Reasonable suspicion of use	310 314 318 322 Other	311 315 319 323 Not tested
c. d. e. f.	Black, not of Hispanic origin  Hispanic origin  American Indian/Alaskan Native  Asian/Pacific Islander   Persons of Mexican, Puerto Rican, Cuban, Central or South Ameriorigin, excluding Brazilian, Jamaican, and Haitian.  For applicants (sworn positions only), regular field/patrol officers, and nonsworn personnel, indicate the types of drug testing programs that are authorized by your agency's written policy. Mark (X) all that apply, but at least one per line.	can, or other S Universal (all are tested) (a)	308 312 316 320 Spanish cult Random selection (b)	309 313 317 321 ure or  Reasonable suspicion of use (c)	310 314 318 322 Other (d)	311 315 319 323 Not tested
c. d. e. f.	Black, not of Hispanic origin  Hispanic origin  American Indian/Alaskan Native  Asian/Pacific Islander  Persons of Mexican, Puerto Rican, Cuban, Central or South Ameriorigin, excluding Brazillan, Jamaican, and Haitian.  For applicants (sworn positions only), regular field/patrol officers, and nonsworn personnel, indicate the types of drug testing programs that are authorized by your agency's written policy. Mark (X) all that apply, but at least one per line.  (1) Applicants for employment (sworn positions)	can, or other S Universal (all are tested) (a) 324	304 306 312 316 320 Spanish cult Random selection (b) 325	309 313 317 321 ure or  Reasonable suspicion of use (c) 326  326	310 314 318 322  Other (d) 327	311 315 319 323  Not tested (e) 328
c. d. e. f.	Black, not of Hispanic origin  Hispanic origin  American Indian/Alaskan Native  Asian/Pacific Islander   Persons of Mexican, Puerto Rican, Cuban, Central or South Ameriorigin, excluding Brazilian, Jamaican, and Haitian.  For applicants (sworn positions only), regular field/patrol officers, and nonsworn personnel, indicate the types of drug testing programs that are authorized by your agency's written policy. Mark (X) all that apply, but at least one per line.	can, or other S Universal (all are tested) (a)	308 312 316 320 Spanish cult Random selection (b)	309 313 317 321 ure or  Reasonable suspicion of use (c)	310 314 318 322 Other (d)	311 315 319 323 Not tested
c. d. e. f.	Black, not of Hispanic origin  Hispanic origin   American Indian/Alaskan Native  Asian/Pacific Islander  Persons of Mexican, Puerto Rican, Cuban, Central or South Ameriorigin, excluding Brazilian, Jamaican, and Haitian.  For applicants (sworn positions only), regular field/patrol officers, and nonsworn personnel, indicate the types of drug testing programs that are authorized by your agency's written policy. Mark (X) all that apply, but at least one per line.  (1) Applicants for employment (sworn positions)	Can, or other S Universal (all are tested) (a) 324	304 308 312 316 320 Spanish cult Random selection (b) 325	309 313 317 321  ure or  Reasonable suspicion of use (c) 326	310 314 318 322  Other (d) 327	311 315 319 323  Not tested (e) 328
c. d. e. f.	Black, not of Hispanic origin  Hispanic origin   American Indian/Alaskan Native  Asian/Pacific Islander  Persons of Mexican, Puerto Rican, Cuban, Central or South Ameriorigin, excluding Brazilian, Jamaican, and Haitian.  For applicants (sworn positions only), regular field/patrol officers, and nonsworn personnel, indicate the types of drug testing programs that are authorized by your agency's written policy. Mark (X) all that apply, but at least one per line.  (1) Applicants for employment (sworn positions)	Can, or other S Universal (all are tested) (a) 324	304 308 312 316 320 Spanish cult Random selection (b) 325	309 313 317 321  Wre or  Reasonable suspicion of use (c) 326	310 314 318 322  Other (d) 327	311 315 319 323  Not tested (e) 328
c. d. e. f.	Black, not of Hispanic origin  Hispanic origin   American Indian/Alaskan Native  Asian/Pacific Islander  Persons of Mexican, Puerto Rican, Cuban, Central or South Ameriorigin, excluding Brazilian, Jamaican, and Haitian.  For applicants (sworn positions only), regular field/patrol officers, and nonsworn personnel, indicate the types of drug testing programs that are authorized by your agency's written policy. Mark (X) all that apply, but at least one per line.  (1) Applicants for employment (sworn positions)	Can, or other S Universal (all are tested) (a) 324	304 308 312 316 320 Spanish cult Random selection (b) 325	309 313 317 321  ure or  Reasonable suspicion of use (c) 326	310 314 318 322  Other (d) 327	311 315 319 323  Not tested (e) 328
c. d. e. f.	Black, not of Hispanic origin  Hispanic origin   American Indian/Alaskan Native  Asian/Pacific Islander  Persons of Mexican, Puerto Rican, Cuban, Central or South Ameriorigin, excluding Brazilian, Jamaican, and Haitian.  For applicants (sworn positions only), regular field/patrol officers, and nonsworn personnel, indicate the types of drug testing programs that are authorized by your agency's written policy. Mark (X) all that apply, but at least one per line.  (1) Applicants for employment (sworn positions)	can, or other S Universal (all are tested) (a) 324	304 308 312 316 320 Spanish cult Random selection (b) 325	309 313 317 321  ure or  Reasonable suspicion of use (c) 326	310 314 318 322  Other (d) 327	311 315 319 323  Not tested (e) 328

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	SECTION IV - PERS	ONNEL - Continued					
	Indicate your agency's residency requirement for new officer recruits that goes into effect at the time of employment or within one year of employment.  Mark (X) only one.	10. What is the amount of in-service training required for your agency's field/patrol officers?  357 358					
	1 Within State 4 Within metropolitan area 2 Within county 5 Within specified miles or driving time 3 Within municipality 6 No residency requirement	11. Is collective bargaining authorized for your agency's employees? Mark (X) one per line.  Yes No					
<b>8.</b> 352	Indicate your agency's education requirements for new officer recruits. Mark (X) only one.  1 Four-year college degree required 2 Two-year college degree required 3 Some college but no degree required 353	359 Sworn	?				
9a.	Enter number of semester hours required  4 High school diploma or equivalent required  5 No formal education requirement  How many hours of training does your agency require for new officer recruits? If no training of that type is	Mark (X) one per line.       Yes       No         361 Police union       1 □ 2 □         362 Nonpolice union       1 □ 2 □         363 Police association       1 □ 2 □					
<b>b.</b> 356	required by your agency, then enter 0.  Enter number of classroom training hours required  Enter number of field training hours required	13. Does your agency provide any of the following to sworn full-time personnel? Mark (X) one per line.  Yes No  364 a. Hazardous duty pay. 1 2 3 3 5 b. Shift differential pay 1 2 3 5 5 c. Education incentive pay. 1 2 3 5					
	1 ☐ Yes 2 ☐ No	367 d. Merit pay					
Enter your agency's expenditures for the most recently completed fiscal year. If data are not available, provide estimates and mark with an asterisk(*). Include expenditures of jails							
a.	administered by your agency.  Gross salaries and wages, including employer contribution benefits. If employer contributions to employee benefits are Namount above, estimate the percentage of gross salaries neces these costs (e.g., 15%, 20%).	ons to employee Amount OT included in the					
b.	Other operating expenditures (e.g., purchase of supplies, services, etc.)						
c.	Equipment (e.g., purchase of cars, radios, computers, etc., v	rith a life expectancy of 5 years or more) \$					
2.	Enter the total estimated value of money, goods, and p from a drug asset forfeiture program during the 12 mo money, goods, or property were received, enter 0.	roperty received by your agency this ending June 30, 1997. If no					
3.	Enter total overtime hours worked, total overtime monet hours earned by FULL-TIME sworn personnel who worked completed fiscal year. If data are not available, provide esting	l overtime during the most recently ates and mark with an asterisk(*).					
a.	Total overtime hours worked	373 Hot	urs				
b.	Total overtime monetary payment	37.4 <b>\$</b> 37.5					
c.	c. Total overtime compensatory hours earned						
4.	Enter your agency's salary schedule for the following f position does not exist in your department, enter "N/A".	Minimum Maximun	n				
a.	Chief of police or sheriff	376 \$					
b.	Sergeant or equivalent first-line supervisor	378 379 \$ \$					
c.	Field/patrol officer or deputy with 1 year post-academy exper						
d.	d. Entry-level officer or deputy (post-academy) \$ \$						

Page 6 FORM CJ44 (6-19-97)

### SECTION VI - POLICIES AND PROGRAMS

 Does your agency have a separate special unit with one or more employees assigned FULL-TIME for any of the following problems or tasks? If YES, enter the number of employees assigned full-time as of June 30, 1997, in columns (1) and (2). If NO, mark one (X) box only in either column (3), (4), or (5).

		Agency has a special unit with full-time personnel			Agency does not have a special unit with full-time personnel  Mark (X) one per line.						
	Type of problem/task	personne full-	number of el assigned -time.	who have been specially designated to handle this problem/task as			Agency has special policies or procedures that address this problem/task, but no specially designated	Agency has no special policies or procedures, or specially designated personnel for this problem/task.			
	Type of problem/task	Sworn (1)	Nonsworn (2)	1100		3)	personnel. (4)	(5)			
a.	Bias/hate crime	384	385	386			2 🗆	3 🗆			
b.	Child abuse	387	388	389	1[		2 🗌	3 🗆			
c.	Community crime prevention	390	391	392	1		2 🗆	3 🗆			
d.	Community policing	393	394	395	1[		2 🗌	3 🗆			
	Crime analysis	396	397	398	1		2 🗆	3 🗆			
	Domestic violence	399	400	401	1		2 🗆	3 🗆			
	Drug education in schools	402	403	404	1[		2 🗆	3 🗆			
-	Drunk drivers	405	406	407			2 🗆	3 🗆			
	Environmental crime	408	409	410			2 🗆	3 🗆			
	Gangs	411	412	413			2 🗆	3 🗆			
	Juvenile crime	414	415	416	1[		2 🗆	3 🗆			
	Missing children	417	418	419			2 🗆	3 🗆			
	Police-prosecutor relations	420	421	422			2 🗆	3 🗆			
	Repeat offenders	423	424	425			2 🗆	3 🗆			
	Research and planning	426	427	428			2 🗆	3 🗆			
	Victim assistance	429	430	431			2 🗆	3 🗆			
	Youth outreach	432	433	434	1[		2 🗆	3□			
	Does your agency have writ	ten nolicy d	lirectives on	Н			ian complaint review				
	the following? Mark (X) one		Yes No		452 YO	ır jurisdicti	on that reviews exce	ssive force			
	Use of deadly force/firearm dis	-			_	npianits aç Yes	jainst your departmei	ıtı			
	Handling the mentally ill						o question 5				
	Handling the homeless				b. To	whom doe	s the civilian complai	nt review			
	Handling juveniles				boa	ard/agency	report? Mark (X) all the	at apply.			
	Use of less-than-lethal force				_		ement executive (chief,				
_	Relationships with private secu Off-duty employment of sworn				454	city manag	nt executive (mayor, co: er, etc.)	nmissioner,			
	Strip searches						tal body (city/county cou	ncil, commission, etc.)			
	Code of conduct and appearan			i	456	Other – <i>Sp.</i> 457	ecify 🚽				
	Use of confidential funds					407					
	Employee counseling assistant Citizen complaints				. D.	oe thie eivi	lian complaint review	, beard/agency			
1/ m. 18 N.	Maximum hours worked by of	ficers	. 1 2		458 hav	re independ	lent investigative aut				
	Discretionary arrest power					ppoenapov Yes	vers?				
3.	Which of the following best	describes y	our			No.					
50	agency's pursuit driving pol				5 1/11	o conducts	administrative (non-	eriminal)			
	I ☐ Judgmental (leaves decisio		inv	estigations	of citizen complaint	s about police use					
	Restrictive (restricts decisio criteria (e.g., type of offense	ense, top speed, etc.)			_		orce? Mark (X) all that ement executive (chief,				
	Discouragement (discourag	es all pursuits	s)			Internal aff		anelin, etc./			
	4☐ Other – Specify ⊋				_		n agency personnel (no	t listed above)			
					462	Other – Sp	ecify 📈				
	<ul> <li>Agency does not have a wripursuit driving</li> </ul>	itten policy pe	ertaining to			463					

FORM CJ.44 (6-19-97) Page 7

	SECTION VI – POLICIES AN	ND PROGRAMS – Continued				
<b>6.</b> 464 465 466 467	2 ☐ Other sworn agency personnel 3 ☐ Government executive 4 ☐ Other – Specify	7. Does your agency have a policy requiring that 489 citizen complaints about excessive force receive separate investigation outside the chain of command where the accused officer is assigned?  1 Yes 2 No  8. Who has the right to administrative appeal in cases involving the use of excessive force?  Yes No				
	468	470 Citizens 1 □ 2 □ 471 Officers 1 □ 2 □				
	SECTION VII – COMMUN	ITY POLICING ACTIVITIES				
472 2. 475 476 477 3. 478 479 480 481 482 483	Does your agency have a community policing plan?  Mark (X) only one.  1 Yes, formally written 2 Yes, not formally written 3 No  During the 3-year period ending June 30, 1997, what proportion of each of the following types of agency personnel received at least 8 hours of community policing training (e.g., problem solving, SARA, community partnerships, etc.)?  Mark (X) one per line.  More Less than than All half half None  New officer recruits	Sa. During the 12-month period ending June 30, 1997, did your agency survey the citizens in its jurisdiction to gather any of the following information?  Mark (X) all that apply.  495				
490 491 492	School groups	522 Precinct 528 Street				
492	493	523 ☐ Census tract 529 ☐ Block 524 ☐ Patrol beat 530 ☐ Other – Specify ₹				
494	☐ Did not meet with any groups					

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**CJ-44** 

OMB No. 1121-0212: Approval Expires 06/16/2000

RETURN TO Bureau of the Census Governments Division Washington Plaza Bldg. 2, Room 509 Washington, DC 20233-6800 FORM CJ-44 (6-8-99)

#### 1999 SAMPLE SURVEY OF LAW ENFORCEMENT AGENCIES

Law Enforcement Management and Administrative Statistics U.S. DEPARTMENT OF COMMERCE BUREAU OF THE CENSUS ACTING AS COLLECTING AGENT FOR BUREAU OF JUSTICE STATISTICS U.S. DEPARTMENT OF JUSTICE

(Please correct any error in name, mailing address, and ZIP Code)

#### INFORMATION SUPPLIED BY Name Title Number and street or P.O. box/Route number City State ZIP Code OFFICIAL ADDRESS Number Extension Area code Number Area code FAX NUMBER TELEPHONE 021 E-MAIL Address

#### **GENERAL INFORMATION**

- Please mail your completed questionnaire to the Bureau of the Census in the enclosed postage-paid envelope before July 21, 1999, or FAX, (each page) toll-free to 1-888-891-2099.
- · Please retain a copy of the completed survey for your records.
- If you have any questions, call Carolyn Gates toll-free at 1-800-352-7229, or email to sslea@ census.gov

#### INSTRUCTIONS

- . If the answer to a question is "not available" or "unknown," write "DK" in the space provided.
- . If the answer to a question is "not applicable," write "NA" in the space provided.
- . If the answer to a question is "none" or "zero," write "0" in the space provided.
- When exact numeric answers are not available, provide estimates and mark (X) the box beside
  each figure that is estimated. For example 1,234 ☒
- · Space for comments and/or explanations is provided on page 6 of the questionnaire.

	SECTION I - OPERATIONS								
	ty. Exc	lude functions which your juest such as aiding another		number of facilities of June 30, 1999, v ARTERS.			ÉFROM		
Traffic and vehicle-relate		Court-related functions:	District/Pre	cinct stations			Ш		
functions:		out Executing arrest warrants				066			
<ul> <li>022 Accident investigation</li> <li>023 Parking enforcement</li> </ul>	ıs	o42 Court security	Fixed neig	hborhood/community	y substa	ations			
024 ☐ School crossing servi	ces	043 Serving civil process	Mobile nei	ghborhood/communi	ity subs	tations	Ш		
ozs Traffic direction and o		Special operations:	Other – S <sub>l</sub>	pecify 🚽					
oze ☐ Enforcement of traffic	laws	044 Bomb disposal	069			068			
enforcement		o45 ☐ Search and rescue o46 ☐ Tactical operations (SWAT)							
Special public safety funct	ions:	047 Underwater recovery	3. During th	ne 12-month perio	d endi	ng June 30,	1999,		
civil defense		Detention operations:	agency u	the following typ se? Mark (X) all tha	es or p t apply	atroi units d	ia your		
∞ Fire services		048 🗌 Jail facility			utine	Special	Did not		
631 ☐ Emergency medical s		Lockup/temporary	Automobil	р. 1e <sup>060</sup>	atrol □	events 061	use 082		
Investigative support func	tions:	overnight detention	Motorcycle	9		064	086		
033 Crime lab services		separate from jail)	Foot			067	068		
∞₄ ☐ Fingerprint processing	g	overnight detention)	Horse	069		070 073	074		
Crime investigation for:		Special enforcement	Marine	076	H	076	077		
∞ □ Homicide		functions:			_		_		
os Other violent crimes		os₁ ☐ Drug enforcement	4. Does you	r agency participa	ate in :	an operation	al		
037 Arson		Other functions:	911 eme	gency telephone:	systen	n or its equiv	alent		
oss Other property crimes	Mark (X) o	can be dispatche only one.	a as a	result of a ca	ali)?				
∞ Environmental crimes	3	oss ☐ Dispatching calls for service	078 1 Yes -	Basic 911 system					
040 Computer crimes		os4 Training academy operation		Expanded/Enhanced	d 911 s	ystem			
received or initiated b are included ₁□ b (91 • If your agency does no	y your 1) <sub>2</sub> [ t respond t avail		dicate (X) und • • Use other and en	otal calls/requests der which categor her 12-month period ter end date here. –	<i>y alarn</i> d if nec	ns essary, 278			
a. Total calls/requests	Т	b. Emergency	request/event c. No	un 011	4	Other sources	/officor		
for service (b+c+d)		911 system	ph	one number		initiated, walk	,		
080	4	le1	082	Ч	083		L		
6. For the total calls/requeach method listed be		entered in Item 5a, 5b, and 5d	above, enter	the number hand	led by				
		Method	d of handling c	all/request for servic	се				
		Direct response by your age	ency	Refer	ral to o	ther agency			
	dispatch of 1 or more agency w officers from your dispatch of			d by your without the enforcement ago of officer(s) (e.g., jurisdiction priority)		Referred to enforceme (e.g., anim public	nt agency al control,		
a. Total calls (from 5a)	084	086		086	L	087	L		
<b>b.</b> 911 calls (5b)	088	L 089		090		091	L		
c. Non-911 calls (5c)	092	083		094	L	096			
Page 2						F	ORM CJ-44 (6-4-99)		

Page 2

1	SECTION II – COMPUTERS AND INFORMATION SYSTEMS									
	NOTE - Use June 30, 1999 as questions in this sec		for all	3.	Does your a following fu		computers	for any of t	he	
	Indicate whether your ager computer type listed below     Mark (X) the box next to figur	ncy does or does not v. Mark (X) one per line	).	126	Mark (X) one Crime analysis Crime mappin	per line. 3		Yes No		
	a. Used in ADMINISTRATIVE		407	Criminal inves processing).	- tigations (ex	clude word				
	stations, etc.) Type of computer	Agency uses – Mark (X) and enter number in use.	Ager   does   use	not 129   9 130	Dispatch (CAD n-field commo n-field report	unications . writing		1 2 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 1 2 1		
	ose (1) Mainframe computer	1□→ " □	2	4. [	nternet acces: Does your ag	ency maint	ain compu	1 2 terized file:	with	
ı	oss (2) Mini-computer	1□→ □	2	-   '	any of the fo Mark (X) one p	oer line.		Yes No		
	100 (3) Personal/desktop computer (PC)		2	133 /	Alams Arrests			1 2 2		
	102 (4) Server	1 □ → 103 □	2	<b>-</b>	Calls for servic Criminal histor			1 2 2		
	b. Used IN THE FIELD by pate	rol officers			Department in Driver's licens	,		1 2 2		
	Type of computer	Agency uses – Mark (X) and enter number in use.	Ager   does     use	not 139	Evidence Field interview ncident-based	/ information	1	1 2 1 2 1 1 2 1 1 2 1 1 2 1 1 1 2 1		
	104 (1) Laptop computer	1□→ ""	2		ncident report			1 2		
	108 (2) Car-mounted mobile digital/ data terminal (MDT)	1 □ → 107 □	   <sub>2</sub> [	143	ncident report inked files for	r crime analy	/sis	1 2 2		
	108 (3) Car-mounted mobile digital/ data computer (MDC)		   <sub>2</sub>	146	Payroll Personnel			1 2 2		
	110 (4) Hand-held digital/data terminal	1□→""□	   <sub>2</sub>	147 5	Stolen vehicle Stolen propert	y – other the	an vehicles	1 2 2		
	112 (5) Hand-held digital/ data computer (MDC)	1□→ 113 □	   <sub>2</sub> [	149	Summonses . Fraffic acciden	ts		1 2 2		
	•	1□→	2	160	Fraffic citation Fraffic stops .			1 2 2		
	114 <b>(6)</b> Other – <i>Specify</i> ,		*_	162	Jniform Crime Jniform Crime		,	1 2 2		
			!	164	Vehicle registr Warrants	ation		1 2 2		
	2a. Do your agency's patrol off the following types of infor IN-FIELD COMPUTERS? Mat	rk (X) one per line.		5. (	For which of tagency use C	the followin OMPUTERIZ	a types of a	data does yo ling and map	ping?	
	117 Criminal history records	-		]	Mark (X) one p Arrests			Yes No		
- 1	118 Driving records			157	Business locat			1 2		
	119 Mapping programs			7   166 '	Calls for servic					
	121 Stolen property	_		100	Census data (e Crime incident					
	122 Wanted suspects			100 '	Other – <i>Specif</i>					
	123 Wanted vehicles	1	2		162	, ,		10 20		
	b. Do your agency's patrol off software application that a COMPUTERS to perform cri as examining time-of-day p repeat calls for service anal		Does your age "Home Page" I ☐ Yes – <i>Ente</i>	on the Wo	rld Wide We	b/Internet?	No			
-	7. As of June 30, 1999, how PRIMARILY transmitted to		ta	Paper	Wireless transmission	Telephone	Computer medium	Data device	Not	
	central information system		ne.	report	(e.g., cellular, UHF)	(voice)	(e.g., disk transfer)	(e.g., laptop download)	applicable	
	Criminal incidents		-	(1)	(2)	(3)	(4)	(5)	(6)	
	166 Criminal incidents									
١	186 Hanic accidents									

FORM CJ-44 (6-8-99) Page 3

	SECTION III - PERSONNEL								
	General instructions for questions 1 and 2	s	worn p	ersonnel		Nons	worr	personn	el
	Include only paid employees	Full	-time	Part-tin	ne	Full-tin	ne	Part-tin	ne
	<ul> <li>Sworn employees must have general arrest powers</li> <li>For the purposes of this survey, full-time employees are those</li> </ul>	167	1)	(2) 168	$\top$	(3)	$\top$	170	$\top$
	who regularly work 35 hours or more per week  Mark (X) the box next to figures which are estimated				_	1			_
	If the information is not available or unknown enter DK								
1.	Total authorized paid positions on June 30, 1999								
2.	Enter the actual number of full-time and part-time paid employees during the pay period that included June 30, 1999. Sum of lines a through f.	171		172	L	173	L	174	L
a.	Administration – Chief of police or sheriff, assistants, and other personnel working in an administrative capacity. Include finance, human resources, and internal affairs.	175				176	_		
b.	Field (law enforcement) operations - Police officers, detectives, inspectors, supervisors, and other personnel providing direct services. Include traffic, patrol, investigations, and special operations.	177	L			178	L		
c.	Technical support - Dispatchers, records clerks, data processors, and other personnel providing support services. Include communications, fleet management, crime prevention, and training.	179	L			180	L		
d.	Jail operations - Correctional officers, guards, cooks, janitors, and other personnel who work in the jail.	181	L			182			
e.	Court operations - Bailiffs, security guards, process servers, etc.	183	L			184	L		
	Other, (e.g., crossing guards, parking monitors, etc.) – Specify $ abla$	185	L			186	T		
	187								
3.	(2b above), enter the number of uniformed officers whose REGULARLY	188	L						
	ASSIGNED duties include responding to citizen calls for service								
4.	4. As of June 30, 1999 enter the number of full-time sworn personnel serving as Community Policing Officers, Community Relations Officers or others regularly engaged in community policing activities								
5.	As of June 30, 1999 enter the number of full-time sworn personnel serving as School Resource Officers	190							
6.	As of June 30, 1999 how many of the following were employed by your	S	worn p	ersonnel		Nonsw	om	personne	ı
	agency?		time 1)	Part-tin (2)	ne	Full-tin (3)	ne	Part-tim (4)	е
		191	<u>"</u>	192	T	(0)		(4)	
a.	Reserve/Auxiliary Sworn Officers					193	_	194	_
b.	Community Service Officers/Police Service Aides					100	_	104	_
c.	Nonsworn volunteers not included in 6b above					196	L	196	L
	SECTION IV – POLICIES AND PROCEDUR	ES							
1.	As of June 30, 1999, did your agency have written policies or procedures on t	ne fol	lowin	g?					
		Yes	No						
	.Code of conduct and appearance		2 🗆						
	Use of deadly force/firearm discharge		2						
	Discretionary arrest powers	_	2						
	Handling domestic disputes		2						
203 <b>g</b>	Working with juveniles	₫	2						
	Use of less-than-lethal force		2 🗆						
	Responding to people with mental illness		2 🗆						

Page 4 FORM CJ-44 (6-8-99)

1			SEC	TION	V – COI	MMUNI	IITY POLICING ACTIVITIES				
		As of June 30, 1999, did your age community policing plan? Mark (X				5a. During the 12-month period ending June 30, 1999, did your agency survey the citizens in its jurisdiction to gather any of the following information?  Mark (X) all that apply.  231 Public satisfaction with police services 232 Public perceptions of crime/disorder problems 233 Personal crime experiences					
	2.	During the 2-year period ending proportion of the following type personnel received at least 8 ho policing training (e.g., problem community partnerships, etc.)? Mark (X) one per line.	es of	fagen of com	cy nmunit	234 ☐ Other – Specify   235  236 ☐ Did not survey the general public – SKIP to question 6a					
				or	than		<ul> <li>For which purposes, does your agency use the survey information described in 5a above? Mark (X) all that apply.</li> </ul>				
			_	more	half	None	237 Allocating resources to targeted neighborhoods				
	208	New officer recruits 1	_	2	3 🗆	4 🗆	238 Prioritizing crime/disorder problems				
	209	In-service sworn personnel 1		2	3 🗆	4 🗆	239 Formulating agency policy and procedures				
	210	Civilian personnel 1	]	2	3 🗌	4 🗌	240 Redistricting beat/reporting areas				
							241 Providing information to patrol officers				
	2	During the 2-year period ending		no 20	1000		242 Evaluating program effectiveness 243 Training				
	э.	which of the following did your all that apply				k (X)	244 Other – Specify 245				
		Trained citizens in community po mobilization, problem solving)				unity					
		Gave patrol officers responsibilit geographic areas/beats					6a. As of June 30, 1999, which of the following methods				
		☐ Assigned detectives to cases bas areas/beats			•		could citizens in your jurisdiction use to access crime statistics or crime maps? Mark (X) all that apply.				
		Actively encouraged patrol office SARA-type problem-solving projections	ects	on thei	ir beats		246				
		Included collaborative problem-s the evaluation criteria of patrol o	ffice	rs			248 Internet/web-page 256 Agency reports 249 Public kiosk/terminal 257 Written requests				
	216	☐ Formed problem-solving partners groups, municipal agencies, or o specialized contracts or written a	then	s throu	gh	nity	250 Newsletter/brochure 250 Other - Specify 7 251 Newspaper 259				
	217	None of the above					252				
							253 Public library 280 None of the above – STOP here				
	4.	During the 12-month period end which of the following groups of regularly meet with to address of problems? Mark (X) all that apply.	lid y crim	our ag	ency	99,	b. As of June 30, 1999, what level of crime statistics/maps could citizens in your jurisdiction routinely access? Mark (X) all that apply.				
	218	Advocacy groups					281 State 288 Neighborhood				
	219	Business groups					262				
	220	Domestic violence groups					264 District 271 Street				
	221	Local public agencies (e.g., sanita	ation	n, parks	;)		265 ☐ Precinct 272 ☐ Block				
	222	Neighborhood associations					288 Census tract 273 Address				
	223	☐ Religious groups					267 ☐ Patrol beat 274 ☐ Other – Specify →				
	224	School groups Tenants' associations				275					
	225	Youth service organizations									
	227	Senior citizen groups					c. For the 12-month period ending June 30, 1999, did				
	228	Other - Specify 7					your agency conduct training classes for citizens on how to use or analyze crime statistics/maps?				
							276 1 ☐ Yes				
	230	Did not meet with any groups					2 No				

FORM CJ.44 (6-8-99) Page 5

Comments 277			
			,

## Thank you for your cooperation and prompt reply.

#### **Burden statement**

Public reporting burden for this collection of information is estimated to average 1 hour per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate, or any other aspects of this collection of information, including suggestions for reducing this burden, to the Director, Bureau of Justice Statistics, 810 Seventh Street, NW, Washington, DC 20531.

The Omnibus Crime Control and Safe Streets Act of 1968, as amended (42 USC 3732), authorizes this information collection, Although this survey is voluntary, we urgently need and appreciate your cooperation to make the results comprehensive, accurate, and timely.

Page 6 FORM CJ-44 (68-99)

CJ-38L

RETURN TO

U.S. Census Bureau Governments Division Washington Plaza II, Room 509 Washington, DC 20233-6800

Law Enforcement Management and Administrative Statistics

OMB No. 1121-0240: Approval Expires 05/31/2003

FORM CJ-38L
(7-10-2000)

2000 CENSUS OF STATE AND LOCAL
LAW ENFORCEMENT AGENCIES
LAW Enforcement Management and

OMB No. 1121-0240: Approval Expires 05/31/2003

U.S. DEPARTMENT OF JUSTICE STATISTICS AND ACTING AS COLLECTION AGENT
U.S. DEPARTMENT OF COMMERCE ECCNOMICS AND STATISTICS ADMINISTRATION
U.S. CENSUS BUREAU

		(Please correct a	any error in name, mail	ing address, and	ZIP Code ab	ove)		
	iternet Home mark (X) here	Page address:		Agency central e-mail address for citizen use: (If none, mark (X) here □)				
			i					
			INFORMATION S	UPPLIED BY				
Name			Ti	tle				
POSTAL ADDRESS	Number and	d street or P.O. box/Ro	oute number	City		State	ZIP Code	
PHYSICAL ADDRESS	If different f	rom postal address –	Number and street	City		State	ZIP Code	
E-MAIL ADDRESS								
TELEPHONE	Area code	Number	Extensi	PAX NUMBER	Area coo	de ¦Nu	ımber	
Enter the ye	Enter the year the agency began operation with sworn personnel							
	ropriate box a Agency is Agency o	wing conditions apply and return survey using s no longer in existen- contracts or "outsource Il name of the agency	ng the enclosed post ce es" to the agency list	age paid envelo	ope.			
Agency employs only part-time officers AND the total combined hours worked for these officers averages less than 35 hours per week All of the officers within the agency volunteer their time (i.e., are unpaid) Agency is private (i.e., not operated with funds from a state, local, special district or tribal government)								
			GENERAL INFO	RMATION				
Please mail your completed questionnaire to the U.S. Census Bureau in the enclosed postage-paid envelope, or FAX, (each page) toll-free to 1-888-891-2099 before August 4, 2000. Please retain a copy of the completed survey for your records. If you have any questions, call Theresa Reitz toll-free at 1-800-352-7229, or email to callea@census.gov								
, , ,		,						
• If the	INSTRUCTIONS  If the answer to a question is "not available" or "unknown," write "DK" in the space provided.  If the answer to a question is "not applicable," write "NA" in the space provided.  If the answer to a question is "none" or "zero," write "0" in the space provided.  When exact numeric answers are not available, provide estimates and place an asterisk (*) next to the figure							

SECTION I – CENS	US II	NFORMATION
What type of government operates this agency?  Mark (X) only one.  ☐ State ☐ Township ☐ Tribal ☐ County or Parish ☐ Regional ☐ Special ☐ Municipal ☐ School district district or authority	6.	Enter the number of ACTUAL full-time and part-time paid agency employees during the pay period including June 30, 2000. Full-time employees are those regularly scheduled for 35 or more hours per week. If none, enter 0.    Full-time
Which of the following law enforcement services did your agency provide on a regular basis during the 12-month period ending June 30, 2000?  Mark (X) all that apply.  Criminal investigation for:  Homicide Arson Other crimes  Crime prevention Drug law enforcement First response to criminal incidents Patrol services Responding to citizen calls/requests for service Traffic law enforcement None of the above		b. Officers without general arrest powers  c. Nonsworn employees  d. TOTAL (Sum of lines a+b+c)  Of the total number of FULL-TIME sworn personnel with general arrest powers, entered in 6a, enter the number of uniformed officers whose REGULARLY ASSIGNED DUTIES included responding to citizen calls/requests for service. If none, enter 0.  Of the total number of FULL-TIME sworn personnel with general arrest powers, entered in 6a, how many served as: If none, enter 0.  a. Community Policing Officers, Community
Which of the following functions did your agency perform on a routine basis during the 12-month period ending June 30, 2000? Mark (X) all that apply.  Providing court security Serving civil process Operating one or more jails Executing arrest warrants Participating in a multi-agency drug task force Operating a training academy Dispatching calls for service Search and rescue operations Tactical operations (SWAT) None of the above	9.	Resource Officers, Community Relations' Officers, or other sworn personnel specifically designated to regularly engage in community policing activities  b. School Resource Officers, School Liaison Officers, or other sworn personnel whose primary duties are related to school safety  Of the total number of FULL-TIME sworn personnel with general arrest powers, entered in 6a, how many performed the following duties as their PRIMARY job responsibility? Count each officer only once. If none, enter 0.  Number  a. Patrol duties
Enter the number of facilities or sites, SEPARATE FROM HEADQUARTERS, operated by your agency as of June 30, 2000.  If none, enter 0. a. District/Precinct stations b. Fixed neighborhood/community substations c. Mobile neighborhood/community substations  Enter the number of AUTHORIZED FULL-TIME SWORN paid agency	10a	b. Investigative duties (e.g., detectives)
positions on June 30, 2000.		Which 12-month period best reflects the budget amount entered in 10a? Mark (X) only one.  Calendar year Fiscal year  Enter the total estimated value of money, goods, and property received by your agency from a drug asset forfeiture program during calendar year 1999. If no money, goods or property were received, enter 0.

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		SECTION II -	PER	SONNEL			
12.			17.	Enter the number of FULL-TIME entered in 6a (with general arre AND GENDER for the pay perio June 30, 2000. If counts are not estimate and mark with an asterish	rest powers) BY RACE iod that included t available, provide an		
	Criminal record check	evaluation			Sworn p	ersonnel	
	Driving record check	□ Second language ability test			Male	Female	
		☐ Voice stress analyzer☐ Volunteer/community		a. White, not of Hispanic origin			
	Personal interview	service history check  Written aptitude test		b. Black or African American, not of Hispanic origin	t		
	Physical agility test			c. Hispanic or Latino			
12	Indicate your egeney's minimum	advention		d. American Indian or Alaska Native			
13.	Indicate your agency's minimum requirement which new (non-lat must have within two years of h	eral) officer recruits		e. Asian			
	Four-year college degree require Two-year college degree require	d		f. Native Hawaiian or Other Pacific Islander			
	Some college but no degree req	hours required		g. Some other race			
	☐ High school diploma or equivale☐ No formal education requiremen	•		h. Total number of full-time sworn agency personnel with general arrest powers (Sum of lines a through g			
14.	How many hours of ACADEMY required of your agency's new (recruits? Include law enforcement only. If no training of that type is re	non-lateral) officer training requirements	18.	should equal 6a) Is collective bargaining authori employees? Mark (X) one per line		ragency's Yes No	
	a. State-mandated hours	nouis		<b>a.</b> Sworn			
	b. Additional required hours						
			19.	Does your agency provide any full-time sworn personnel? Mai			
15.	How many hours of FIELD TRAI FTO) are required of your new (recruits upon graduation from the Include law enforcement training reno training of that type is required,	non-lateral) officer he academy? equirements only. If		a. Education incentive pay b. Hazardous duty pay c. Merit/performance pay Shift differential pay.		. 📙 📙	
		Hours		d. Shift differential pay     e. Special skills proficiency pay			
	a. State-mandated hours			f. Tuition reimbursement			
	b. Additional required hours						
16.			20.	Enter your agency's salary sch FULL-TIME sworn positions. If a your department, enter "N/A".	edule for the position doe	e following as not exist in	
	required annually for your agen NON-PROBATIONARY field/patr	ol officers? Include				UAL salary	
	law enforcement training requirement training of that type is required, ent	ents only. If no er 0.		a. Chief executive (chief, director		Maximum	
		Hours		sheriff, etc.)  b. Sergeant or equivalent first-	\$	\$	
	a. State-mandated hours			line supervisor	\$	\$	
	b. Additional required hours			c. Entry-level officer or deputy (post-academy)	\$	\$	
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	SECTION III - COMMUNI	TY POLICING ACTIVITIES					
21.	As of June 30, 2000, did your agency have a community policing plan? Mark (X) only one.  1 Yes, formally written 3 No	24. During the 12-month period ending June 30, 2000, which of the following groups did your agency meet with regularly (at least once every 3 months) to address crime-related problems? Mark (X) all that apply.					
22.	2 Yes, not formally written  During the 12-month period ending June 30, 2000, what proportion of agency personnel received at least eight hours of community policing training (problem solving, SARA, community partnerships, etc.)?  Mark (X) one per line.  All Half or Less than Mone half	Advocacy groups Business groups Domestic violence groups Local public agencies Neighborhood associations Religious groups School groups Tenants' associations youth service organizations Did not meet with any groups					
	New officer recruits	25a. During the 12-month period ending June 30, 2000, clid your agency conduct or sponsor a survey of citizens on any of the following topics? Mark (X) all that apply.					
23.	During the 12-month period ending June 30, 2000, which of the following did your agency do?  Mark (X) all that apply.  Actively encouraged patrol officers to engage in	☐ Public satisfaction with police services ☐ Public perceptions of crime/disorder problems ☐ Personal crime experiences of citizens ☐ Reporting of crimes to law enforcement by citizens					
	SARA-type problem-solving projects on their beats  Assigned detectives to cases based on geographic	Other - Specify 7					
	areas/beats  Conducted a citizen police academy	Did not survey general public – SKIP to section IV					
	Formed problem-solving partnerships with community groups, public agencies, or others through specialized contracts or written agreements.	b. For which purposes does your agency use the information described in 25a above? Mark (X) all that apply.					
	☐ Gave patrol officers responsibility for specific geographic areas/beats	☐ Allocating resources to targeted neighborhoods ☐ Evaluating program effectiveness					
	Included collaborative problem-solving projects in the evaluation criteria of patrol officers	☐ Formulating agency policy and procedures ☐ Prioritizing crime/disorder problems ☐ Providing information to patrol officers					
	☐ Trained citizens in community policing (e.g., community mobilization, problem solving) ☐ Upgraded technology to support community policing	☐ Redistricting beat/reporting areas ☐ Training development ☐ Other – <i>Specify</i> ¬					
	activities	Guier - openny y					
	☐ None of the above						
	SECTION IV - COMPUTE	RS AND INFORMATION SYSTEMS					
26a.	Indicate whether your agency's field/patrol officers use any of the following types of computers or terminals WHILE IN THE FIELD. Mark (X) one per line, and enter number of each type in use as of June 30, 2000.	<ul> <li>b. Do any of your agency's field/patrol officers have dire access to the following types of information using IN-FIELD computers? Mark (X) one per line.</li> <li>Yes No</li> </ul>					
	Type of computer used in the field Agency uses – Agency uses – Agency used in the field number in use.	Motor vehicle records					
	(1) Vehicle-mounted	Criminal history records					
	a. Laptop computer □ → □ □  b. Mobile digital/data	Linked files for crime analysis					
	computer (MDC) □ →						
	c. Mobile digital/data terminal (MDT) □ → □						
	d. Other -Specify 7						
	□						
	(2) Portable (not vehicle-mounted)  a. Laptop computer □ → □ □						
	b. Mobile digital/data						
	c. Mobile digital/data						
	terminal (MDT) □ →   □ d. Other – Specify ⊋						
/							

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SECTION IV - COMPUTERS AND IN	FORMATION SYSTEMS — Continued
27. How are field data from criminal incident reports PRIMARILY transmitted to your agency's central information system? Mark (X) only one.  Paper report Wireless transmission (e.g., cellular, UHF) Telephone line (voice) Computer medium (e.g., disk transfer) Data device (e.g., laptop download) Not applicable – agency does not handle such reports  28. Does your agency own or have access to an Automated Fingerprint Identification System (AFIS) that includes a file of digitized prints? Mark (X) all that apply. Agency is exclusive owner of an AFIS system Agency uses terminal with access to an AFIS system None of the above	29. Does your agency use computers for any of the following functions? Mark (X) all that apply.  Automated booking   Inter-agency information sharing   Crime analysis   Internet access   Personnel records   Dispatch (CAD)   Records management   Resource allocation   In-field communications   In-field report writing    30. Does your agency maintain its own computerized files with any of the following information? Mark (X) all that apply.  Alarms   Stolen property   Arrests   Summonses   Calls for service   Traffic accidents   Traffic citations   Fingerprints   Traffic stops   Incident reports   Use-of-force incidents   Linked files for crime analysis   None of the file types listed
SECTION V -	OPERATIONS
31. Does your agency participate in an operational 9-1-1 emergency telephone system or its equivalent (i.e., your agency's units can be dispatched as a result of a call to 9-1-1)? Mark (X) only one.    Yes = Enhanced/Expanded 9-1-1 system   Yes = Basic 9-1-1 system   No  32. During the 12-month period ending June 30, 2000, did your agency use the following types of patrol on a routine basis?    Yes   No   Yes   No     Automobile	33. As of June 30, 2000, how many officers did your agency have assigned to a special unit for drug enforcement or a multi-agency drug enforcement task force? If none, enter 0.  Assigned full-time Assigned part-time  a. Special unit for drug enforcement  b. Multi-agency drug task force  34. Enter the total capacity and maximum hours of holding time for temporary holding (lockup) facilities operated by your agency as of June 30, 2000. Include only overnight facilities used to hold persons prior to arraignment. If none, enter 0.  Adults Juveniles  a. Total capacity  b. Maximum holding time hrs. hrs.
SECTION VI -	- EQUIPMENT
35. Does your agency supply or give a cash allowance to its regular field/patrol officers for the following?  Cash Supplied allowance Neither Primary sidearm	36. Which types of sidearms does your agency authorize for use by its field/patrol officers? Mark (X) all that apply.  Not Semi-automatics Primary Backup authorized  10mm

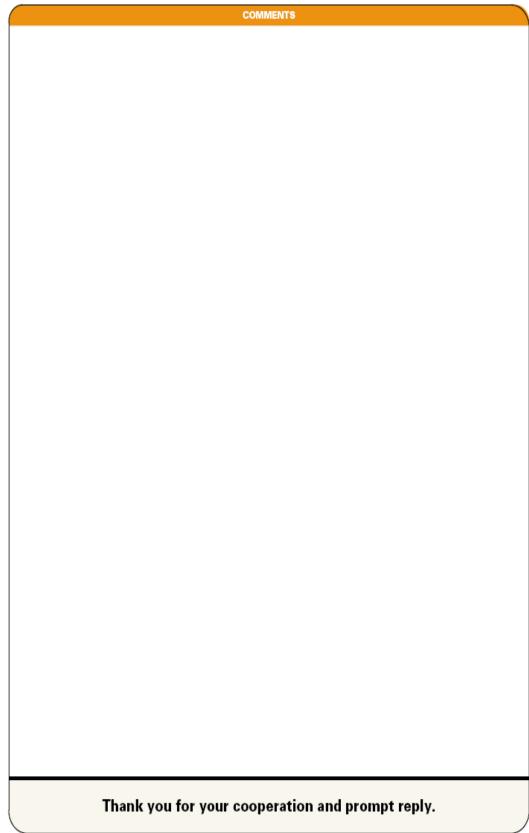
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	SECTION VI - EQUIPMENT — Continued						
37.	Are any of your agency's field/patrol officers required to wear protective body annor while in the field?  Mark (X) only one.	40a.	Does your agency allow officers to take marked vehicles home?				
	□ All □ Some □ None		Yes No – SKIP to question 41				
38.	Which of the following types of non-lethal weapons or actions are authorized for use by your agency's	b.	<ul> <li>Does your agency allow officers to drive marked vehicles for personal use during off-duty hours?</li> </ul>				
	or actions are authorized for use by your agency's field/patrol officers? Mark (X) all that apply.		☐ Yes ☐ No				
	a. Impact devices						
	☐ Traditional baton ☐ Rubber bullet ☐ PR-24 baton ☐ Other – Specify ☐ ☐ Collapsible baton ☐ Soft projectile ☐ Collabside	41.	Enter the number of animals regularly maintained by your department for use in activities related to law enforcement. If none, enter 0.				
	☐ Blackjack ☐ None authorized		Dogs Horses				
	b. Chemical agents  Personal Tactical Not	42.	Does your agency use any of the following technologies on a regular basis? $Mark(X)$ all that apply.				
	Personal Tactical Not issue operations authorized		Night vision/electro-optic  ☐ Infrared (thermal) imagers ☐ Image intensifiers ☐ Laser range finders ☐ None of the above  ☐ Digital imaging ☐ Fingerprints ☐ Mug shots ☐ Suspect composites ☐ None of the above				
	c. Other weapons/actions		Vehicle stopping/tracking				
Hand-held electrical device-direct contact Hand-held electrical device-stand off (e.g., taser) Hold or neck restraint (e.g., carotid hold) Capture net			☐ Electrical/engine disruption ☐ Stolen vehicle tracking ☐ Tire deflation spikes ☐ None of the above				
	☐ Flash/bang grenade ☐ Other - Specify →	43a.	During the 12-month period ending June 30, 2000, did your agency use video cameras on a regular				
	and a specify		basis?				
	□ No other weapone/actions authorized		Yes No - SKIP to Section VII				
□ No other weapons/actions authorized  39. Enter the number of vehicle types operated by your agency as of June 30, 2000. Include owned, leased, rented and confiscated vehicles that your agency uses. If none, enter 0.		b.	b. Enter the number of video cameras operated by your agency as of June 30, 2000. If none, enter 0.  Number operated				
	Number operated		In patrol cars				
	Marked cars		Fixed-site surveillance				
	Unmarked cars		Mobile surveillance				
	Other 4-wheel vehicles (SUV, truck, van, etc.)		Traffic enforcement				
	Fixed-wing aircraft						
	Helicopters						
	Boats						
	Motorcycles						
	Bicycles						

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	SECTION VII - POLICIES AND PROGRAMS									
44.	Does your agency have written following? Mark (X) one per line.	policy directive		46. What sp arrests	ecial policy does you in the following situa	r agency have regarding tions?				
	a. Use of deadly force/firearm disc b. Use of less-than-lethal force c. Code of conduct and appearanc d. Off-duty employment of officers e. Maximum work hours allowed to		Yes No	☐ Ma ☐ Pro <b>b.</b> Dome ☐ Ma	estic assault (Mark (X) or andatory arrest	Other special policy No special policy				
45. Which of the following best describes your agency's written policy for pursuit driving? Mark (X) only one.  Discouragement (discourages all pursuits)  Judgmental (leaves decisions to officer's discretion)  Restrictive (restricts decisions of officers to specific criteria (e.g., type of offense, top speed, etc.)  Other – Specify				47a. Is there a civilian complaint review board/agency in your jurisdiction that reviews excessive force complaints against your department?						
	IF YOUR AGENCY H	AS LESS THAI	V 100 FU	LL-TIME SW	ORN PERSONNEL, S	TOP HERE.				
48.	48. Does your agency have a SEPARATE SPECIAL UNIT with one or more employees assigned FULL-TIME for any of the following problems or tasks? If YES, mark (X) the appropriate box in column (1). If NO, mark (X) one box only in either column (2), (3), or (4). Mark (X) only one box per row.									
			Age	ncy does not h	nave a special unit wit	h full-time personnel				
		Agency has special unit		ncy does not h	ave a special unit wit Policies/procedure only	· · · · · · · · · · · · · · · · · · ·				
	Type of problem/task	special unit with full-time personnel	Designa Agency designate add	ted personnel has specially d personnel to tress this task as needed	Policies/procedure only  Agency has policies o procedures to addres this problem/task, bu no designated personn	Problem/task not officially addressed  Agency does not have personnel, policies or procedures to address this problem/task				
		special unit with full-time personnel (1)	Designa Agency designate add	ted personnel has specially dipersonnel to tress this task as needed (2)	Policies/procedure only  Agency has policies o procedures to address this problem/task, bu	Problem/task not officially addressed  Agency does not have personnel, policies or procedures to address this problem/task  (4)				
	a. Bias/hate crime	special unit with full-time personnel	Designa Agency designate add	ted personnel has specially de personnel to tress this task as needed (2)	Policies/procedure only  Agency has policies o procedures to addres this problem/task, bu no designated personn (3)	Problem/task not officially addressed  Agency does not have personnel, policies or procedures to address this problem/task  (4)				
	a. Bias/hate crime b. Child abuse	special unit with full-time personnel	Designa Agency designate add	has specially ad personnel to tress this task as needed	Policies/procedure only  Agency has policies o procedures to addres this problem/task, bu no designated personn (3)	Problem/task not officially addressed  Agency does not have personnel, policies or procedures to address this problem/task  (4)				
	a. Bias/hate crime b. Child abuse c. Community crime prevention	special unit with full-time personnel  (1)	Designa Agency designate add	ted personnel has specially depersonnel to tress this task as needed (2)	Policies/procedure only  Agency has policies o procedures to address this problem/task, but no designated personn (3)	Problem/task not officially addressed  Agency does not have personnel, policies or procedures to address this problem/task  (4)				
	a. Bias/hate crime b. Child abuse c. Community crime prevention d. Community policing	special unit with full-time personnel	Designa Agency designate add	has specially ad personnel to tress this task as needed	Policies/procedure only  Agency has policies o procedures to addres this problem/task, bu no designated personn (3)	Problem/task not officially addressed  Agency does not have personnel, policies or procedures to address this problem/task  (4)				
	a. Bias/hate crime b. Child abuse c. Community crime prevention d. Community policing e. Crime analysis	special unit with full-time personnel  (1)	Designa Agency designate add	has specially ad personnel to dress this task as needed	Policies/procedure only  Agency has policies o procedures to address this problem/task, but no designated persons (3)	Problem/task not officially addressed  Agency does not have personnel, policies or procedures to address this problem/task  (4)				
	a. Bias/hate crime b. Child abuse c. Community crime prevention d. Community policing e. Crime analysis f. Cybercrime	special unit with full-time personnel  (1)	Designa Agency designate add	has specially and personnel to tress this task as needed	Policies/procedure only  Agency has policies o procedures to addres this problem/task, bu no designated personn (3)	Problem/task not officially addressed  Agency does not have personnel, policies or procedures to address this problem/task  (4)				
	a. Bias/hate crime b. Child abuse c. Community crime prevention d. Community policing e. Crime analysis f. Cybercrime g. Domestic violence	special unit with full-time personnel  (1)	Designa Agency designate add	has specially and personnel to tress this task as needed (2)	Policies/procedure only  Agency has policies o procedures to address this problem/task, but no designated personn (3)	Problem/task not officially addressed  Agency does not have personnel, policies or procedures to address this problem/task  (4)				
	a. Bias/hate crime b. Child abuse c. Community crime prevention d. Community policing e. Crime analysis f. Cybercrime g. Domestic violence h. Drug education in schools	(1)	Designa Agency designate add	ted personnel has specially depersonnel to tress this task as needed (2)	Policies/procedure only  Agency has policies o procedures to address this problem/task, but no designated persons  (3)	Problem/task not officially addressed  Agency does not have personnel, policies or procedures to address this problem/task  (4)				
	a. Bias/hate crime b. Child abuse c. Community crime prevention d. Community policing e. Crime analysis f. Cybercrime g. Domestic violence h. Drug education in schools i. Drunk drivers	special unit with full-time personnel	Designa Agency designate add	has specially and personnel to tress this task as needed (2)	Policies/procedure only  Agency has policies o procedures to address this problem/task, but no designated personn (3)	Problem/task not officially addressed  Agency does not have personnel, policies or procedures to address this problem/task  (4)				
	a. Bias/hate crime b. Child abuse c. Community crime prevention d. Community policing e. Crime analysis f. Cybercrime g. Domestic violence h. Drug education in schools i. Drunk drivers j. Environmental crime	special unit with full-time personnel	Designa Agency designate add	ted personnel has specially ed personnel to tress this task as needed (2)	Policies/procedure only  Agency has policies of procedures to address this problem/task, but no designated persont (3)	Problem/task not officially addressed  Agency does not have personnel, policies or procedures to address this problem/task  (4)				
	a. Bias/hate crime b. Child abuse c. Community crime prevention d. Community policing e. Crime analysis f. Cybercrime g. Domestic violence h. Drug education in schools i. Drunk drivers j. Environmental crime k. Gangs	special unit with full-time personnel	Designa Agency designate add	ted personnel has specially ed personnel to tress this task as needed (2)	Policies/procedure only  Agency has policies o procedures to address this problem/task, but no designated personned (3)	Problem/task not officially addressed  Agency does not have personnel, policies or procedures to address this problem/task  (4)				
	a. Bias/hate crime b. Child abuse c. Community crime prevention d. Community policing e. Crime analysis f. Cybercrime g. Domestic violence h. Drug education in schools i. Drunk drivers j. Environmental crime k. Gangs l. Internal affairs	special unit with full-time personnel	Designa Agency designate add	ted personnel has specially ed personnel to tress this task as needed (2)	Policies/procedure only  Agency has policies o procedures to address this problem/task, but no designated personn (3)	Problem/task not officially addressed  Agency does not have personnel, policies or procedures to address this problem/task  (4)				
	a. Bias/hate crime b. Child abuse c. Community crime prevention d. Community policing e. Crime analysis f. Cybercrime g. Domestic violence h. Drug education in schools i. Drunk drivers j. Environmental crime k. Gangs l. Internal affairs m. Juvenile crime	special unit with full-time personnel	Designa Agency designate add	ted personnel has specially ed personnel to tress this task as needed (2)	Policies/procedure only  Agency has policies o procedures to address this problem/task, but no designated personned (3)	Problem/task not officially addressed  Agency does not have personnel, policies or procedures to address this problem/task  (4)				
	a. Bias/hate crime b. Child abuse c. Community crime prevention d. Community policing e. Crime analysis f. Cybercrime g. Domestic violence h. Drug education in schools i. Drunk drivers j. Environmental crime k. Gangs l. Internal affairs m. Juvenile crime n. Missing children	special unit with full-time personnel	Designa Agency designate add	ted personnel has specially depersonnel to tress this task as needed (2)	Policies/procedures only  Agency has policies of procedures to address this problem/task, but no designated personnes (3)	Problem/task not officially addressed  Agency does not have personnel, policies or procedures to address this problem/task  (4)				
	a. Bias/hate crime b. Child abuse c. Community crime prevention d. Community policing e. Crime analysis f. Cybercrime g. Domestic violence h. Drug education in schools i. Drunk drivers j. Environmental crime k. Gangs l. Internal affairs m. Juvenile crime n. Missing children o. Prosecutor relations	special unit with full-time personnel	Designa Agency designate add	ted personnel has specially depersonnel to less this task as needed (2)	Policies/procedures only  Agency has policies of procedures to address this problem/task, but no designated personnes (3)	Problem/task not officially addressed  Agency does not have personnel, policies or procedures to address this problem/task  (4)				
	a. Bias/hate crime b. Child abuse c. Community crime prevention d. Community policing e. Crime analysis f. Cybercrime g. Domestic violence h. Drug education in schools i. Drunk drivers j. Environmental crime k. Gangs l. Internal affairs m. Juvenile crime n. Missing children o. Prosecutor relations p. Repeat offenders	special unit with full-time personnel	Designa Agency designate add	ted personnel has specially ed personnel to tress this task as needed (2)	Policies/procedures only  Agency has policies of procedures to address this problem/task, but no designated personnes (3)	Problem/task not officially addressed  Agency does not have personnel, policies or procedures to address this problem/task  (4)				
	a. Bias/hate crime b. Child abuse c. Community crime prevention d. Community policing e. Crime analysis f. Cybercrime g. Domestic violence h. Drug education in schools i. Drunk drivers j. Environmental crime k. Gangs l. Internal affairs m. Juvenile crime n. Missing children o. Prosecutor relations	special unit with full-time personnel	Designa Agency designate add	ted personnel has specially depersonnel to less this task as needed (2)	Policies/procedures only  Agency has policies of procedures to address this problem/task, but no designated personnes (3)	Problem/task not officially addressed  Agency does not have personnel, policies or procedures to address this problem/task  (4)				

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