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### FINAL REPORT

on

# **DETERMINANTS OF CITIZEN AND POLICE INVOLVEMENT IN COMMUNITY POLICING**

submitted to:

The City of Boston Police Department and The National Institute of Justice U.S. Department of Justice (#96-IJ-CX-0011)

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#### Abstract

The primary goal of the research was to determine the effects of distinct factors on citizen and police officer involvement in community policing within the City of Boston.

The research is based on extensive surveys of 3,046 Boston residents and 1,383 police officers, Boston police data on calls for service and arrests, and various local and federal government institutional data on such aspects as land-use, residential mobility, neighborhood poverty level, single-parent families, and the extent of community-based organizations and recreational/educational facilities.

The results indicate that specific factors are significant in determining the extent to which these two groups engage or take an active role in community policing practices. The most consistent indicators of residents' involvement relate to issues of neighborhood attachment and positive attitudes toward the police, with some notable racial distinctions. Police officer involvement is most affected by knowledge of community policing, supervisor abilities, and rank.

The data also provide an empirical assessment on the extent and nature of community policing in Boston several years after the police department had transformed its operations to a community policing philosophy, and during an unprecedented period of crime reduction within the city for which its community policing philosophy received national acclaim.

Such information can be used to better understand the relevant factors that are most important to the viability and stipulated goals of community policing.

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#### INTRODUCTION

The whole criminal justice system and all the criminal justice scholars cannot, without an organized, informed community, make significant progress toward safer, friendlier neighborhoods.

Warren Friedman (1994)

During the past decade, community policing has emerged as the guiding philosophy of law enforcement. A majority of American police agencies serving populations of 50,000 or more are either employing, developing, or planning to develop a community oriented policing strategy (Carter, Sapp & Stephens 1991). After experimentation with other approaches that were generally based on reactive measures to address crime-related problems (e.g., random motor patrols, saturation patrols, non-differential rapid response), the collaborative and prevention oriented principles of community policing gained more attention and evolved to become the dominant model for policing in the United States. The community policing emphasis on strengthening relationships between local neighborhood groups and municipal institutions, and channeling external crime control resources into the local community is generally considered the most significant aspect of the strategy for the reduction of crime and disorder.

There remain, however, a number of issues to be resolved in determining the true value and impact of community policing. Some questions persist about what community policing means, what it might be expected to accomplish, how and why it might be expected to work where other strategies have failed, and how to effectively measure the impact of community policing

strategies (Buerger 1994; Bursik & Grasmick 1993; Klockers & Mastrofski 1991; Mayhall et. al. 1995; Sadd & Grinc 1994; Sherman 1986; Skogan 1994). While the extent of research in these areas is rapidly increasing, there is already evidence that specific elements are prevalent in the development of community policing (see Skolnick and Bayley 1986). One element common to all definitions of *community policing* is the idea that the police and community residents must work in concert both to define and develop solutions to problems affecting the community. Increasing the level of contact between police officers, individual community residents, and existing community organizations is central to most definitions of community policing (Goldstein 1987; Skolnick and Bayley 1986). The police and community residents are ultimately supposed to become "co-producers of crime prevention" (Skolnick and Bayley 1986: 213).

However, the assumptions about community policing bringing police and residents into closer contact, or that [enough] residents even desire closer contact with police to address crime-related problems are largely untested. The historically poor relationship between the police and some segments of the community, the fear of retaliation, the fleeting nature of "projects" to help poor communities, general apathy, inadequate mechanisms for community organization, and chronic neighborhood conditions are among the factors that may adversely effect the willingness or ability of community residents to participate in community policing strategies (Skogan & Maxfield 1981; Sadd & Grinc 1994).

Related questions about why community members should be willing to involve themselves in community policing, or whether they are aware or adequately informed about the promises and potential of community policing remain largely unanswered in the literature. Yet, a sound knowledge in these areas is crucial to the development of successful long-range community policing strategies within any city.

## Resident Involvement in Community Policing

One of the primary tenets of modern community policing is that residents and police work together to control and prevent crime and disorder. Resident participation is an essential element to successful community policing wherein they can provide valuable information on neighborhood problems and solutions. Resident involvement can also invoke sentiments that the police are responsive to their concerns and result in heightened feelings of safety, better community-police relations, and decreases in crime (Grinc 1994).

Considering the importance of the role of citizen involvement in community policing, a major challenge for most police departments is getting residents to actively participate in crime control efforts. A review of community policing strategies in eight cities confirmed that each experienced difficulty in stimulating community involvement (Grinc 1994). Given both the importance of the community's role in community policing and the difficulty in stimulating citizen involvement, it is necessary that we further explore potential factors associated with citizen participation in anti-crime efforts. Understanding the factors associated with citizen participation will provide policy-makers with valuable information with which to examine underlying assumptions regarding community policing and refine current strategies.

In our review of the literature on community policing, several individual-level concepts emerged as being important for the study of citizen involvement in community policing. At the resident or individual levels, these included:

- Neighborhood investment:
- 2. Social investment;
- 3. Attitudes toward police;
- 4. Fear of crime; and

<sup>&</sup>lt;sup>1</sup> The eight cities/areas surveyed about their community policing programs included Hayward (CA), Houston (TX), Louisville (KY), New York, Norfolk (VA), Portland (OR), Prince George's County (MD) and Tempe (AZ).

## 5. Familiarity among neighborhood residents.

Skogan (1990) identified several of these concepts within the literature on citizen participation in crime control and prevention efforts. His review suggests that the people likely to be involved in such "anti-crime" groups are those that have a vested interest in the community – they tend to have children, own homes, and have lived in the neighborhood a long time.

Social investments, such as a sense of belonging to a neighborhood and the ability to rely on neighbors in time of need, may also reflect vested interests in the community that may foster willingness to participate in anti-crime groups. Skogan's (1990) further indicated that participation in anti-crime groups was higher among residents that engage in informal surveillance by asking neighbors for assistance and intervening in suspicious circumstances.

Fear of retaliation was the most commonly cited reason for lack of community involvement in Grinc's (1994) review of eight community policing programs. Factors found to exacerbate fear of crime include the presence of offenders who may retaliate against residents who cooperate with police, high levels of crime, and perceptions of social disorder.

Attitudes toward police may also affect citizen participation. Grinc (1994) found that a major reason why residents do not get involved in community policing projects or are hostile to police initiatives has to do with the generally poor relationship between the police and residents of poor, minority communities. Mistrust and fear have historically characterized the relationship between police and residents of poor, minority communities.

Neighborhood-level characteristics may also affect residents' participation and/or interest in community policing initiatives. For example, neighborhood social disorganization indicators have been found to affect the level of participation in local voluntary organizations (Sampson and Groves 1989). Social disorganization is typically defined as the inability of a neighborhood

to engage in self-regulation (Bursik and Grasmick 1993). Social disorganization indicators include neighborhood poverty, racial heterogeneity and residential mobility. Since participation in anti-crime efforts involves voluntary commitment, social disorganization is likely to affect levels of involvement among residents.

Central to the notion of self-regulation embodied in social disorganization theory is that there exists a consensus involving community crime problems among residents and how they should be addressed (Bursik 1998). Collective involvement in community policing would seem more likely if there were agreement in the identification of community crime problems and solutions. It would certainly be easier to engage the community in anti-crime efforts if there was agreement among residents over what issues should be addressed.

Other community-based concepts, such as social disorder, amount of criminal activity, and density of criminal offenders have also been identified as important motivators for community participation. Their negative effect on community participation is hypothesized to operate through fear (Grinc 1994; Skogan 1990). In contrast, high levels of crime and social disorder have also been assumed to be motivating forces behind community participation. This is due in part to the nature of community policing implementation. Community policing activities have often been targeted toward distressed neighborhoods with existing crime and social problems, the notion being that people in these areas would be motivated to get involved and help "take back" their neighborhoods. Rarely has this assumption been tested in a systematic way.

In the following analysis, we examine the factors that predict residents' knowledge, interest, and involvement in community policing. The analysis is exploratory in nature and designed to investigate the influence of both community- and individual-level factors on the likelihood of participating in community policing. Variables were selected for the analysis

based on crime control and prevention efforts and their relevance for studying community policing.

Another assumption that has motivated community-based research is that community characteristics most worthy of empirical investigation are those that are deficit oriented, measuring only negative aspects of communities. We believe it is just as important to explore some of the positive elements of a community and the influence that they may have on community participation. Community assets are one way to describe positive community characteristics. Assets are important for this study because they represent important resources that may motivate participation in efforts to protect these resources from the negative effects of physical and social neglect.

### Police Involvement in Community Policing

During the past 30 years, police departments have tried different tactics and methods to improve police performance and community relations. These include preventive/directed patrol (Kansas City), differential police response (Garden Grove, Greensboro, and Toledo), patrol deployment (San Diego), team policing and specialized patrol (Wilmington), low-visibility patrol (New York, Boston, Memphis, San Francisco, Miami), high-visibility patrol (Alexandria, Cleveland, San Jose), and management of demand (Wilmington). These approaches evolved into several models of community policing [e.g., problem-oriented policing (Newport News, New York City), experimental policing district (Madison), foot patrols (Baltimore County and Newark), neighborhood-oriented policing (Houston), and police mini stations (Detroit)].

Given the variations in how community policing is implemented, program evaluations are often limited in their external validity (Resig & Giacomazzi 1998). Notwithstanding, studies of police officers' reaction to policing practices are important to the analysis of community

policing. Among the first studies to evaluate police officers' response to community policing efforts took place in San Diego in 1991. The goals of the police department's "community profile development" program were to train police officers to change their perception of the police officer's role in relation to the community; demonstrate greater beat accountability and service to the community; show a higher level of job satisfaction; and draw on social service agencies and other community resources more often when handling problems on their beat.

Based on control and experimental group surveys, no significant difference in job satisfaction was detected. However, the experimental group demonstrated higher levels of knowledge pertaining to their beats and placed a higher value on police-community relations (Lurigio & Rosenbaum 1994: 149).

A 1977 evaluation of Cincinnati's (OH) "community sector team policing" program, an antecedent to community policing, indicated mixed levels of effectiveness.<sup>2</sup> Police officers in the experimental group reported a higher sense of responsibility and independent decision making, though overall job satisfaction remained unchanged. A corresponding survey of residents indicated an increased level of police response to calls for service, but an otherwise unchanged satisfaction with police services (Lurigio & Rosenbaum 1994: 150-151).

The evaluative component of Flint's (MI) "neighborhood foot patrol" program focused on determining citizen and police officer response to foot versus motorized patrol units. Citizens rated foot patrols superior to motorized patrols in four of six categories – preventing crime, working with juveniles, following up on complaints, and encouraging citizen self-protection. Furthermore, police officers participating in foot patrol rated their job satisfaction and morale

<sup>&</sup>lt;sup>2</sup> Common to the concepts of both team and community policing is the notion of decentralized decision making and the assignment of the same officers to the same neighborhoods.

higher than those assigned to motorized units. Motorized patrols were rated superior only in the category of responding to complaints (Lurgio & Rosenbaum 1994: 152).

Baltimore County (MD) implemented "citizen oriented police enforcement" which encouraged officers to interact more frequently with the public and to problem solve together to address issues of crime and fear. The experimental group of officers assigned to the COPE (Citizen-Oriented Police Enforcement) program reported a higher level of job satisfaction and more positive attitudes toward the public than did officers in the control group (Lurigio & Rosenbaum 1994: 153).

Community policing programs in Houston (TX) and Newark (NJ) aimed at reducing fear and enhancing police-community relations involved opening store front police substations and increasing police officer initiated interactions with neighborhood residents in order to assess issues of concern and problem solve. The program evaluation determined that levels of fear were significantly reduced and that citizens rated police officers as more polite and helpful. Notwithstanding these positive outcomes, there was reduction in crime level.

Moreover, non-minority, home-owning residents were disproportionately impacted. "Those [citizens] at the bottom of the local status ladder were severely underrepresented in terms of awareness and contact with the programs, and were unaffected by them. In short, those better off – got better off, and the disparity between area residents grew deeper" (Skogan 1990: 107).

In the late 1980's, New York began its "community patrol officer program" (CPOP) intended to integrate community policing concepts into the police department without large scale restructuring. Police officers participating in CPOP were surveyed about their attitudes toward the CPOP program, being a police officer, the community, and the department. Results

showed positive increases in the first three areas, but a negative shift in attitude toward the department (Lurigio & Rosenbaum 1994: 155).

Another strategy used by the New York City Police Department involves *quality of life* enforcement that targets problems such as illegal parking, loud music, and public drinking. This zero tolerance approach to issues of common community concern has been cited by the NYPD as having significantly reduced crime (Kappeler 1998: 304). Whether or not this correlation is causal, quality of life enforcement remains an innovative strategy, consistent with a community policing philosophy.

Edmonton (Canada) implemented a "neighborhood foot patrol program" (NFPP) with the goals of reducing the number of repeat calls for service while increasing officers' job satisfaction and improving citizen satisfaction with police services. The tactics of the NFPP were to concentrate officer presence in "hot spots," open up neighborhood substations, increase police visibility through foot patrols, provide officers with greater autonomy to problem solve, and encourage officers to involve community members in their problem-solving efforts.

Results of surveys given to foot patrol officers were compared to a sample of mobile patrol officers. The experimental group reported more positive attitudes toward their job satisfaction toward their work and that of the department. Citizen surveys also indicated significantly positive attitudes toward the foot patrol units (Lurigio & Rosenbaum 1994: 156).

Philadelphia (PA) implemented a community policing program called Project COPE (Community Oriented Police Education). The goals of the program were to encourage community crime fighting activities, improve citizen-police communication and understanding, and to improve officers' concern for the areas in which they were assigned. The project consisted of a series of classes attended by both police officers and community members and dealing with issues such as race relations, community resources, police practices, crime prevention strategies, and the need to relieve police-community tensions. Police officers were given pre- and post-program surveys. The findings were mixed, with officers reporting a

perception of less direct public antagonism toward the police and a more involved role for the community in crime prevention and control. However, officers perceived citizens to be less supportive; that the quality of their interactions with the public had declined; and were less satisfied with their jobs (Lurigio & Rosenbaum 1994: 157).

Madison (WI) implemented a community policing program which consisted of creating an "experimental police district" in which officers would devise strategies for working more closely with citizens to identify and solve problems. Surveys were administered to officers in experimental and control groups prior to the onset of the program and two years later. The findings indicated that the experimental group had a higher level of confidence in the quality of police leadership within organization and a greater satisfaction with their jobs and working environment. However, officers did not perceive greater success with problem solving efforts, nor did they indicate greater confidence in citizen problem solving involvement or having more time available for proactive work. A corresponding citizen survey did not yield any significant findings. Though this was attributed to a "ceiling factor" due to an already high level of confidence in the police to begin with (Lurigio & Rosenbaum 1994: 158).

The cities of Aurora and Juliet (IL) cooperatively implemented a "neighborhood-oriented policing and problem-solving project." This program consisted of extensive training of officers, and the proliferation of foot patrol units that would actively seek to problem-solve with community residents. Experimental groups in both cities were compared with a control group of officers in the neighboring city of Evanston (IL). Surveys revealed that the experimental group in Aurora had a greater knowledge of problem-oriented policing and spent a greater amount of time on foot patrol. However, there was less satisfaction with departmental communication issues; fewer problems were being addressed; and fewer meetings held with community groups. Results in Joliet were similar, where officers displayed greater knowledge

of and support for problem-oriented policing, but that several measures of implementation were less than that of the control group (Lurigio & Rosenbaum 1994: 159-160).

The above research supports the premise that police officers and citizens generally respond favorably to community policing. Questions remain as to whether these recorded increases are solely attributable to the agencies' community policing program or to competing factors.

Indicators of police officers' job satisfaction are also increased. This, however, may more greatly reflect the predisposition of the officers involved in their community policing program, rather than the program itself. In order to properly evaluate community policing programs, it is necessary to determine whether and to what extent officers are participating. Often times, the officers and citizens involved will not implement the programs as designed. Therefore, it is necessary to take into account any disparity between the drawing boards and the actuality of the program. Furthermore, it is necessary for studies to be designed to account for and exclude potentially competing factors, which critics may use to dismiss findings.

A well-conceived and implemented training program is essential to convey the expectations a department has of its personnel that will be involved in community policing. Given the non-traditional nature of community policing, likewise, training programs have sought to reflect this change. It has been suggested by Watson et al. (1998: 132) that in order for a community policing philosophy to be integrated into a department, police academy training must reflect the paradigm shift and include training in subjects such as professionalism, ethics, juvenile issues, interpersonal communications, problem solving, and critical thinking. Friedmann (1992: 79) further suggests that recruits be given exposure to government social service agencies in order to instill a sense of partnership with these other agencies.

In some locales, training focused on community policing has been met with resistance from police personnel. In Chicago, civilians were utilized to assist in the development and

training of community policing classes. This situation created a great deal of resentment from officers who perceived their civilian trainers to be condescending and out of touch with the realities of police work. Furthermore, the informal classroom setting in which personnel of differing ranks were mixed together, created an uncomfortable situation for superior officers who did not feel that this environment supported their leadership authority (Skogan & Hartnett 1997: 98-102).

In 1997, Zhao and Thurman sought to determine whether the general focus of policing in the U.S. was indeed shifting from a professional to a community policing model based on whether crime control as a priority of police agencies has shifted to order maintenance and provision of services, and organizational change was rooted in the external environment (i.e. community complaints/demands). Their results, however, indicated that crime control remains the top priority of police agencies and that police organizations are more so influenced by each other and a crime control mandate, than they are by the communities they serve. Zhao and Thurman (1997: 354) concluded that "the reality [of community policing] so far has not caught up with the rhetoric."

Their results are supported by Jiao (1998: 136-137) who reported that evaluations of community policing have primarily yielded three negative aspects. These are:

- (1) A lack of crime prevention, owing to a lack of community consensus as to what strategies are appropriate to prevent crime.
- (2) Difficulties in accepting and implementing community policing among police officers due to the quasi-military police culture which fosters an "us versus them" mentality.
- (3) Problems sustaining adequate levels of citizen involvement. Jiao identifies this as the greatest challenge to community policing, particularly in low-income, high-crime areas where many citizens feel

disillusioned and distrustful of government (especially the police department) and community organizations affiliated with government.

Overall, much of the literature suggests that the shift from a professional to a communityoriented model has been firmly established in the rhetoric of American police policy. What is
less clear, however, is the extent to which the rhetoric of community policing has been
actualized into the reality of police work. The preponderance of the research would suggest
that the cart might be significantly ahead of the horse. The reasons for its incomplete
application include limitations in relevant training and supervision of police officers involved in
community policing practices and lack of interest by community members. It may, therefore,
be appropriate to acknowledge that community policing theory may not be able to fully
translate into the reality of a community's multifaceted dynamics.

## Community Policing in the City of Boston

The concept of community policing within the City of Boston was first discussed in 1988 under the administration of former Police Commissioner Francis Roache. However, as in most locales at that time, the tenets of community policing were not clearly developed and the police department was not suitably organized to effectively address the range of issues involved in the transition to a community policing philosophy.

By 1992, the transformation of department operations to support a community policing philosophy became one of the principal goals of then Police Commissioner William Bratton.

During his brief tenure (October 1992-January 1994), a number of issues were addressed on the conversion to community policing. Among them, internal assessments of police officer training and equipment needs were conducted. The number of personnel in supervisory ranks was increased and efforts were begun to increase the overall number of police officers by 300 or

more personnel (from approximately 1,850 to 2,150) in order to adequately staff walking beats and other necessary functions. The acquisition of modern technologies to both free police officers from time-consuming manual functions and permit more efficient data processing and review was also initiated. Under the Bratton administration, the transition to community policing became more focused and its implementation inevitable.

In 1994, Paul Evans became police commissioner and continued the movement toward the modernization of the Boston Police Department in philosophical and practical terms by decentralizing command to district captains to allow them more flexibility in determining the applied approaches to crime control. Evans also capitalized on the availability of local, state, and federal funding to increase the size of the police force and acquire more advanced technological equipment (e.g., the offender identification [ID] imaging system, detective case management, and integrated ballistics system) to improve support functions. He set a minimum standard for police patrol deployment in the neighborhoods by mandating the eventual assignment of the same officer(s) to the same sector at least 60 percent of the time. An extensive citywide survey was also implemented at two-year intervals to more precisely ascertain the level of community concerns and perceptions on various police and crime-related issues. A "strategic planning and community mobilization" process was then implemented to better incorporate the involvement of community "stakeholders" into the development of district-based policing strategies. By 1995, the Department was well involved in its community policing strategy and became a national model [under the Clinton/Gore administration] for collaboration and crime control.

Significant progress was made in realizing lower levels of crime, even in the most troubled neighborhoods. In terms of serious crime, while the number of reported Part One crimes decreased throughout the nation during most of the 1990s, Boston residents experienced an

unprecedented 10 consecutive years of decreasing crime. While the factors that led to the decreases are unclear [especially since theoretically under the principles of community policing, the number of reported crimes should actually increase during the initial years of community policing], the Boston Police Department has succeeded in developing some comprehensive enforcement strategies and establishing collaborative partnerships with residents and other criminal justice agencies that have likely contributed to some of the reduction in reported (and unreported) crime.

For example, the Youth Violence Strike Force (YVSF) was established in October 1993 as a multi-agency initiative to address the problems of youth violence in various neighborhoods. Police officers in the Anti-Gang Violence Unit joined with probation officers, prosecutors, service providers, ATF, School Police, Youth Services, and beat officers, parents, neighborhood residents, and young people to suppress gang violence through a "zero tolerance" approach. The YVSF is diligent in its efforts to arrest, issue citations, and otherwise interfere with all levels of illicit activity in the affected areas from traffic violations, truancy enforcement and noise complaints to drug stings, probation checks, and otherwise intensively enforce all types of minor ordinances among youth. More serious offenses are targeted for swift prosecution by the U.S. and District Attorneys' offices. The year following this initiative, the number of juvenile homicide victims decreased by 47 percent (from a total of 19 to 10). In 1996 and 1997 there were three juvenile homicides each year, a remarkable 84 percent reduction since 1993, the year prior to YVSF's inception.

The majority of community policing efforts in Boston take place at the neighborhood level. Decentralization has provided district captains the discretion to deploy personnel as they see fit to most effectively respond to the problems particular to their locale. Each district is composed of a number of sectors, each assigned to specific officers. This "Same Cop/Same

Neighborhood" (SC/SN) aspect is the cornerstone to the Department's Neighborhood Policing strategy. With an increased sense of responsibility to a geographical area, rather than solely calls for service, officers are in a better position to form partnerships with area residents and businesses, thereby more effectively addressing community crime concerns.

There is much debate as to how much of a role the police can play in reducing crime. The direct and indirect causes of crime are many, some of which are beyond the scope of the criminal justice system. What is clear, however, is that levels of crime and fear in the Boston have declined to levels exceeding most expectations. By some measures, community policing has been a significant success in the City of Boston.

#### **METHODOLOGY**

This study is based on both primary and secondary data obtained from residents, police officers, and institutional sources. The research involves the analysis of multiple datasets related to the application of community policing practices, and is intended to yield a spectrum of information on the determinants of citizen and police involvement in community policing within the City of Boston.

#### **Data Sources**

The research is based on the following data sources:

- (1) A telephone survey of 3,046 adult residents of Boston;
- (2) A classroom administered survey of 1,383 Boston police officers;
- (3) Boston police data on calls for service and arrests; and
- (4) Various local and federal government institutions (i.e., Boston Property Assessor, U.S. Census, Coles Business Directory) with information on such aspects as land-use, residential mobility, single-parent families, and the extent of community-based organizations and recreational/educational facilities.

The variables and analysis within this report are organized into two distinct sections based on resident and police officer survey responses. Although some of the questions asked of these two groups are similar, most are particular to their respective roles and appropriate for comparative rather than integrated analysis. In addition, the resident survey incorporates the analysis of secondary data aimed at discerning the underlying reasoning for some responses.

## **Resident Sample Characteristics**

This component is based on the results of a telephone survey of adult residents of Boston during the summer of 1997.<sup>3</sup> A professional market research firm was contracted to perform the primary data collection functions.<sup>4</sup> Random digit dialing was deployed to contact a total of 7,010 residents with listed and unlisted telephones. A total of 3,046 valid surveys were completed with residents 18 years of age and older (i.e., 50% response rate). Stratified random sampling was used to ensure that the subsets were proportionately representative of the populations within the diverse neighborhoods of Boston (i.e., age, race, gender).

At the 99 percent confidence level, the error margin for the citywide sample is less than 1 percent. At the 95 percent confidence level, the margin of error at the district level ranges between 1 and 2 percent (Exhibit 1). Overall, the sample size and margin of error are adequate for making statistical inferences at both the citywide and district neighborhood levels.

This is the most comprehensive survey of Boston residents ever conducted on community policing and crime-related issues. The survey focuses on factors such as:

- 1. Neighborhood conditions/environment;
- 2. Fear of crime;
- 3. Neighborhood cohesion;
- 4. Police-community relations; and
- 5. Community policing issues.

The demographic characteristics of the respondent sample adequately reflect the composition of the larger Boston population in terms of age, race, gender and income.

<sup>&</sup>lt;sup>3</sup> The survey was designed and coordinated by the principal investigator for the Boston Police Department during his tenure as the Department's Director of Research and Evaluation.

<sup>&</sup>lt;sup>4</sup> Atlantic Marketing Research, Inc. served as the contractor to conduct the telephone interviews and data entry.

### Limitations

The sample was limited to those residents with telephone service. Those without telephones are not represented in the sample. These include homeless persons, transients who find shelter in single room occupancy dwellings, and others who cannot afford or otherwise choose not to have telephone service.

In addition, it is likely that undocumented aliens and some linguistic minorities who live in the city are underrepresented in the sample. The sample also does not represent persons less than 18 years of age (who constituted approximately 20 percent of the city's 2000 Census population), tourists visiting Boston, or those who commute into the city to work.

Exhibit 1.  THE SAMPLE STATISTICS FOR THE 1997 BOSTON PUBLIC SAFETY SURVEY BY POLICE DISTRICT							
Police District	Adult Population	District % of City's Adult Pop.	Surveys Completed	% of Total Surveys	% Difference	Response Rate per 1,000 Residents	Error Margin at the 95% Confidence Level
A-1 (Downtown, Beacon Hill, Chinatown)	28,846	6.1%	206	6.9%	0.8%	7.3	<u>+</u> 1.6%
A-7 (E. Boston)	26,433	5.6%	224	7.4%	1.8%	8.5	<u>+</u> 1.4%
A-15 (Charlestown)	12,325	2.6%	225	7.4%	4.8%	18.3	<u>+</u> 1.0%
B-2 (Roxbury, Mission Hill)	54,865	11.7%	304	10.4%	-1.3%	5.8	<u>±</u> 1.5%
B-3 (Mattapan, parts of Dorchester)	32,372	6.9%	232	7.6%	0.7%	7.2	±1.5%
<i>C-6</i> (S. Boston)	27,508	5.9%	198	6.6%	0.8%	7.2	<u>+</u> 1.6%
C-11 (Dorchester)	52,733	11.2%	220	9.8%	-1.4%	5.6	±1.8%
D-4 (Back Bay, S. End, Fenway)	62,350	13.3%	375	11.0%	-2.2%	5.4	<u>+</u> 1.4%
D-14 (Allston, Brighton)	63,350	13.5%	330	12.0%	-1.5%	5.8	<u>±</u> 1.4%
E-5 (W. Roxbury, Roslindale)	41,640	8.9%	240	7.7%	-1.1%	5.6	<u>±</u> 1.7%
E-13 (Jamaica Plain)	31,214	6.6%	196	6.9%	0.2%	6.7	<u>±</u> 1.7%
E-18 (Hyde Park)	36,179	7.7%	293	6.8%	-0.9%	5.7	<u>+</u> 1.5%
City of Boston	469,530	100%	3,046	100%	0.6%	6.5	@ 99% C.L. = <u>+</u> 0.6%

# **Police Officer Sample Characteristics**

This component is based on the results of a survey of Boston police officers conducted by the principal investigator during the winter 1997 in-service training cycle at the Boston Police Academy. This is the most comprehensive study of Boston police officers ever conducted, examining a variety of issues related to police operations and public safety in the City of Boston. These include:

- 1. Police officer job satisfaction and morale;
- 2. Supervision issues;
- 3. Perspectives on Department operations, management, and deployment strategies;
- 4. Assessments of crime and social conditions in each police district;
- 5. Community policing issues;
- 6. Technological capacity;
- 7. Training and equipment needs;
- 8. Stress factors; and
- 9. Internal and long-range planning issues.

The sample consists of 1,383 officers from all ranks among the 2,114 officers within the Department. This accounts for 65 percent of the sworn police personnel. Given the relatively high response rate, the data are representative in terms of gender, race, ethnicity, rank, district of assignment, and length of service within the Department (Exhibits 2-4 display some of these elements). The overall confidence level for the survey is 99 percent, with a sampling error margin of less than 1 percent.

30%

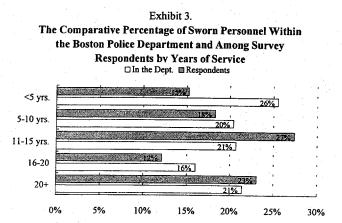
40%

50%

60%

70%

Exhibit 2.



20%

10%

Exhibit 4.

DISTRICT ASSIGNMENTS OF RESPONDENTS AND POLICE OFFICERS IN THE DEPARTMENT (1997)

District/Unit Assignment	Survey Respondents	In the Department
Total Number	1,383	2,114
	<b>%</b> o	f Total
A-1	4.7	8.2
A-7	2.1	3.7
B-2	6.1	8.0
B-3	4.6	6.0
C-6	2.5	4.1
C-11	4.8	7.4
D-4	5.3	7.8
D-14	3.0	4.6
E-5	3.0	3.7
E-13	2.7	4.0
E-18	2.9	4.7
Specialized Units or Headquarters	12.4	37.7
Unidentified	45.8	0.0

#### **Boston Police Calls for Service and Arrest Data**

Citizen demands for police services were measured using 9-1-1 emergency calls for services. The Boston Police Department collected information on approximately 350,000 citizen requests for service and criminal incidents in 1997. From the time a call is placed until its conclusion, information about the call is collected by the police.

Throughout the process, several different agents enter detailed information into the 9-1-1/CAD (Computer Aided Dispatch) system relative to the citizen's request for assistance as well as data on the police service that was delivered. The information collected comes from three different sources: 9-1-1 operators, police dispatchers, and responding police officers.

For each request made by a caller to 9-1-1, the operator enters into the CAD system all information necessary for dispatching police services to the address of the caller. Information

specifying the time the call was received, address, and a description of the problem, referred to by police as the nature code (e.g., assault, burglary, etc.). Medical and fire emergencies are routed to different dispatchers if no immediate police assistance is required.

When a 9-1-1 operator inputs the address given by a citizen, the system automatically performs address verification using geography files stored in the CAD system. In cases where any ambiguity is exhibited (e.g., multiple streets with the same name), the operator must provide additional information, such as the section of the city, to further specify the location so that a unique address location can be identified. This process is critical because it helps ensure that police officers are dispatched to the correct location associated with a citizen's request for help. After location verification and priority assignment, the police dispatcher receives the call information transmitted via the CAD system and assigns an available police unit.

After servicing the call, the officer contacts the dispatcher via radio and reports the specific type of crime problem serviced as well as the type of service rendered. The CAD system records the time the call was completed. If the problem encountered is not identified as a potential crime by the responding officer or dispatcher, then he or she must report a *miscel* code (i.e., miscellaneous) to the dispatcher that describes the problem. The dispatcher will enter the code reported by police into the CAD system. If a call is determined to be a crime by the officer or dispatcher, then a 1.1 incident report must be filled out by the police officer. The information on the 1.1 incident report is subsequently computerized.

All of this information is stored in three database files.

- (1) The 9-1-1 *calls for service* file which contains data on the initial categorization of calls for assistance made by 9-1-1 operators;
- (2) The *miscel* file which includes information about calls that are not identified as crimes by the police, but required some police response; and
- (3) The 1.1 *incident* file that contains all of the information for calls when a crime is committed.

Arrest information in each census tract was also obtained from the data files compiled by the Boston Police Department. A computerized record is compiled for each person arrested in the city. Included in the record is the address of the person arrested and type of crime for which they were arrested. The arrest data for 1997 was geocoded using standard mapping software.

## Geocoding Respondent Addresses to Corresponding Neighborhoods

A total of 3,046 telephone interviews were completed with Boston adult residents. Among the information requested was their home address. Approximately 80 percent of respondents (i.e., 2,447) provided their addresses. These were geocoded to the census tract level using the *MapInfo* software (version 4.5). The census tract was the lowest level of aggregation available for the survey. There are 163 census tracts in the City of Boston with an average population of approximately 3,500. Census tract information was regrouped according to the 12 police districts that comprise the City and serve as Boston's neighborhoods in this study.

Approximately 1,526 addresses were initially successfully geocoded to the census tracts. There were several reasons for the failure to assign some respondents to census tracts. In some cases, inaccurate or partial addresses may have been provided by the respondent or entered improperly by the person conducting the interview.<sup>5</sup> Four hundred and twenty one (421) addresses were corrected for spelling and subsequently geocoded.

Another geocoding issue was the commonality of some street names in the City of Boston (e.g., Washington, Adams, River, etc.). For different streets with the same name and for partial addresses that included a street name, an additional attempt was made to assign respondents to

<sup>&</sup>lt;sup>5</sup> Some respondents may have provided inaccurate addresses that although were not the respondents correct address, where legitimate Boston addresses. There was no way to account for this error and for purposes of this study, we assumed that if the address was a legitimate Boston address, it was in fact the respondents correct address.

neighborhoods using the BPD's reporting area (RA) maps.<sup>6</sup> For addresses that included a street entirely contained within an RA, the RA was the geographic unit assigned to the survey. An additional 415 respondents were geocoded in this manner.

The reporting area geographic boundaries used by the Boston Police Department (BPD) correspond closely with U.S. census tract boundaries. Thus, each survey respondent for which an RA could be determined was assigned a corresponding census tract.

The sum of these efforts resulted in the successful geocoding of 78 percent (i.e., 2,362) of the respondent addresses at the census tract level. All analyses conducted in this report relative to the resident survey are based on this sample of 2,362 geocoded cases.

<sup>&</sup>lt;sup>6</sup> The City of Boston is organized into 896 reporting areas by the Boston Police Department. These RAs are small geographic areas within the 12 police districts of the City.

#### Research Variables

## Dependent Variables

#### **Resident Component**

Residents' knowledge, interest, and involvement in community policing were the three dependent variables considered in the analysis. The assumption was that planning issues and strategy refinements may be evident based on the different factors that influence these elements. The telephone survey of residents contained the appropriate questions to gauge these aspects. Residents' knowledge with community policing

This dichotomous measure was constructed from three survey questions – (1) Have you ever heard of the concept of community policing? (2) Do you know how community policing is supposed to work, or how it's supposed to reduce crime? and (3) Within the past year, did you know of any meetings held in your area on public safety issues? If a respondent answered yes to any of these questions, then they were assigned a value of 1 for this measure (0 was coded for no). Seventy-five (75) percent of the residents reported a familiarity with the concept of community policing.

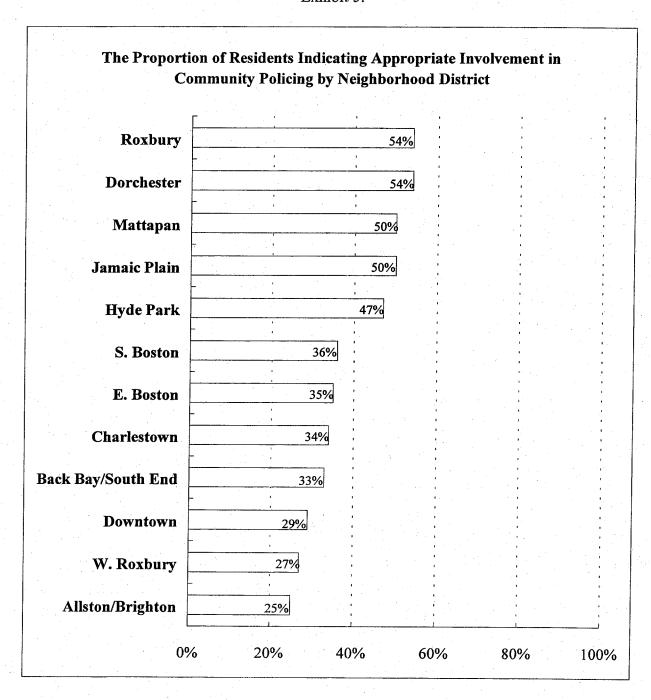
### Residents' interest in participating in community policing activities

This ordinal measure was based on a survey question asking residents to indicate how strongly they agreed with the statement that they would like to work more closely with local police officers to identify and solve neighborhood crime problems. Based on a 5-point scale, with 1 indicating strongly disagree and 5 indicating strongly agree, 50 percent of residents indicated a considerable interest in working with police.

## Residents' involvement in community policing activities

This dichotomous measure was constructed from three survey questions – (1) Have you personally done anything different during the past year to help reduce or prevent crime from occurring in your neighborhood? (2) Within the past year, have you attended any meetings related to public safety or crime issues in your neighborhood? and (3) Do you belong to a neighborhood watch group? If a respondent answered yes to any of these questions, then they were assigned a value of 1 for the involvement measure (0 was coded for no).

The proportion of residents within the 12 police districts who report an appropriate level of involvement in these public safety aspects range from 25 to 54 percent, with a citywide mean of 39 percent (Exhibit 5). The overall proportion of residents indicating involvement is highest in predominantly minority neighborhoods (e.g., Roxbury [54%] Dorchester [54%], Mattapan [50%], and Jamaica Plain [50%]). The lowest proportions of involved residents are in neighborhoods with either a large segment of renters or a high density of businesses (i.e., Allston/Brighton [25%], Downtown/Beacon Hill/Chinatown [29%]), or at the other extreme where single-family dwelling are predominant, housing values highest, and crime rates are lowest (i.e., West Roxbury [27%]).



## **Police Officer Component**

Police officers' knowledge, acceptance, commitment, and involvement in community policing were the dependent variables considered in the analysis. The assumption again was that planning issues and strategy refinements may be evident based on the different factors that

influence these elements. The classroom survey of police officers contained the appropriate questions to gauge these aspects.

Police Officers' Knowledge of Community Policing

Knowing the Concept of Community Policing

Since 1993, Same Cop/Same Neighborhood has been a main component of the Department's community policing philosophy. Information related to this strategy has been well disseminated and reinforced throughout the Department. When asked, "Which do you believe should be used to define community policing?" 80 percent of officers accurately responded, "regularly assigning same cop to the same neighborhood." The remainder (20%) provided other responses such as improving the police response to 9-1-1 calls; officers working in the same areas they live in; citizens forming their own patrol force; and using new technology to improve clearance rates.

This variable was recoded as dichotomous variable with "1" indicating respondents who recognize the primary tenet of the Department's community philosophy and "0" for those who responded otherwise.

Perception of the Current Policing Priorities Within the Department

The concept of community policing has been formally promoted within the Department since 1993. This variable measures officers' perceptions of the current policing priorities within the Department which emphasize prevention over traditional, reactive response methods. When asked what they consider the Department's policing priorities, 55 percent of the officers' indicated crime prevention or increasing collaboration between police and other community members as the first priority. The remainder indicated responding to 9-1-1 call (20%), public order maintenance (19%), and solving serious crimes (10%).

The responses for this variable were recoded as "1" indicating appropriate knowledge of policing priorities and "0" indicating otherwise.

Perception of What Community Policing Activities Should Be

Police officers were asked to rank the top five activities (from a list of 12) that they believe *should* be the focus of the Department's community policing strategy. A total of 49 percent of the respondents selected the following:

- (1) Assigning the same cop to the same neighborhood . . 15.5%
- (2) Increasing neighborhood residents' involvement . . . 11.1%
- (3) Increasing police presence in neighborhoods . . . . . 10.3%
- (4) Giving captains complete district control . . . . . . 8.8%
- (5) Increasing collaboration with area businesses . . . . . 3.7%

Because of the rank order, the five possible choices are in 5 variables and they carry different weights in terms of importance. This measure is calculated into a new variable named "activity." If the respondent selected any of the above mentioned community policing activities as the fifth rank, then a code of "5" is assigned. If the fourth rank includes any of the 5 items, the code would be "4", and so forth until code "1" is reached. Each step in the code assignment

process overwrites the previously assigned code, if any, to preserve their priority order. Those who did not include any of the community policing activity in the five choices are assigned "0."

Perceived Willingness of Residents to Work Closer With Police

This variable measures officers' perceived level of support from the community based on their response to whether or not "given the opportunity, most residents would be willing to work more closely with police officers to solve neighborhood crime problems." Seventy (70) percent of officers agreed with the statement.

## Police Officers' Acceptance of Community Policing

These group of variables attempt to measure the extent to which police officers accept some of the interactive elements of community policing.

Perceptions of whether residents working closer with police officers to identify and solve local problems would significantly reduce crime

Approximately 96 percent of police officers agreed with this statement.

Whether officers would be more effective if they could make a greaert effort to learn about citizens' concerns

This variable is based on Likert scale responses to how strongly respondents' agree or disagree that officers would be more effective if they could make more of an effort to learn about the things that concern the people in their area, rather than relying as much on calls for service and other reaction-based information. Approximately 85 percent of officers indicated some level of agreement with this statement.

The above two variables provide some indication of the police officers' perceptions about the potential effectiveness and acceptance toward forging closer police-community relations/partnerships. The variables were subsequently combined into a new dichotomous variable named "acceptance," with "2" indicating that respondents responded affirmatively to

both questions and "1" if they were affirmative on either of the two questions or negative on both questions. Affirmative responses to both questions were provided by eighty-three (83) percent of the respondents.

Police Officers' Commitment to Community Policing

Citizens' satisfaction as an indicator of police success

This variable measures how strongly respondents' agree or disagree that the level of citizen satisfaction is the most useful indicator of police success. The underlying assumption is that officers who view residents as customers or clients would tend to agree with this statement.

Approximately 52 percent of officers responded affirmatively on this aspect.

Making an effort to know residents

This variable measures officers' commitment to community policing via their personal efforts to get to know the residents in their patrol areas. The variable is coded as "1" for officers who do make an effort to get to know the residents in their area, and "0" for those who do not. Seventy-four (74) percent indicated they usually do make such effort.

A dichotomous variable was created from the two above variables as an overall indicator of commitment to community policing. A code of "2" indicates that the respondent agrees that citizens' satisfaction should be the measure of police success and that he/she usually makes an effort to know residents, and "1" if the officer only agrees with one or neither of the two questions. Affirmative responses to both questions were provided by forty one (41) percent of respondents.

Officer Involvement in Community Policing

This component contains four dependent variables.

Number of times officers interact with citizens

This variable measures how often officers casually interact with citizens, excluding crimerelated incidents or calls for service during a typical week. Since the amount of time one spends on crime-related incidents varies from person to person, the differences will be compensated/accounted for during subsequent multivariate analysis.

Types of interaction

Officers were asked to delineate the types of interactions they have with residents. Twenty-three (23) percent of their interactions were in the context of community policing (i.e., discussing specific problems, attending a community meeting).

Number of hours spent in crime prevention

The self-reported, weekly amount of time officers spend on prevention-oriented activities (e.g., making informal contact with residents/kids, identifying potential neighborhood problems and attempting to address them, voluntary walk n' talks) varies from 0 to 35 hours with a general average of 3 hours per week.

Perceived role of police in crime prevention

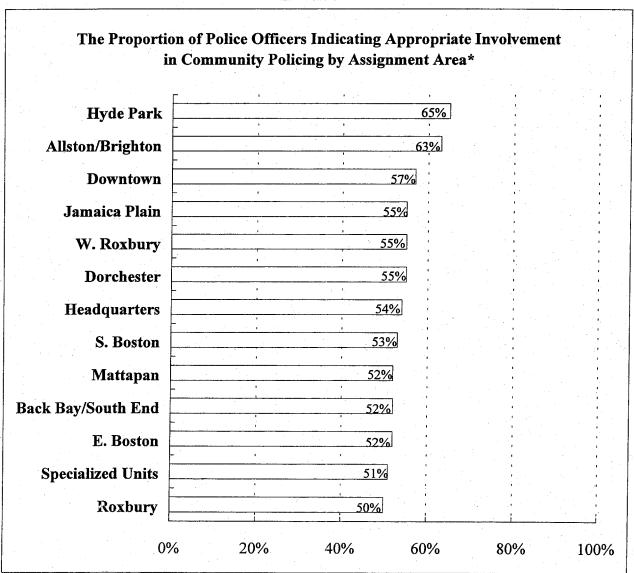
This ordinal level variable measures the self-assessment of one's role in crime prevention in his or her patrol area. It is based on a 4 point scale, with "1" indicating a major role and "4" as not playing any role. Seventy-one (71) percent feel that they play a moderate or major role in crime prevention.

A dichotomous variable was created from these four variables as an overall indicator of involvement in community policing, with an assigned value of "1" indicating substantial or full involvement and "0" indicating limited or no involvement.

The proportion of police officer within the 12 police districts, specialized units or headquarters who report an appropriate level of involvement in these community policing functions range from 50 to 65 percent, with a citywide mean of 54 percent (Exhibit 6). The

proportion of police officers indicating involvement is highest in neighborhoods where minority residents are predominant (e.g., Hyde Park [65%] Downtown/Beacon Hill/Chinatown [57%], and Jamaica Plain [55%]). The lowest proportions of involved police officers are in neighborhoods with either a large segment of renters or a high density of businesses (i.e., 3 [50%], 7 [29%], 2, 4), or at the other extreme where single-family dwelling are predominant, housing values highest, and crime rates are lowest (i.e., West Roxbury [27%]).

Exhibit 6.



<sup>\*</sup> There were only two respondents assigned to district 15 (Charlestown). Their proportion was insufficient to include in this display.

## Independent Variables

## **Resident Component**

The literature describes several individual and community-level factors that may be important in determining the extent of resident participation in community policing. These include neighborhood investment, neighborhood familiarity, attitudes toward police, victimization experiences, fear of crime, level of incivilities, neighborhood social disorganization, and consensus of neighborhood problems. These concepts were operationalized using the survey data, police crime data, and other institutional sources (Exhibit 7).

Exhibit 7.

THE INDIVIDUAL- AND COMMUNITY-LEVEL INDEPENDENT VARIABLES
USED IN THE ANALYSIS

Individual-level Variables	Community-level Variables			
Years in neighborhood	Neighborhood crime problems			
Household income	Community-based organizations			
Number of children	Recreational/educational assets			
Home ownership	Poverty level			
Reliability of neighbors	Residential mobility			
Resident assimilation	Racial heterogeneity			
Familiarity with other residents	Density of offenders			
Call police when suspicious	Demand for police services			
Confidence in police	Percentage of commercial parcels			
Familiarity with police				
Victimization experiences				
Fear of crime				
Perceived level of neighborhood incivility				
Respondent race				
Gender				
Education				

The following discusses the individual- and community-level variables selected for the analysis.

### Individual-Level Variables

## Residents' Extent of Neighborhood Investment

Years in neighborhood

This variable is measured as the number of years respondents have resided in the neighborhood. Responses range from 0 to 20 or more years. The average residential tenure in 1997 was 9.2 years.

Home ownership

This measure is coded as 0 if the respondent owned their place of residence and 1 for those who rented. Seventy-four (74) percent of the respondents own their place of residence.

Rely on neighbors

This measure is coded as 1 if the respondent indicated that if he or she had a problem, he or she could rely on neighbors for help and 0 if they indicated no or not sure. Eighty (80) percent of the respondents regarded their neighbors as reliable in this aspect.

Resident assimilation

This measure is coded as 1 if the resident considered him/herself a part of the neighborhood and 0 if they merely considered it a place to live. Sixty-three (63) percent of the respondents felt as if they were part of the neighborhood.

# Residents' Extent of Neighborhood Familiarity

Recognizability of residents

This measure is coded as 1 if the respondent indicated that he or she believed it is relatively easy for them to distinguish a stranger in the neighborhood from someone who lives there, and 0 if it would be difficult to do so. Fifty-five (55) percent believed it would be easy to differentiate a stranger from someone who lives in the neighborhood.

Call police when suspicious

This variable indicates how often the respondent would call the police if they saw something suspicious going on in their neighborhood. Based on a 4-point scale, with 1 indicating he or she would *never* call the police and 4 indicating the respondent would *always* call the police, 44 percent of the respondents reported that they would always call the police when they saw something suspicious going on.

#### Residents' Confidence in the Police

Ability to prevent crime

This variable is measured on a 4-point ordinal scale and is based on the question of how much confidence respondents have in the ability of the Boston police to prevent crime, with 1 indicating the respondent has no confidence at all and 4 indicating a great deal of confidence.

Only 5 percent indicate that they have no confidence in the ability to prevent crime. Thirty-six (36) percent indicate a great deal of confidence in the ability to prevent crime.

Ability to reduce crime

This variable is also measured on an ordinal scale and is based on the statement that the Boston police do all that can reasonably be expected of them to reduce crime in the respondent's neighborhood. Based on a 5-point scale, with 1 indicating the respondent strongly

disagreed with the statement to 5 indicating a strong agreement with the statement, thirty-one (31) percent agree and 10 percent disagree that the police do all that can be expected of them to reduce crime.

## Police familiarity with residents

This ordinal measure is based on the statement that police officers who work in the respondents' neighborhood area make an effort to get to know residents. Based on a 5-point scale, with 1 indicating the respondent *strongly disagreed* with the statement to 5 indicating a *strong agreement* with the statement, 27 percent of the sample strongly agreed with the statement. Twenty-seven (27) percent strongly disagreed.

## Professional conduct

Residents were asked to rate the professional conduct of Boston police officers. Based on a 4-point scale, with 1 indicating *poor* and 4 indicating *excellent*, five percent of the respondents rated Boston police officers as poor in their professional conduct and 29 percent as excellent. The mean score was 2.99.

Respondents were also asked to rate Boston police officers on other similar types of conduct (i.e., responding promptly to 9-1-1 calls, being fair and respectful to all people, and having the proper skills to work with residents and confrontational situations). However, there were significant numbers of missing values for these measures ranging from 13 percent to 24 percent of the total cases. The creation of a professionalism index with these measures would have resulted in a considerable loss of cases (45%) due to missing values. Therefore, the rating of professional conduct was the sole variable used in this area because it represented general professionalism and had the least amount of missing values (12%).

## Residents' Victimization Experiences

This measure was coded "1" if the respondent had been the victim of (reported or unreported) crime in Boston within the past year. Eighteen (18) percent of the respondents indicated that they had been the victims of crime.

#### Residents' Extent of Fear of Crime

General fear index

A fear of crime index was created by combining and converting the 10-point scale response to 12 questions related to fear of being the victim of specific crimes to a 100-point value scale (survey question #15). The scale measure for each item was based on "1" indicating not at all afraid to "10" being very afraid (see Appendix A for list of questions included). Respondent scores for this variable were between 9 and 95, with a mean score of 39.6. The alpha value for the index is .877, indicating that the index components are measuring a similar concept.

Among the specified crimes, fear of having their home burglarized was the most significant fear (5.35), followed by fear of having their car broken into (5.27) and of being attacked with a weapon (5.26).

Local fear index

An additional (more localized) fear measure was included based on the single-item indicator of how safe respondents feel out alone in their neighborhood at night. Using a 4-point scale, with 1 indicating very safe and 4 indicating very unsafe, only 8 percent indicated that they felt very unsafe alone in their neighborhood at night. Thirty-five (35) percent indicated that they felt very safe.

Residents' Perceived Level of Neighborhood Social Disorder

Perception of incivilities

An index of incivilities was created by aggregating the 4-point scale response to 7 specific conditions that may be problematic in respondents' neighborhoods (i.e., litter/trash, graffiti, excessive noise, kids hanging around, public drinking, and panhandling in the neighborhood). Conditions selected for inclusion in this index were those that have been prominent in the literature on issues of social disorder and incivilities (survey question #13). The alpha value for this index is .788, indicating that the components of the index are measuring the same concept.

Respondents rated each condition, with "1" indicating that it is not a problem to "4" indicating that it is a serious problem in their neighborhood. Missing values were also a consideration in the construction of this measure. Relevant variables with more than 2 percent of the responses missing were excluded from consideration in order to maintain a significant number of valid responses for the multivariate analysis. The scores ranged from 7 to 28, with a mean of 13.5.

Control Variables

Race

This variable is coded as "0" for white respondents and "1" for non-white respondents (i.e., African-American, Asian, and people of other races). Sixty-eight (68) percent of the sample is white.

Sex

This variable is coded as "0" for male and "1" for female. Forty-five percent of the sample was males and 55 percent were female.

#### Education

This variable is measured on a 7-point ordinal scale, with "1" indicating that the last grade completed was 4th grade or lower, and "7" indicating some graduate-level experience. Sixtynine (69) percent of the population had at least some college education. Only seven (7) percent of the sample had not graduated from high school.

#### Household income

This measure was organized into six income categories ranging from less than \$20,000 to more than \$100,000. Fifty-four (54) percent of residents earn less than \$40,000 per year.

Thirty-three (33) percent earn \$40,000-\$80,000. Thirteen (13) percent earn more than \$80,000. Children in the home

This measure is coded as "0" for no children under 18 in the home and "1" for the presence of any children under 18. Forty (40) percent of the respondents indicated the presence of at least one child under 18 in their home.

### Community-Level Variables

Community characteristics selected for the analysis were appended onto each individual survey record using the census tract as the matching criteria. The resulting database was comprehensive; representing a unique combination of community-based data from several official sources and survey data for the City of Boston.

#### **Consensus of Community Problems**

#### Consensus of community disorder problems

This measure was created by aggregating to the census tract level responses to a select group of conditions listed in survey question #13 (i.e., litter, graffiti, vacant houses, unkempt lots, drug usage, public drunkenness, kids hanging around). However, the 4-point scale

response was recoded into a dichotomous variable, with "1" indicating that it was considered a significant problem and "0" that it was not. If more than 50 percent of neighborhood respondents selected the same rank, there was considered to be consensus on that neighborhood problem and 1 was added to an overall neighborhood consensus measure. This process was repeated for each of the seven questions dealing with neighborhood problems. The final consensus measure ranged from 0, indicating that there was no consensus of neighborhood problems to 7, indicating complete consensus of neighborhood problems. The mean for this measure was 3.06.

### Community Assets

Community assets are regarded as positive elements in a neighborhood that may inspire participation and awareness of community policing efforts/opportunities. Community assets were measured using information from the 1997 Coles Business Directory. The Directory includes a listing of all businesses, services and organizations located in the City of Boston that are included in the yellow and white pages of the Boston telephone directory. Included in this dataset are the type and location of the businesses determined by the Standard Industrial Classification (SIC) codes. This classification code indicates the primary type of activity in which the establishment is engaged. Two community asset measures were extracted from this dataset.

#### Member organizations

First, we computed a count of all membership organizations in each census tract (see Appendix B for listing of organizations). The number of membership-based organizations in each neighborhood may influence awareness and participation because it may indicate a predisposition toward volunteerism in the neighborhood, which is key to resident involvement in community policing. These organizations may also be considered valued community resources worthy of protection. The number of community-based organizations within census tracts ranged from 0 to 40.

#### Recreational/Educational assets

The second community asset variable is measured as a count of all schools, museums, libraries, and other recreation facilities in the neighborhoods. Residents living in areas where these kinds of resources are present may be more likely to participate or be interested in community policing activities if they are concerned about their preservation and protection. The number of such resources within the census tract areas ranged from 0 to 20.

### Social Disorganization

The selected indicators of social disorganization were similar to those that have been used in much of the extant quantitative literature on social disorganization. These included measures of community-level poverty, residential mobility, racial heterogeneity, and single-parent families. Social disorganization indicators were obtained from the 1990 U.S. Census of Population and Housing and organized at the census tract level.

#### **Poverty**

This indicator is defined as the percentage of the population living in poverty (i.e., families of two earning less than \$11,250 or families of four or more earning less than \$17,050). For Boston census tracts, the range is from a low of 2.5 percent to 66 percent. The mean poverty level is 20 percent.

## Residential mobility

This indicator is defined as the percent of residents who have moved within the previous five years. The range is from 25 to 94 percent indicating a considerable population turnover in some Boston neighborhoods. The mean for this indicator is 19 percent.

## Racial heterogeneity

This indicator was constructed by subtracting from 1 the sum of the squared proportions of people in each racial category. The census used five racial categories – (1) White, (2) Black, (3) Asian or Pacific Islander, (4) American Indian or Aleutian, and (5) other. This measure has been used and discussed in prior social disorganization literature (e.g., Smith and Jarjoura 1988; Warner and Pierce 1992). This measure is desirable because the number of racial categories as well as the percentages in each group is taken into account. It is interpreted as the chance expectation that two persons chosen at random are not from the same racial group. The measure was multiplied by 100 for consistency of interpretation in terms of percentages. The higher the percentage, the greater the heterogeneity. The measure ranges from 0 to 72 percent. The average heterogeneity measure was 30 percent.

## Single Parent Families

Measured as the percent of single parent families, this variable is intended to measure the family structure of an area. The minimum value is 0 and the maximum is 65 percent. The mean is 24 percent.

### Density of Offenders

These indicators were measured as the number of persons arrested in each census tract. The data came from the computerized arrest files compiled by the Boston Police Department. A computerized record is compiled for each person arrested in the city. The 1997 arrest file

contained 26,933 arrests of Boston residents. Included in the record is the address of the person arrested and type of crime for which they were arrested. The address field contained the street name and number used to associate the person arrested with their resident neighborhood.

Multiple streets having the same name was again a problem in geocoding these data. It was therefore necessary to use other geographic elements to geocode these records. Since no list currently exists that identifies multiple street names for the city, the procedure used involved creating a list of streets that were unique to each zip code, police district, and police reporting area. The street name for each person arrested was then compared to these files and those who lived on streets with multiple locations were systematically excluded and could not be geocoded. Using standard mapping software, a final total of 19,266 or 72 percent of Bostonians arrested in 1997 were geocoded to their residential census tract.

The following four measures of density of offenders were created:

General arrest rate per 1,000 residents

This measure is based on the total number of persons arrested in each census tract. The rate per 1,000 ranged from about 2 to 160. The average arrest rate was 39 per 1,000 residents.<sup>7</sup>

Arrest rate for drug-related crimes per 1,000 residents

This measure is based on the total number of persons arrested for drug offenses in each census tract. The rate per 1,000 ranged from .27 to 50. The mean drug arrest rate was 8.7 per 1,000 residents.<sup>8</sup>

<sup>&</sup>lt;sup>7</sup> Extreme upper values were bounded at the rate of 160 per thousand.

<sup>&</sup>lt;sup>8</sup> Extreme upper values were bounded at the rate of 50 per thousand.

Arrest rate for violence-related crimes per 1,000 residents

This measure is based on the total number of persons arrested for violent crimes (i.e., homicide, rape, aggravated assault, and robbery). The rate per 1,000 ranged from 0 to 25, with a mean rate of 6 per 1,000 residents.9

Arrest rate for property-related crimes per 1,000 residents

This measure is based on the total number of persons arrested for property crimes (i.e., burglary, larceny and theft). The rate per 1,000 ranged from 0 to 30, with a mean rate of 4.9 per 1,000 residents.<sup>10</sup>

# Density of Offenses

Density of offenses was based on citizen demands for police services and was measured using a combination of 9-1-1 emergency calls for services, incident and miscellaneous files. In 1997, the police department data collection system recorded information on approximately 484,480 citizen requests for service and criminal incidents throughout the City of Boston. From the time a call is place until its conclusion, information about the call is collected by police personnel. Of these calls, 112,030 had no street number. Most of these were calls to intersections. Approximately 20,000 additional calls had incomplete address information and were not geocoded. A total of 352,690 calls for police service were geocoded.

Throughout the process, three groups of police personnel enter detailed information into the 9-1-1/CAD system about the citizens request for assistance as well as data on the police service that was delivered. The information collected comes from three different sources – 9-1-1 operators, police dispatchers, and police officers.

<sup>10</sup> Extreme upper values were bounded at the rate of 30 per thousand.

<sup>&</sup>lt;sup>9</sup> Extreme upper values were bounded at the rate of 25 per thousand.

For each request made by a caller to 9-1-1, the operator enters into the CAD system all information necessary for dispatching police services to the address of the caller including the time the call was received, address, and a preliminary description of the problem, a.k.a., the nature code (e.g., fight, noisy party, etc.). Medical and fire emergencies are routed to different dispatchers if no police assistance is required.

When a 9-1-1 operator inputs the address given by a citizen, the system automatically performs address verification using geography files stored in the CAD system. In cases where ambiguity exists (i.e., cases in which there are multiple streets with the same name), the operator must provide additional information, such as the section of the city, to further specify the location so that a unique address location can be identified. This process is critical because it helps ensure that police officers are dispatched to the correct location associated with a citizen's request for help. After location verification and priority assignment, the police dispatcher receives the call information transmitted via the CAD system and assigns an available police unit.

After servicing the call, the officer contacts the dispatcher via radio and reports the type of crime problem serviced and the type of service rendered. The CAD system records the time the call was completed. If the incident is not confirmed as a potential crime by the responding officer, a miscellaneous code (a.k.a., *Miscel*) describing the problem is assigned and entered into the CAD system. If a call is determined to be a crime by the officer or dispatcher, then a 1.1 incident report must be filled out by the police officer. The information on the 1.1 incident report is subsequently computerized.

All of this information is stored in three database files: (1) The 9-1-1 Calls for Service file contains data on the initial categorization of calls for assistance made by 9-1-1 operators; (2)

The *Miscel* file includes information about calls that are not identified as crimes by the police, but required some police response; and (3) The (1.1) *Incident* file contains all of the information on calls for which a crime was committed and includes a crime code indicating the police definition of the crime that had occurred. From these files, five indicators of citizen demand for police services were selected for the analysis.

Total call rate per 1,000 households

This measure is based on the total number of calls for police services for each census tract in 1997, including incidents resulting in either a *Miscel* code or formal *Incident* report with a corresponding crime code. This measure ranged from 135 to 6,000, with a mean of 1,822.<sup>11</sup>

Violent crimes per 1,000 households

This measure is based on the number of calls for services identified by police as violent crimes including homicide, rape, assault, and robbery. This measure ranged from 0 to 220, with a mean of 41.<sup>12</sup>

Property crimes per 1,000 households

This measure is based on the number of calls for services identified by police as property crimes including theft, burglary and larceny. The measure ranged from 2 to 500, with a mean of 127.<sup>13</sup>

Drug-related crimes per 1,000 households

This measure is based on the number of calls for services identified by police as drug crimes. The measure ranged from 0 to 250, with a mean of 29 per thousand.<sup>14</sup>

<sup>11</sup> Extreme upper values were bounded at the rate of 6,000 per thousand households.

<sup>&</sup>lt;sup>12</sup> Extreme upper values were bounded at the rate of 220 per thousand households.

<sup>&</sup>lt;sup>13</sup> Extreme upper values were bounded at the rate of 500 per thousand households.

<sup>&</sup>lt;sup>14</sup> Extreme upper values were bounded at the rate of 250 per thousand households.

Social disorder incidents per 1,000 households

This measure is based on the number of calls for services identified by police as social disorder or incivility incidents including prostitution, panhandling, loud parties, minor disturbances, and vandalism. The number ranged from 17-900, with a mean of 140 per thousand households.<sup>15</sup>

Land Use

The method of land-use was included as a measure to capture the amount of commercial property in an area. Information from the Boston Assessor's Department was used to measure this indicator. The Boston Assessor's Department is the government agency responsible for assessing the full market value of every parcel of land in the City of Boston. This information is then used for purposes of property taxation. There are approximately 140,000 parcels in the City of Boston, categorized as either residential or commercial. From this database, we constructed a measure of land-use at the census tract level.

Percent of commercial parcels

This measure is based on the percentage of parcels that have been categorized by the Boston Assessor's Department as commercial use parcels. The measure ranged from 2 to 80, with a mean of 19.16

# **Police Officer Component**

Three blocks of independent variables are used for the analyses.

- A. Officer Demographic and Service Factors
  - 1. Rank (i.e., police officer, sergeant, sergeant —detective, lieutenant, lieutenant-detective, captain, captain-detective, deputy superintendent, superintendent).
  - 2. District (among the 12 police districts within the city of Boston).

<sup>&</sup>lt;sup>15</sup> Extreme upper values were bounded at the rate of 900 per thousand households.

<sup>&</sup>lt;sup>16</sup> Extreme upper values were bounded at 80 percent of all parcels.

- 3. Shift (i.e., Days: 7am-3pm; 1st Half: 3pm-11pm; Last Half: 11pm-7am).
- 4. Length of service (i.e., 1-30+ years).
- 5. Race.
- 6. Gender.

## B. Social and Psychological Factors

- 1. Morale level (i.e., low, moderate, high).
- 2. Would choose to be Boston police officer again?
- 3. Preferred choice of assignment(s).
- 4. Whether officer feels he/she is treated with respect by the organization.
- 5. Whether there are enough sergeants in the Department to supervise patrol officers.
- 6. Whether sergeants have the time to ensure good field training to new officers.
- 7. Whether their supervisor treats all subordinates with respect.
- 8. " " looks out for welfare of subordinates.
- 9. " " applies rules fairly.
- 10. " " is a knowledgeable leader.

#### Independent variables cont'd:

- 11. " " is well respected.
- 12. " " praises good work.
- 13. " " handles duties effectively.
- 14. Whether their supervisor informs what is fairly expected.
- 15. " " is accessible for service calls.
- 16. " " earned their rank.
- 17. Whether there are enough lieutenants supervisors assigned to the districts.
- 18. Whether the detective supervisor on their shift is skillful and effective in managing criminal investigations.
- 19. Whether they feel their knowledge and experience have any impact on the Department.
- 20. What they consider the key factors to getting into leader positions within the Department.
- 21. Their primary motivation for being police officers.
- 22. Level of cumulative stress during prior 12 months.
- 23. Stress2 (i.e., family demanding more time).
- 24. Number of times assaulted during prior 12 months.

## C. Department Operational Issues

- 1. Whether they believe that the Department does all that can reasonably be expected to reduce crime (survey question #43).
- 2. Perceived change in residents' sense of safety/fear of crime during the past 2 years (Q51).
- 3. Whether the presence of marked patrol cars reduce citizens' fear of crime more effectively than foot patrols (Q66r).
- 4. Effectiveness of the Department in preventing crime (Q50).
- 5. Number of high priority calls responded to during an average tour of duty (Q54).
- 6. Overall effectiveness of the police department, D.A.'s office, and judges (Q66a-c).
- 7. Reliability of fellow officers as source of useful information (Q28a-i).

### DATA ANALYSIS AND RESULTS

#### RESIDENT COMPONENT

Exploratory analysis began with an examination of the bivariate correlation coefficients between the independent variables and each of the dependent variables. Independent variables significantly correlated with each dependent variable were included in subsequent multivariate analyses. The bivariate Pearson correlation coefficients are displayed in Exhibit 8.

Accordingly, the significance of several individual- and community-level indicators to adult residents' knowledge, interest, and involvement in community policing activities is confirmed.

Exhibit 8.

BIVARIATE CORRELATES OF INDIVIDUAL AND COMMUNITY INFLUENCES ON BOSTONIANS' KNOWLEDGE, INTEREST, AND INVOLVEMENT IN COMMUNITY POLICING

idependent Variables	<u>Involvement</u>	<u>Interest</u>	Knowledge
Individual-level Indicators			
Socio-demographic			
Income	.033	015	.118**
Education	013	078**	.112**
Race	.115**	.091**	110**
Sex	007	062**	047*
Age	.103**	.069**	.131**
District 11	.081**	.048**	.019
Neighborhood Attachment			
Feel a part of the neighborhood	.219**	. 116**	.183**
Rely on neighbors	.091**	. 065**	.145**
Children in home	.121**	.069**	023
Years in neighborhood	.117**	.052*	.156**
Rent home	100**	014	124**
Attitudes Toward Police			
Police prevent crime	010	.102**	017
Police know residents	.115**	.130**	.052*
Police reduce crime	024	.109**	056**
Professional conduct	020	.069**	.035
Fear, Victimization, and Social Disord			
General fear	.003	.046*	091**
Local fear	.054**	.001	052*
Previous victimization	.052*	.016	.041
Perception of social disorder(s)	.123**	.033	.033
Watchful Behavior		,	.035
ID unknown person (s)	.115**	.084*	.041
Call police when suspicious	.157**	.138**	.143**
Community-level Indicators	.137	.150	.145
Arrest - property crime	.133**	.090**	.006
Arrest - property crime  Arrest - violent crime	.166**	.110**	.028
Arrest - drug crime	.141**	.102**	.028
Arrest - total crime	.154**	.102	.021
Incidents - property crime	.022	.006	012
Incidents - violent crime	.152**	.114**	012
Incidents - drug crime	.119**	.080**	.002
Incidents - total crime	.100**	.079**	000
Incidents - social disorder	.018	.042	002
Percent in poverty	.062**	.032	048*
Racial heterogeneity	.053*	.032	037
Residential mobility	085**	078**	084**
Percent single parent families	.171**	.119**	.013
Membership organizations	021	036	.000
Recreation/facilities	044*	061**	.003
Percent commercial parcels	.044*	.027	002
Consensus of neighborhood problems	030	000	.017

<sup>\*</sup> p<.05 \*\* p<.01

Residents' Knowledge of Community Policing

Bivariate Analysis

The bivariate analysis revealed notable patterns in the relationship between individual, social, and economic factors and residents' knowledge of community policing. Indicators of neighborhood familiarity and investment were positively associated with such knowledge. Age and education were also positively significant.

The correlates between attitudes toward police and knowledge of community policing revealed a notable pattern. While the belief that police make an effort to know residents was positively associated with knowledge, the actual crime reduction efforts of the police department was negatively associated with knowledge of community policing. Such a pattern suggests that police interaction with residents affects their knowledge of community policing, and that those who did not believe the police were doing all they can to reduce crime in their neighborhoods were less likely to know about community policing.

Neither perception of social disorders nor prior victimization experiences are significantly associated with knowledge of community policing. However, both general and local fear measures are negatively associated with knowledge, suggesting that those who are more fearful are less likely to know about community policing.

At the community level, only the percent in poverty and residential mobility indicators are (negatively) associated with knowledge of community policing, indicating that those who live in lower income areas and/or those in areas with relatively high population turnover are less likely to know about community policing. None of the crime measures is associated with knowledge of community policing.

# Multivariate Analysis

All of the variables having a significant zero-order correlation with knowledge of community policing were considered as independent variables for the analysis. Correlations among the independent variables were then examined for collinearity. *Age* and *Years in neighborhood* were highly correlated. *Years in the neighborhood* was selected because it was more direct measure of neighborhood attachment. Examination of variance inflation factors and a condition index did not reveal any additional collinearity problems.

Since knowledge of police is a dichotomous dependent variable, logistic regression was used for the analysis.<sup>18</sup> The results are presented in Exhibit 9. Model 1 includes the estimates for the individual factors for the entire sample along with the exponentiated values for the coefficients.

Knowledge of community policing is significantly influenced by measures of neighborhood attachment. When other factors are controlled, those who feel like part of the neighborhood are significantly more likely to be knowledgeable about community policing than others. The odds of knowing about community policing increase by 87 percent among residents who feel like they are part of their neighborhood.

<sup>&</sup>lt;sup>17</sup> An alternative grouped age measure was created, but the correlation with tenure in neighborhood remained high. <sup>18</sup> Our original intent was to the hierarchical linear modeling (HLM) statistical method (Bryk and Raudenbush, 1992) to estimate the effects of individual and community factors on resident's involvement, interest and knowledge of community policing. Preliminary hierarchical models were estimated for each dependent variable which is the equivalent of a one-way analysis of variance with random effects. A preliminary model is useful for determining the reliability of neighborhood estimates and for determining how much of the variance in the dependent variable can be attributed to community effects. The results show that for each dependent variable, the reliability estimates for neighborhood effects were low (.288 for involvement, .105 for interest, and .275 for knowledge) perhaps due to the small size of neighborhood samples (mean=14). It was also determined that approximately 1% of the variation in the dependent variables could be attributed to community effects. Therefore, in each case we chose to estimate the model with fixed effects.

Exhibit 9.

LOGISTIC REGRESSION RESULTS PREDICTING RESIDENTS' KNOWLEDGE OF COMMUNITY POLICING (n=1,679)

dependent Variables  Model 1  Excluding community-level indicators		Model 2 Including community-level indicators		
Individual-level Indicators		$e^{\mathrm{B}}$		$e^{\mathrm{B}}$
Socio-demographic				
Sex	* -0.2656	0.7667	* -0.261	0.7703
Education	** 0.2468	1.28	** 0.3386	1.403
Race	-0.2544	0.7754	** -0.4654	0.6279
Income	0.0435	1.0445	0.0367	1.0374
Neighborhood Attachment				
Part of neighborhood	** 0.6284	1.8745	** 0.607	1.8349
Rely on neighbors	* 0.3854	1.4703	* 0.3711	1.4493
Years in neighborhood	** 0.0495	1.0507	** 0.0419	1.0428
Rent	-0.1404	0.869	-0.0886	0.9152
Fear				
General fear	*-0.0073	0.9927	** -0.0079	0.9922
Local fear	0.0294	1.0298	0.0115	1.0115
Watchful Behavior			1.0	
Call police when suspicious	** 0.2299	1.2585	** 0.2061	1.2289
Attitudes Toward Police				
Police get to know residents	* 0.1041	1.1097	* 0.1003	1.1056
Police reduce crime	**1821	0.8347	** -0.1825	0.8332
Community-level Indicators				
Residential Mobility			** -0.0261	0.9742
% Neighborhood Population in Poverty			** 0.0231	1.0234
$\begin{array}{c} \operatorname{model} x^2 \\ \operatorname{block} x^2 \end{array}$	** 197.25		** 226.68 ** 29.43	

<sup>\*</sup> p<.05 \*\* p<.01

Residents who feel that they can rely on their neighbors or have lived in the neighborhood for a relatively long period (i.e., 10 or more years) are also significantly more likely than others to be knowledgeable about community policing practices. Engaging in watchful behavior also influences knowledge. Residents who indicate a general inclination to call police when suspicious

behavior is detected are significantly more likely to know about community policing than those less willing to do so.

Attitudes toward police are also significant predictors of knowledge. Those who believe that police make an effort to get to know residents are more likely to be knowledgeable about community policing. Notably, individuals who generally believe that the police do all they can to reduce crime are likely to be less knowledgeable about community policing.

General fear of crime is negatively related to knowledge. Those more fearful of crime are less likely to know about community policing.

Educational level is positively related to knowledge. For every unit increase in education, the odds of a respondent knowing about community policing increases by 28 percent.

The odds of women knowing about community policing are 24 percent lower than men.

The odds of minority residents knowing about community policing are 23 percent below that for white residents when other factors are controlled. Local fear, district of residence, income, and renter status are not significantly related to knowledge of community policing.

The overall chi-square goodness of fit measure is significant indicating that the model with the individual factors fit the data better than a model with only a constant.

In Model 2, the results of both individual and community factors are presented. Each community level indicator is a significant predictor when individual factors are controlled. Residents living in more short-term tenure communities were significantly less likely to know about community policing than those in more stable communities. Those from poor communities are also more likely to know about community policing.

With the exception of race, the individual level effects remain unchanged by the inclusion of the community indicators. In the combined model, race is a significant predictor of

knowledge, with minorities less likely than whites to know about community policing when community factors were controlled.<sup>19</sup>

The chi-square improvement value for the addition of the community variables is significant, indicating that the model with the community level indicators provides a better fit to the data than the model with just the individual factors.

Knowledge of community policing appears to be influenced by both individual and community factors. Individual level measures of neighborhood attachment, watchful behavior, fear of crime, education, gender, and race are significant predictors of residents' knowledge of community policing. Both of the community level indicators – residential mobility and percent living in poverty – are associated with knowledge of community policing.

Residents' Interest in Community Policing

Bivariate Analysis

Excluding home rental status, each neighborhood attachment indicator is significantly associated with interest in community policing. Watchful behavior indicators are also positively associated with interest. All attitudinal measures toward police are positively associated with interest in community policing, indicating that those who feel positive toward police are more likely to be interested in community policing.

Females and older residents generally express more interest than their counterparts.

Education is negatively associated with interest; those with more education are less interested in community policing. Though general fear is positively associated with interest, victimization, perceptions of social disorder, and local fear are not related to sufficient interest in community policing.

<sup>&</sup>lt;sup>19</sup> The significance for the race variable in the individual model was .054. The probability cut-off for significance was .05. The difference between the models in terms of probabilities was small.

At the community level, neither racial heterogeneity nor the percent living in poverty is significantly related to interest in community policing. Residential mobility and recreational assets are negatively associated and percent of single parent families is positively associated with interest in community policing. Neither membership organizations nor consensus of neighborhood problems are related to interest.

With the exception of property-related crimes and social disorder incidents, all of the crime indicators are positively associated with interest in community policing. Residents of high crime areas are generally more likely to express interest in community policing than residents of low crime areas.

## Multivariate Analysis

The multivariate models predicting interest were built in several stages using ordinary least squares regression. Exhibit 10, Model 1 includes the standardized coefficients for the individual factors within the entire sample.

One measure of neighborhood attachment is significant. Residents who feel a part of their neighborhood are significantly more likely to be interested in community policing than those who consider it just a place to live, when other factors are controlled. Each increase of one standard deviation unit in feeling like part of the neighborhood is associated with a .096 standard deviation unit increase in interest in community policing.

A respondent's willingness to call the police after witnessing suspicious activity is positively associated with interest in community policing when other factors were controlled. The ability to distinguish a stranger from a resident in the neighborhood is not significantly related to interest in community policing.

Exhibit 10. OLS REGRESSION ESTIMATES PREDICTING RESIDENTS' INTEREST IN COMMUNITY POLICING (n=1,624)

	Model 1	Model 2	Model 3	Model 4	Model 5
Independent Variables					
Individual-level Indicators					
Socio-demographic					
Race	** 0.102	* 0.067	* 0.064	* 0.065	* 0.065
Sex	** -0.083	** -0.084	** -0.083	** -0.084	** -0.084
Education	-0.043	-0.027	-0.027	-0.027	-0.027
District 11	0.021	0.018	0.016	0.016	0.016
Neighborhood Attachment					
Part of neighborhood	** 0.096	** 0.095	** 0.093	** 0.093	** 0.093
Rely on neighbors	0.041	0.038	0.040	0.039	0.039
Children in home	0.021	0.009	0.009	0.009	0.009
Years in neighborhood	-0.022	-0.036	-0.036	-0.036	-0.036
Fear					
General fear	0.048	* 0.050	0.050	0.050	0.050
Watchful Behavior					
ID unknown person	-0.017	-0.019	-0.020	-0.019	-0.019
Call police when suspicious	** 0.122	** 0.11 <b>7</b>	** 0.117	** 0.117	** 0.117
Attitudes Toward Police					
Police know residents	* 0.061	* 0.061	* 0.062	* 0.062	* 0.062
Police prevent crime	0.011	0.007	0.009	0.008	0.008
Police reduce crime	* 0.063	* 0.067	* 0.067	* 0.067	* 0.067
Police professional conduct	0.045	0.051	0.050	0.050	0.050
Community-level Indicators					
Residential mobility		-0.037	-0.033	-0.035	-0.034
Recreation facilities		-0.014	-0.013	-0.014	-0.014
% Single parent families		* 0.086	0.067	* 0.079	* 0.076
Property arrests		-0.020			
Violent arrests			0.011		
Drug arrests			<del>-</del> -	-0.005	
Total arrests					-0.001
Adj. R square	0.063	.064	.066	.066	.066
* n< 05					·

<sup>\*</sup> p<.05 \*\* p<.01

Attitudes toward police are predictive of interest in community policing. Controlling for other factors, those who believe that the police make an effort to get to know residents are more likely to be interested than those who do not. Residents who believe the police do all they can to reduce crime are more likely to be interested. This finding suggests that what the police do in neighborhoods does matter when it comes to getting the community interested in community policing activities. However, since the survey is cross-sectional in design, it is again unclear which came first, the involvement and interest in community policing, or the attitudes toward police.

Minorities are significantly more likely than whites, and males more likely than females to be interested in community policing when other factors are held constant. Education and police district of residence are not significant predictors of interest. The model accounts for approximately 6 percent of the variation in interest in community policing.

In Model 2, the community level variables including residential mobility, recreation facilities, percent single parent families and arrest rate for property crimes were added to the model with the individual factors. Percent single parent families is positively related to interest in community policing. No other community factors are significant.

Models 3 through 5 include arrest rates for violent crime, drug crime, and total arrests respectively. None of the arrest measures are significant predictors of interest when the other factors are controlled.

Measures for incident rates of violent, drug, and total crime (i.e., density of offenses) were considered in additional predictive models of interest in community policing. The results (not shown) indicated that none of the incident measures had a significant impact on interest in community policing when other factors were controlled.

The inclusion of the community level factors did not significantly alter the effects of the individual level factors. The probability for the general fear index was near the cut-off value of .05 for significance across the models. For Model 2, the significance was .049, which met the requirements for significance. For the rest of the models, it was slightly higher than .05.

In sum, individual factors appear to have greater success in predicting interest in community policing than do community factors. Individual measures of neighborhood attachment, watchful behavior, attitudes toward police, race, and sex are significantly related to interest in community policing. None of the community crime measures are related to interest. The only community factor that has a significant association with interest in community policing is the percent of single parent families.

Residents' Involvement in Community Policing

**Bivariate Analysis** 

At the individual level, all of the neighborhood attachment indicators are positively associated with involvement in community policing. Watchful behavior indicators are also positively associated with involvement. The only indicator of attitudes toward police that is significantly associated with involvement is the belief that police get to know neighborhood residents. Previous victimization, local fear, and perceptions of social disorder are all positively and significantly related to involvement. Race is also a significant factor, with minority residents more likely to be involved than white residents in community policing activities. Age is positively associated with involvement in community policing.

Community level indicators are also important correlates of involvement in community policing at the bivariate level. With the exception of incidents of social disorder and property crime incidents, all of the crime indicators are positively and significantly associated with involvement in community policing.

Social disorganization indicators including percent in poverty, percent single parent families, and racial heterogeneity are positively associated with involvement in community policing suggesting that involvement is higher in poor, heterogeneous communities with large percentages of single parent families. Residential mobility, however, is negatively associated with involvement, indicating that high population turnover discourages involvement.

The percentage of commercial property parcels was positively and significantly related to involvement in community policing. The number of membership organizations was not related to involvement in community policing. The number of recreation facilities, however, was negatively related to involvement, suggesting that in areas that have more assets such as parks, schools and museums, involvement in community policing was low. Consensus of neighborhood problems was not significantly related to involvement in community policing.

#### Multivariate Analysis

Multivariate model effects predicting involvement were estimated using logistic regression methods. Exhibit 11, Model 1 displays the logistic regression results with just the individual level variables. Measures of neighborhood attachment are significantly associated with involvement in community policing. When controlling for other factors, those who feel they are part of the neighborhood and those who had been in the neighborhood for longer periods of time are significantly more likely to be involved in community policing. Feeling like part of the neighborhood increases the odds of involvement by over 100 percent. Persons who rented have odds of involvement that are 23 percent lower than owners.

One indicator of watchful behavior is significant. For each unit increase in the residents' willingness to call police for suspicious activity, the odds of involvement increase by 41 percent. Being able to identify a stranger in the neighborhood is not a significant predictor of involvement.

Residents who believe that police officers get to know the residents were more likely to be involved in community policing while controlling for other factors. Localized fear is not significantly associated with involvement when the other factors are controlled. Perceptions of social disorder in the neighborhood and victimization experience are significantly related to involvement. For every unit increase in the social disorder index, the odds of being involved in community policing increase by 7 percent. The odds of involvement are 58 percent higher for those who were victimized.

Controlling for other factors, race is a significant predictor of involvement in community policing.

Minority respondents are more likely to be involved in community policing than white respondents.

Those in District 11 are significantly more likely to be involved in community policing than residents from other police districts.

In Model 2, the community indicators including the percent of commercial parcels, number of recreation facilities, residential mobility, racial heterogeneity, percent of the population living in poverty, percent single parent families and arrest rates for property crime were added to the model.

None of the community level indicators is a significant predictor of involvement in community policing. In Models 3 through 5, rates of arrests for violent crime, drug crime, and total arrest rates were added respectively. None of these crime measures are significant predictors when other factors are controlled. In Models 4 and 5, residential mobility is barely a significant predictor of involvement. The impact of this variable is questionable given that the probability value barely reached significance for Models 4 and 5 and was just above the cut off of .05 for Models 2 and 3.

Exhibit 11.

LOGISTIC REGRESSION RESULTS PREDICTING RESIDENTS' INVOLVEMENT IN COMMUNITY POLICING BY INDIVIDUAL- AND COMMUNITY-LEVEL INDICATORS CONTROLLING FOR AREA ARREST RATES [i.e., Density of Offenders] (n=1,821)

Independent Variables	M	odel 1	M	odel 2	Mo	odel 3	Mo	del 4	Mod	
Individual-level Indicators		$e^{\mathrm{B}}$		$e^{\mathrm{B}}$		$e^{\mathrm{B}}$		$e^{\mathrm{B}}$		$e^{\mathrm{B}}$
Neighborhood Attachment						**				
Part of neighborhood	** 0.8 <b>6</b> 45	2.3739	** 0.853	2.3468	** 0.8513	2.3428	** 0.8541	2.3493	** 0.8532	2.347
Rely on neighbors	0.2832	1.3273	0.2695	1.3093	0.2722	1.3129	0.2682	1.3076	0.2693	1.309
Children in home	0.2214	1.2478	0.1775	1.1942	0.1777	1.1944	0.1771	1.1937	0.1774	1.194
Years in neighborhood	* 0.0154	1.0156	0.0116	1.0116	0.0114	1.0115	0.0116	1.0116	0.0116	1.011
Rent	* -0.2527	0.7767	* -0.2602	0.7709	* -0.2559	0.7742	* -0.2616	0.7698	* -0.2604	0.770
Watchful Behavior									, **	
ID an unknown person	0.1759	1.1923	0.1716	1.1872	0.1676	1.1825	0.1726	1.1884	0.1718	1.187
Call police when suspicious	** 0.3442	1.4109	** 0.3399	1.4048	** 0.3414	1.4069	** 0.3397	1.4045	** 0.3398	1.404
Attitudes Toward Police										
Police get to know residents	** 0.1343	1.1437	** 0.1323	1.1414	** 0.1331	1.1423	** 0.1322	1.1413	** 0.1323	1.141
Fear, Victimization, Disorder							to a second			
Perceptions of disorder	** 0.0725	1.0752	** 0.0699	1.0724	** 0.0691	1.0715	** 0.0701	1.0726	** 0.0699	1.072
Local fear	0.0856	1.0893	0.0663	1.0685	0.0645	1.0666	0.0669	1.0692	0.0663	1.068
Previous victimization	** 0.4625	1.588	** 0.4667	1.5947	** 0.4663	1.5941	** 0.4665	1.5944	** 0.4667	1.594
Socio-demographic										
Race	** 0.4188	1.5201	0.2413	1.2729	0.2303	1.259	0.2442	1.2765	0.2419	1.273
District 11	** 0.5551	1.7421	* 0.4789	1.6143	* 0.4674	1.5958	* 0.4802	1.6163	* 0.4796	1.615
Community-level Indicators									}	
% Commercial Parcels			-0.0016	0.9984	-0.0021	0.9979	-0.0013	0.9987	-0.0015	0.998
Number Recreation Facilities		1.5	0.0138	1.0139	0.0148	1.0149	0.0137	1.0137	0.0138	1.013
Racial Heterogeneity			0.0035	1.0035	0.0034	1.0034	0.0035	1.0035	0.0035	1.00
Residential Mobility			-0.0096	0.9905	-0.009	0.991	* -0.0098	0.9903	* -0.0096	0.99
% Population in Poverty			0.0034	1.0034	0.0031	1.0031	0.0035	1.0036	0.0035	1.00
% Single Parent Families			0.0079	1.0079	0.005	1.005	0.0085	1.0085	0.0079	1.0
Property Arrest Rate			0.0011	1.0011						
Violence Arrest Rate			1		0.0177	1.0178				
Drug Arrest Rate							-0.0025	0.9975		
Total Arrest Rate									0.0000408	1
$\operatorname{model} x^2$	** 268.01		** 278.624		**279		** 278.65		** 278.62	
block $x^2$			10.60		11.41		10.63	•	10.60	

<sup>\*</sup> p<.05 \*\* p<.01

The chi-square tests for improvement of fit of the models with the block of community factors versus the model with just the individual factors indicates that the addition of the community variables did not contribute significantly to the overall fit of the model. Also, separate community crime estimates for violent, drug and total crime incidents were considered in additional models, but none were significant predictors of involvement when other factors were controlled (results not shown).

The entrance of the community level variables did reduce the impact of the race variable to insignificance. Upon further inspection, it was apparent that the race variable is significantly correlated with many of the crime indicators and several of the community indicators. This relationship was investigated further to determine the presence of interactions. Separate models were estimated for white and minority populations. When correlations among variables for each group were examined for collinearity, it was evident that for the minority group, percent single parent families and crime measures are highly correlated (.7). To avoid estimation problems, single parent families and the crime measures were added to the models separately.

Exhibit 12, Model 1 includes individual factors separately for whites and minorities. Some clear distinctions emerge. For both groups, feeling like part of the neighborhood, calling the police for suspicious behavior, and the belief that police make an effort to get know residents are significant predictors of involvement in community policing. Rental status is rendered insignificant for both groups.

Group differences are evident among individual predictors including victimization, perceptions of social disorder, and district/area of residence. Perceptions of social disorder and prior victimization experience are significant predictors of involvement in community policing for white residents, and district/area of residence for minority residents.

Exhibit 12.

## LOGISTIC REGRESSION RESULTS PREDICTING RESIDENTS' INVOLVEMENT IN COMMUNITY POLICING BY INDIVIDUAL- AND COMMUNITY-LEVEL INDICATORS CONTROLLING FOR GENERAL RACE

	Model 1				Model 2			
	W	/hite	Mino	rity	White		Minori	ty
Independent Variables	(n=1,221)		(n=600)		(n=1,221)		(n=600)	
Individual-level Indicators		$e^{\mathrm{B}}$		$e^{\mathrm{B}}$		$e^{\mathrm{B}}$		$e^{\mathbf{B}}$
Neighborhood Attachment								
Part of neighborhood	** 0.836	2.3072	** 0.8876	2.4293	** 0.8014	2.2287	** 0.8722	2.3922
Rely on neighbors	0.2856	1.3306	0.2331	1.2624	0.2865	1.3318	0.2369	1.2673
Children in home	0.1728	1.1887	0.2958	1.3443	0.1816	1.1991	0.1934	1.2133
Years in neighborhood	0.0211	1.0214	0.0098	1.0098	* 0.0207	1.0209	-0.0049	0.9951
Rent	-0.2595	0.7715	-0.3248	0.7226	-0.253	0.7764	-0.389	0.6777
Watchful Behavior								
ID an unknown person	0.1619	1.1758	0.2422	1.274	0.2203	1.2464	0.2389	1.2699
Call police when suspicious	** 0.2265	1.2542	** 0.498	1.6455	** 0.2331	1.2625	** 0.4658	1.5933
Attitudes Toward Police						•		
Police get to know residents	** 0.1256	1.1338	** 0.1602	1.1737	**0.1193	1.1267	** 0.1523	1.1645
Fear, Victimization, and Disorder	* *							
Perceptions of disorder	** 0.0962	1.1009	0.0413	1.0422	** 0.098	1.103	0.0322	1.0327
Local fear	0.0804	1.0837	0.0968	1.1016	0.0403	1.0411	0.0797	1.083
Previous victimization	** 0.4688	1.5981	0.3729	1.452	** 0.4861	1.626	0.4235	1.5273
Socio-demographic								
District 11	* 0.5064	1.6594	0.6452	1.9063	0.3348	1.3977	* 0.8498	2.3392
Community-level Variables				1				
% Commercial Parcels	• .				0.0012	1.0012	0.0004	1.0004
Number Recreation Facilities			4		-0.003	0.997	0.0389	1.0397
Racial Heterogeneity					** 0.014	1.0141	-0.0073	0.9927
Residential Mobility					* -0.0113	0.9887	-0.0088	0.9912
% Population in Poverty			*		3.65E-05	. 1	0.0002	1.0002
% Single Parent Families					-0.0099	0.9902	* 0.0231	1.0233
model $x^2$	** 268		** 100.63		174		116.63	
block x <sup>2</sup>	· .				10.24		* 15.99	

<sup>\*</sup>p<.05 \*\* p<.01

Significant differences also emerged when the community level factors were included (Model 2). Higher levels of racial heterogeneity in the neighborhood predicted higher levels of involvement for white residents. Residential mobility is negatively associated with involvement in community policing for the white group. For minorities, the percentage of single parent families in an area is positively associated with involvement in community policing.

The goodness-of-fit chi-square value for the models is generally higher for the white group. The improvement chi-square value with inclusion of the community variables is, however, significant for the minority population and not for the white population.

In Exhibit 13, arrest rates for violent crime and total crime (i.e., density of offenders) were included respectively. For minorities, both of these crime measures are significant predictors of involvement when other factors were controlled. Every unit increase in the violent crime arrest rate increases the odds for minority residents' involvement in community policing by approximately 7 percent.

Neither of the community crime measures was significant for the white group. Other arrest and incident crime measures were estimated in separate models (results not shown), but none were significant for either group when other factors were controlled.

The lack of a significant relationship between the district of residence and involvement in policing for the white group may, however, be due to the lack of variation in the district measure – only 6 percent of white respondents and 9 percent of minority respondents lived in District 11. The same holds true for the lack of relationship between previous victimization and involvement in community policing for the minority group – 15 percent of minority respondents and 20 percent of the white respondents reported being victimized.

It thus appears that community factors, including crime measures, may have more of an effect on minority groups than whites in their capacity to predict resident involvement in community policing. The results also suggest that the measures of prior victimization and perceived social disorder are more important for whites than for minority groups in predicting who will be involved in community policing.

Exhibit 13.

LOGISTIC REGRESSION RESULTS PREDICTING RESIDENTS' INVOLVEMENT IN COMMUNITY POLICING BY INDIVIDUAL- AND COMMUNITY-LEVEL INDICATORS CONTROLLING FOR GENERAL RACE AND AREA ARREST RATES (i.e., Density of Offenders)

Model 1.

Model 2.

	Model 1							
	White	,	Minor	Minority		ite	Minori	ty
	(n=1,22	1)	(n=60)	0)	(n=1,	221)	(n=600)	)
Individual-level Indicators		$e^{\mathrm{B}}$		$e^{\mathrm{B}}$		$e^{\mathrm{B}}$		$e^{\mathrm{B}}$
Neighborhood Attachment								
Part of neighborhood	** 0.7965	2.2179	** 0. <b>8</b> 494	2.3381	** 0.7975	2.2199	** 0.8454	2.3289
Rely on neighbors	0.2775	1.3198	0.2802	1.3235	0.2741	1.3154	0.2747	1.3162
Children in home	0.1767	1.1933	0.2273	1.2552	0.1806	1.1979	0.237	1.2675
Years in neighborhood	* 0.0203	1.0205	-0.0045	0.9956	* 0.0209	1.0212	-0.003	0.997
Rent	-0.2635	0.7683	-0.3783	0.685	-0.268	0.7649	-0.3866	0.6793
Watchful Behavior								
ID an unknown person	0.2285	1.2567	0.2385	1.2694	0.2333	1.2627	0.2316	1.2607
Call police when suspicious	** 0.2315	1.2605	** 0.4851	1.6244	** 0.2315	1.2605	** 0.4831	1.6211
Attitudes Toward Police					1			
Police get to know residents	<b>**</b> 0.1204	1.1279	** 0.1642	1.1785	** 0.122	1.1298	** 0.1633	1.1774
Fear, Victimization, and Disorder							*	
Perceptions of disorder	** 0.0991	1.1042	0.0306	1.0311	** 0.1006	1.1058	0.0307	1.0311
Local fear	0.0425	1.0434	0.0765	1.0795	0.0437	1.0446	0.078	1.0811
Previous victimization	** 0.4832	1.6212	0.4342	1.5437	** 0.4837	1.6221	0.4269	1.5324
Socio-demographic								
District 11	0.3401	1.4051	* 0.7795	2.1803	0.3633	1.438	* 0.7817	2.1851
Community-level Indicators								
% Commercial Parcels	0.0025	1.0025	-0.0015	0.9985	0.0041	1.0041	-0.0022	0.9978
Number Recreation Facilities	-0.002	0.998	0.0358	1.0365	-0.0026	0.9974	0.0313	1.0318
Racial Heterogeneity	** 0.0137	1.0138	-0.0059	0.9941	** 0.0137	1.0138	-0.0062	0.9938
Residential Mobility	* -0.0113	0.9888	-0.0098	0.9903	* -0.0127	0.9874	-0.0104	0.9896
% Population in Poverty	-0.0024	0.9976	0.0115	1.0116	-0.0009	0.9991	0.0145	1.0146
Violent Crime Arrest Rate	-0.0326	0.968	* 0.0658	1.068				
Total Arrest Rate					-0.008	0.992	* 0.0095	1.0095
$\operatorname{model} x^2$	174.87		117.67		** 176.18	-	** 115.14	
block $x^2$	10.49		** 17.03		11.81	1	* 14.51	
*p<.05 ** p<.01			•					

However, the temporal order of these relationships is unclear due to the survey design. For example, it could be that because the respondents were involved in community policing, they became more watchful of behavior in their neighborhoods and were more willing to call police for suspicious behavior. Involvement in community policing may also influence attitudes toward police rather than the inverse.

Overall, the results of the analysis predicting involvement in community policing suggest that:

- (1) Involvement in community policing is influenced by specific individual- and community-level factors;
- (2) Feeling like part of the neighborhood, calling the police when suspicious, and the belief that police make an effort to know the residents are consistent individual-level predictors of involvement in community policing; and
- (3) Crime does influence citizen involvement in community policing, but the nature of the effects varies by the race, with white residents' involvement more so determined by individual crime measures such as direct victimization and perceived levels of social disorder, and minority residents' involvement by density of offenders.

### **Police Officer Component**

Analyses of the four research models on police officers – *knowledge*, *acceptance commitment*, and *involvement* in community policing – were conducted with three sets of independent variables (i.e., police officer demographic and service factors, social and psychological factors, and Department operational issues).

Bivariate analyses were based on the chi-square statistic ( $x^2$ ). Multivariate analysis utilized logistic regression methods to predict the effect of the independent variables. Each set of independent variables was analyzed individually within each model.<sup>20</sup> Significant variables from the preceding model regressions were included for analysis with the subsequent group of independent variables.<sup>21</sup> Moreover, the dichotomous dependent variable(s) from previous models (i.e., knowledge, etc.) was also included among the independent variables in the analysis of each succeeding model.<sup>22</sup> This process was repeated for each of the four models.<sup>23</sup> The resultant analyses indicate the key predictors (of police officer involvement in community policing) among all significant variables from the four models.

<sup>&</sup>lt;sup>20</sup> The option of simultaneously considering all three independent variable sets in the analysis of any of the four models significantly diminished the available number of cases (i.e., 67-73 cases) and/or prohibited valid analysis.

The individual independent variable sets were "entered" into each model as one block.

<sup>&</sup>lt;sup>22</sup> There was no significant change noted in the other model variables when these previously dependent variable(s) were excluded from the analysis.

<sup>&</sup>lt;sup>23</sup> The relatively large original sample size (1,383) permitted appropriate analysis of all the model variables under this format. Regression sample sizes ranged from 185 to 607, with an average of 350 valid cases included in the analyses.

### Police Officers' Knowledge of Community Policing

The measure of current knowledge of community policing is based on three criteria from the survey – (q13) knowing the Department's definition of community policing; (q21) understanding the Department's current policing priorities; and (q38) perception of what community policing activities should be. The responses for each variable were regrouped to represent aggregate knowledge level of community policing.

Appropriate knowledge of the definition of community policing was determined by a survey response selection of "assigning the same cop to the same neighborhood" (SC/SN) from among the available selections as the most significant component of the Department's formal community policing strategy. A dichotomous variable was subsequently created with:

1	SC/SN signifying a respondent's appropriate knowledge of the	
	definition of community policing; and	79.5%

any of the other four choices categorized as having a lack of appropriate knowledge of the formal definition. 20.5%

The second variable (understanding the Department's current policing priorities) is based on a 1-3 rank order among available response categories. Two of the five choices represent the Department's formal policing priorities (i.e., crime prevention and collaboration). The coding values and response percentages for the three ranked choices are listed below:

3	indicating that their first rank selection is a correct answer	52.3%
2	that their second rank selection is a correct answer	24.3%
1	that their third rank selection is a correct answer	10.8%
0	for no correct answer selected	12.7%

The third variable (perception of what community policing activities should be) is also rank-ordered. Respondents ranked the top five activities [from a list of 12] that *should be* the focus of the Department's current community policing strategy. We considered five of the 12 selection choices as "correct" in representing community policing principles (i.e., assigning the same cops to the same

areas; increasing the police presence in neighborhoods; increasing the level of involvement by neighborhood residents; focusing more on minor problems; and increasing the level of collaboration with other city agencies). The combination of these variables served as the *community policing* activity variable. The ranked choices were given the following values:

5	indicating that their first rank selection is a correct answer	51.4%
4	that their second rank selection is a correct answer	21.1%
.3	that their third rank selection is a correct answer	9.5%
2	that their fourth rank selection is a correct answer	4.2%
1	that their fifth rank selection is a correct answer	1.3%
0	none is correct	12.4%

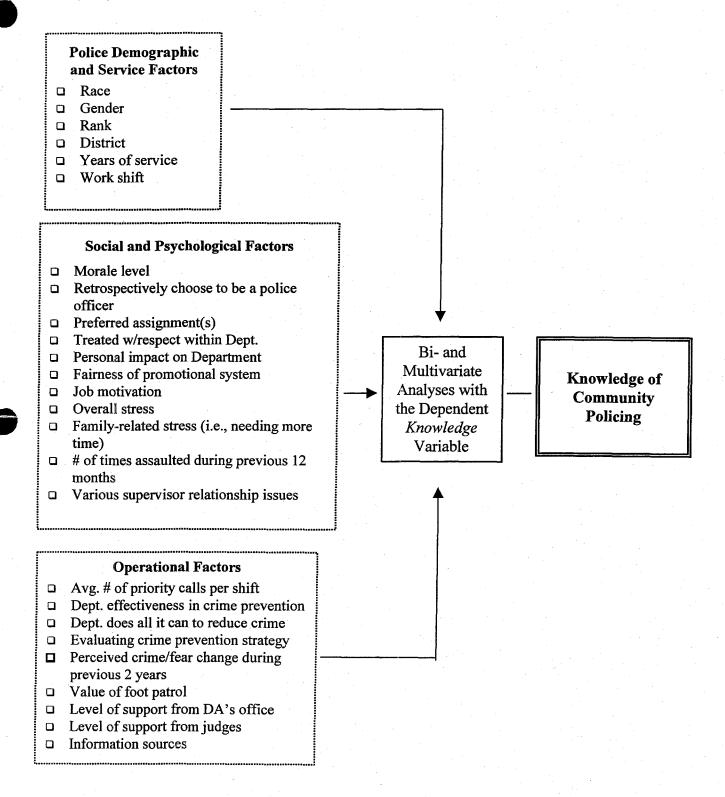
The definitive measure of knowledge was constructed by assigning a value of "1," indicating appropriate knowledge, for respondents with the designated confirmatory responses within all three variables (i.e., definitional awareness, understanding current policing priorities, and correctly perceiving the Department's community policing activities). Otherwise, a "0" value was assigned signifying limited to no demonstrable knowledge of the Department's community policing philosophy. A new *knowledge* variable resulted from this reconstruction.

1	Having knowledge $(n=658)$	47.9%
0	None to limited knowledge $(n=715)$	52.1%

The three sets of independent variables (i.e., police demographic and service factors, social and psychological factors, and attitude toward Department operational issues) were examined in relation the knowledge variable (Exhibit 14).

Exhibit 14.

#### THE POLICE OFFICER KNOWLEDGE MODEL ANALYSIS PLAN



# Impact of Police Demographic and Service Factors on Officers' Knowledge of Community Policing

The literature suggests that certain demographic characteristics and police service experience variables such as age, race, gender, length of service, districts of assignment, and work shift can significantly affect officers' attitudes and motivation to fully engage in policing efforts (e.g., Carter, Sapp, and Stephens 1989; Skolnick and Bayley 1988).

The strength of the relationship between personal and professional characteristics of police officers and their knowledge of community policing was initially determined using the chi-square  $(x^2)$  statistic. The results indicate that officer knowledge levels do not differ significantly based on assigned district, length of police service, gender, work shift, or race/Latino ethnicity. The only significant difference is in rank, with patrol officers being less likely to have appropriate knowledge of community policing (47%) than detective personnel (56%) or officers of higher rank (57%) (Exhibit 15).

Exhibit 15.

Chi-Square Results for Officers' Knowledge of Community Policing by Police Demographic and Service Variables

	$x^2$	df
Gender	.08	1
Race	2.42	4
Rank	9.14*	2
District	10.50	13
Years of service	2.43	4
Work shift	5.44	2

<sup>\*</sup> p<.05

Notwithstanding, logistic regression analysis did not indicate any significant relationship between the dependent and independent variable group ( $x^2$ =22.05; df=26; p>.60; n=604; overall prediction=59%; -2 Log Likelihood=815.17;  $R^2$  = .048), with less than 5 percent of variance in knowledge explained by the model variables (Exhibit 16).

## Exhibit 16.

### Logistic Regression Results For Impact of Police Demographic and Service Factors on Officers' Knowledge of Community Policing

Overall 58.61%

Number of cases included in the analysis: 604

Dependent Variable2 Log Likelihood Goodness of Fit	KNOWLEDGE 815.169 602.256	(knowing + priori	ty + activity)
Cox & Snell - R^2	.036		
Nagelkerke - R^2	.048		
	Chi-Square	df Significance	e de la companya de l
Model	22.047	26 .6861	
Block	22.047	26 .6861	
Step	22.047	26 .6861	

Classification Table for KNOWLEDGE The Cut Value is .50  $\,$ 

		None		Know!		of	Percent Correct	
Observed None to Limited	N	+ I	170	- <del>†</del>	128	+ I	57.05%	
Knowledgeable of	ĸ	I t	122	I -+	184	I +	60.13%	

		Variables	in the Ec	quation			
Variable	В	S.E.	Wald	đ£	Sig	R	Exp(B)
GENDER(1)	2962	.2980	.9881	1	.3202	.0000	.7436
RACE			2.4639	4	.6511	.0000	
RACE(1)	0155	.2167	.0051	.1	.9431	.0000	.9846
RACE(2)	.3451	.3887	.7883	1	.3746	.0000	1.4121
RACE(3)	.7493	.8769	.7301	1	.3929	.0000	2.1155
RANK1			3.2064	2	.2013	.0000	
RANK1(1)	.3568	.2423	2.1679	1	.1409	.0142	1.4287
RANK1(2)	.3846	.2743	1.9665	1	.1608	.0000	1.4691
DISTRICT			8.3530	13	.8199	.0000	•
DISTRICT(1)	6592	.4033	2.6722	1	.1021	0283	.5173
DISTRICT(2)	2999	.4288	.4892	1	.4843	.0000	.7409
DISTRICT(3)	.0071	.3905	.0003	1	.9855	.0000	1.0071
DISTRICT (4)	.4802	.4590	1.0948	1	.2954	.0000	1.6165
DISTRICT(5)	2997	.4821	.3865	1	.5341	.0000	.7410
DISTRICT(6)	0697	.5098	.0187	1	.8913	.0000	.9327
DISTRICT(7)	2274	.3956	.3303	1	.5655	.0000	.7966
DISTRICT(8)	1897	4835	.1540	1	.6948	.0000	.8272
DISTRICT(9)	3494	.4402	.6299	1	.4274	.0000	.7051
DISTRICT(10)	5.2101	9.5356	.2985	1	.5848	.0000	183.1196
DISTRICT(11)	0766	.4612	.0276	1	.8681	.0000	.9263
DISTRICT(12)	1832	.3595	.2597	1	.6104	.0000	.8326
DISTRICT(13)	0719	.4044	.0317	1	.8588	.0000	.9306
YEARS			.6631	4	.9558	.0000	
YEARS (1)	1342	.2930	.2099	1	.6469	.0000	.8744
YEARS (2)	1625	.2967	.3001	. 1	.5838	.0000	.8500
YEARS (3)	0207	.3399	.0037	1	.9515	.0000	.9796
YEARS (4)	1849	.3243	.3249	1	.5687	.0000	.8312
SHIFT			1.4238	2	.4907	.0000	
SHIFT(1)	2284	.1943	1.3818	1	.2398	.0000	.7958
SHIFT(2)	0428	.2515	.0289	1 .	.8650	.0000	.9581
Constant	.2827	.3810	.5507	1	.4580	<del>-</del> -	

### Impact of Police Social and Psychological Factors on Officers' Knowledge Level

A set of 26 social and psychological factors was selected for this analysis component. Chisquare results indicated that specific factors – i.e., morale and stress levels, being treated with
respect, choosing again to be a police officer, supervisor's skill level, one's perceived impact on the
Department, and perceived fairness of promotions – significantly influence the likelihood of officers
having appropriate knowledge of the Department's community policing philosophy (Exhibit 17).

The likelihood of police officers knowing the Department's official definition of community policing and its strategies was significantly higher among those who self-reported relatively high morale levels; a sense of being treated with respect by the Department and that their knowledge and experience have an impact on the future of the Department; and retrospectively choosing policing as a profession.

Particular attitudes toward the promotional system are also a significant contributing factor.

Those who feel that promotions in the Department are primarily based on political contacts are less likely to know the correct definition of community policing than do those who believe the promotion system is fair (i.e., based on hard work, earned rank, solid skills).

Though the pattern is uneven, overall stress level has a significant impact on knowledge.

Officers who reported moderate stress levels tended to know more about community policing than those with either no self-reported stress or with high stress levels.

Exhibit 17.

Chi-Square Results for Officers' Knowledge of Community Policing by Police Social and Psychological Factors

		Knowledge		
Survey Question #	Social and Psychological Factors	$x^2$	df	
1	Personal morale level	10.04**	1	
3	Choose to be a police officer again	6.45*	1	
7	Choice of assignments over the next 10 years	17.51	24	
40	Treated with respect	17.07**	1	
59a	There are not enough patrol sergeants to supervise	2.96	1	
59b	Sergeants have no time for good field training	.13	1	
59c	Supervisor treats all with respect	1.61	1	
59d	Supervisor looks out for welfare of subordinates	.03	1	
59e	Supervisor applies rules fairly	.13	1	
59f	Supervisor is a knowledgeable leader	.10	1	
59g	Supervisor is well respected	.11	1	
59h	There is not enough lieutenants to supervise	.31	1	
59i	Detective supervisor is skillful with investigations	3.55	1	
59j	Rise to attention	.24	1	
59k	Supervisor praises good work	.94	1	
591	Useful to discuss work related problem with supervisor	1.79	1	
59m	Supervisor handles duties effectively	.29	1	
59n	Supervisor informs what is fairly expected	.15	1	
<b>59</b> o	Supervisor accessible for service calls	4.45	1	
59p	Supervisor earned rank	2.01	1	
63	Personal impact on organization	8.24*	3	
64	Promotions fair	5.17*	1	
67	Job motivation	4.59	6	
68a-u	Overall stress	17.51**	3	
68j	Family-related stress	.16	1	
69	Number of times assaulted during previous 12 months	1.03	4	

<sup>\*\*</sup> p<.01 \* p<.05

Logistic regression was performed to estimate the impact of each of the independent variables in this group on the likelihood of knowing the Department's official community policing definition and strategies (Exhibit 18). The analysis indicated a significant correlation between model variables ( $x^2=77.24$ ; p<.05; df=57; n=300; -2 LL=337.99; overall prediction=69%; Nagelkerke  $R^2=.30$ ). The  $R^2$  increased from .048 in the demographic model to .303, indicating that approximately 30 percent of the variation in knowledge is explained by social and psychological factors.

Exhibit 18.

# Logistic Regression Results for Impact of Police Social and Psychological Factors on Officers' Knowledge of Community Policing

Number of cases included in the analysis: 300

Dependent Variable.	KNOWLEDG	(knowing + priority + activity)
-2 Log Likelihood Goodness of Fit Cox & Snell - R^2 Nagelkerke - R^2	337.995 294.896 .227 .303	
	Chi-Square	df Significance
Model Block Step	77.239 77.239 77.239	57 .0384 57 .0384 57 .0384

Classification Table for KNOWLEDG The Cut Value is .50

		None to Limited Knowledgeable of		
	N	K		
Observed None to Limited N	112	45	71.34%	
Knowledgeable of K	47	96	67.13%	
	1	Overall	. 69.33%	

Dradiatad

Note: The significant variables in the equation are highlighted in bold.

Exhibit 18 cont	'd:						
		Variables					
Variable	B	S.E.	Wald	df	Sig		Exp(B)
Q1RECODE	1055	.1619	.4248	1 .	.5146	.0000	.8999
Q3A	.2478	.3733	.4406	1	.5068	.0000	1.2812
Q7A	1 0500	0100	17.5347	21	.6782	.0000	3403
Q7A(1)	-1.0520	.8188	1.6506	1	.1989	.0000 0900	.3492
Q7A(2)	-2.4062	1.0388	5.3651	1	.0205		.0902
Q7A(3)	-1.3209	.6762	3.8155	1 1	.0508	0661	.2669
Q7A(4)	-10.3911 1963	36.6779	.0803	. 1	.7769	.0000	.0000
Q7A(5)	1963 5955	.8263 .9796	.0565	1	.8122 .5432	.0000	.8217 .5513
Q7A(6)	6654	.8547	.6061	1	.4362	.0000	.5141
Q7A(7)	-8.6060	25.7695	.1115	1	.7384	.0000	.0002
Q7A(8)	3326	.8978	.1372	1	.7304	.0000	.7170
Q7A(9) Q7A(10)	-2.4076	1.2473	3.7261	1	.0536	0645	.0900
Q7A(10) Q7A(11)	9276	.9130	1.0324	1	.3096	.0000	.3955
Q7A(11)	-1.9451	1.1847	2.6954	1	.1006	0409	.1430
Q7A(12)	-1.3862	1.0247	1.8299	1	.1761	.0000	2500
Q7A(13) Q7A(14)	-1.7865	1.0366	2.9703	1	.0848	0483	.1676
Q7A(15)	7286	1.2592	.3348	ī	.5629	.0000	.4826
07A(16)	4145	.7553	.3011	ī	.5832	.0000	.6607
Q7A(17)	-8.6071	23.9949	.1287	1	.7198	.0000	.0002
07A(18)	.5768	1.4019	.1693	ī	.6807	.0000	1.7804
Q7A(19)	-2.3477	1.8286	1.6484	1	.1992	.0000	.0956
Q7A(20)	-1.2601	.8275	2.3191	1	.1278	0277	.2836
Q7A(21)	-1.0103	.8795	1.3194	1	.2507	.0000	.3641
Q40	.2775	.3306	.7046	1	.4012	.0000	1.3198
R59A	.4106	.3551	1.3367	1	.2476	.0000	1.5077
R59B	0702	.3356	.0438	1	.8342	.0000	.9322
R59C	-1.0251	. 5084	4.0653	1	.0438	0705	.3588
R59D	.0949	.4910	.0373	1	.8468	.0000	1.0995
R59E	5078	.5464	.8639	1	.3526	.0000	.6018
R59F	.7425	.6275	1.4002	1	.2367	.0000	2.1011
R59G	.4649	. 5665	.6736	1	.4118	.0000	1.5919
R59H	0378	.3390	.0124	1	.9112	.0000	.9629
R59I	2799	.3808	.5402	1	.4624	.0000	.7559
R59J	1366	.3530	.1497	1	.6988	.0000	8723
R59K	3686	3666	1.0110	1	.3147	.0000	1.4458
R59L R59M	1402 .7422	.3920 .4758	.1279 2.4332	1 1	.7206 .1188	.0000	.8692
R59N	.0632	.4745	.0177	1	.8940	.0323	2.1005 1.0653
R590	0370	.4884	.0057	1	.9397	.0000	.9637
R59P	6983	.5769	1.4652	1	.2261	.0000	.4974
Q63	. 0505		12.9928	3	.0047	.1298	. 40/4
Q63(1)	4699	.3896	1.4548	. 1	.2278	.0000	.6250
Q63 (2)	.2941	.4474	.4321	1	.5110	.0000	1.3419
Q63(3)	1.2579	.5211	5.8272	1	.0158	.0960	3.5181
R64	. 6736	.3067	4.8240	1	.0281	.0825	1.9613
Q67A			9.0169	5	.1084	.0000	
Q67A(1)	.5756	.5875	.9598	1	.3272	.0000	1.7782
Q67A(2)	.7733	.3946	3.8406	1	.0500	.0666	2.1668
Q67A(3)	.2929	.4284	.4674	1	.4942	.0000	1.3403
Q67A(4)	-6.4755	22.8794	.0801	1	.7772	.0000	.0015
Q67A(5)	2.3329	.9151	6.4988	1	.0108	.1041	10.3078
STRESS1			7.9734	3	.0466	.0689	
STRESS1(1)	4167	.9433	.1951	1	.6587	.0000	.6592
STRESS1(2)	8070	.9845	.6720	1	.4124	.0000	.4462
STRESS1(3)	-2.0061	1.1060	3.2898	1	.0697	0557	.1345
FAMSUPPT	3340	.1130	8.7292	1	.0031	1273	.7161
Q69			1.1312	4	.8893	.0000	
Q69(1)	0229	.4478	.0026	1	.9592	.0000	.9774
Q69 (2)	1308	.3497	.1399	1	.7083	.0000	.8774
Q69 (3)	.3570	.5978	.3567	1	.5504	.0000	1.4291
Q69(4)	3693	.6432	.3297	1	.5659	.0000	.6912
Constant	.4472	1.6419	.0742	1	.7853		

The social and psychological factors that significantly contribute to the prediction of knowledge are listed below based on their *Wald* values (i.e., the square of the ratio of the coefficient to its standard error).

Exhibit 19.

Summary of Significant Social and Psychological Indicators of Police Officer Knowledge of Community Policing

Survey Question #	Significant Variables	Wald
63	Extent of personal impact on the Department	12.99
68j	Family-related stress level	8.73
66a-u	Overall stress level	7.97
64	Perception of promotional system fairness	4.82
59c	Belief that supervisor treats subordinates with respect	4.07

### Impact of Police Operational Issues on Officers' Knowledge of Community Policing

The measurement of attitudes toward Department operations consists of the following aforementioned components:

- 1. Whether officers think the Department does all that it can to reduce crime;
- 2. Their perceived change in crime and fear in the city during the previous 2 years;
- 3. Whether or not they believe that foot patrols are more effective than motor patrols in reducing fear of crime;
- 4. Their perceived effectiveness of Department's crime prevention strategies;
- 5. Average number of priority calls officers handle per week;
- 6. Their perceived overall effectiveness of policing services;
- 7. The perceived support police officers receive from the DA's office;
- 8. The perceived support police officers receive from the judges in court; and
- 9. Officers' primary sources of information (i.e., fellow officers, supervisors, Department's publication, special orders and memos, training bulletins, rumors, radio, TV, or newspapers).

Among these variables, the  $x^2$  analysis indicated that officers' source of information is a highly significant contributor to knowledge of community policing. Those officers who reported getting

their information more frequently from their supervisors or from reading Department's publications and special orders are more likely have to adequate knowledge of the Department's community policing philosophy than those who more often rely on information from other sources.

Those who believe that the Department does all that can reasonably be expected to reduce crime in the neighborhoods; that the city has become safer during the previous two years; and that foot patrol is a more effective way to reduce fear of crime are more likely to know the official definition of community policing than did those who believe otherwise (Exhibit 20).

Exhibit 20.

Chi-Square Results for Officers' Knowledge of Community Policing by Police Operational Issues

Survey Question #	Operational Issues	x² value	df
Q43	The police dept. does what is expected to reduce crime	8.21**	1
Q50	Effectiveness of Department in crime prevention	3.98	3
Q51	Crime/fear change during previous 2 years	6.10*	2
Q66R	Value of foot patrol	5.65*	1.1.
Q54	Volume of priority 1 & 2 calls per tour of duty	2.23	2
Q66A	Rate quality of police services by Dept.	3.35	3
Q66B	Rate support provided by DA's office	5.21	3
Q66C	Rate support provided by judges	1.82	3
Q28A	Info source fellow officer	1.12	1
Q28B	Info source supervisor	10.77**	1
Q28C	Info source dept publication	8.84**	1
Q28D	Info source special order	10.73**	1 .
Q28E	Info source training bulletins	3.79	1
Q28F	Info source rumors	1.17	1
Q28G	Info source radio	5.66*	1
Q28H	Info source TV	3.79	1
Q28I	Info source newspapers	.52	1

<sup>\*\*</sup> p<.01 \* p<.05

In the logistic regression analysis, the Department operational variables were examined along with the regression significant variables from the previous models. The resulting analysis was

significant ( $x^2$ = 56.71; df=46; p<.05; n=226; -2LL=268.351; overall correct=71%; Nagelkerke  $R^2$ =.286), with that approximately 29 percent of the variation in knowledge is explained by the model (Exhibit 21).

Exhibit 21.

Logistic Regression Results for Impact of Police Operational Issues on Officers' Knowledge of Community Policing

Number of cases included in the analysis: 226

Dependent Variable. KNOWLEDG (knowing + priority + activity)
Beginning Block Number 0. Initial Log Likelihood Function -2 Log Likelihood 325.05966

-2 Log Likelihood 268.351
Goodness of Fit 234.053
Cox & Snell - R^2 .214
Nagelkerke - R^2 .286

Model 56.708 34 .0086
Block 56.708 34 .0086
Step 56.708 34 .0086

Classification Table for KNOWLEDG The Cut Value is .50

Predicted Percent Correct None to Limited Knowledgeable of Observed None to Limited N 71 40 63.96% 77.42% Knowledgeable of K 28 96 71.06% Overall

Note: The significant variables in the equation are highlighted in **bold**.

Exhibit 21 cont	d:	Variables	in the	Equation			
		Variables	In the	nquacton			
Variable	В	S.E.	Wald	df	Sig	R	Exp(B)
R59C	7344	.4097	3.2127		.0731	0611	.4798
Q63			1.8685		.6001	.0000	
Q63(1)	3296	.4158	.6283	1	.4280	.0000	.7192
Q63(2)	6877	.5329	1.6652		.1969	.00.00	
Q63(3)	5141	.5089	1.0203		.3125	.0000	
R64	.4832	.3235	2.2303		.1353	.0266	1.6212
STRESS1			2.3838		.4966	.0000	
STRESS1(1)	7.4202	16.9636	.1913		.6618		1669.2869
STRESS1(2)	7.3561	16.9660	.1880		.6646		1565.6597
STRESS1(3)	6.4206	16.9772	.1430	1	.7053	.0000	614.3723
FAMSUPPT	0807	.1206	.4485	. 1	.5031	.0000	.9224
Q43	. 6702	.3423	3.8338	1	. 0502	.0751	1.9546
Q50R	.8039	.4698	2.9281	1	.0871	.0534	2.2343
Q51			.7621	2	.6832	.0000	
Q51(1)	4885	.6309	.5994	1	.4388	.0000	.6135
Q51(2)	1824	.3454	.2787	1	.5975	.0000	.8333
FOOTPAT	1.1388	. 3561	10.2265	, <b>1</b> .	.0014	. 1591	3.1230
Q54R			2.0217	2	.3639	.0000	
Q54R(1)	2189	.3497	.3918	1	.5314	.0000	.8034
Q54R(2)	.5273	.5133	1.0553	1	.3043	.0000	1.6943
Q66A			.3587	3	.9486	.0000	
Q66A(1)	.1473	.6136	.0576	1	.8103	.0000	1.1587
Q66A(2)	0438	. 6953	.0040	1	.9498	.0000	.9571
Q66A(3)	-5.8175	20.0139	.0845	1	.7713	.0000	.0030
Q66B			3.4194	3	.3314	.0000	
Q66B(1)	5851	1.2421	.2219	1	.6376	.0000	.5571
Q66B(2)	-1.2868	1.2353	1.0852	1	.2975	.0000	.2761
Q66B(3)	-1.0190	1.2851	.6288	1	.4278	.0000	.3609
Q66C			1.0756	3	.7830	.0000	
Q66C(1)	7.2262	36.6646	.0388	1	.8438		1375.0025
Q66C(2)	7.7194	36.6632	.0443	1 :	8332		2251.5625
Q66C(3)	7.5355	36.6644	.0422	1	.8372		1873.3658
Q28A	0192	.1372	.0197	1	.8885	.0000	.9809
Q28B	0920	.1263	.5306	1	.4664	.0000	.9121
Q28C	0118	.1368	.0074	1	.9315	.0000	.9883
Q28D	.0693	.1382	.2511	1	.6163	.0000	1.0717
Q28E	2178	.1291	2.8485	1	0915	0511	.8043
Q28F	.0834	.1255	.4421	1	.5061	.0000	1.0870
Q28G	.3537	.1810	3.8186	1	.0507	.0748	1.4244
Q28H	3105	.2207	1.9793	1	.1595	.0000	.7331

.9940

.1504

.3188

.6981

.0000

1.1742

.1606

-15.6859

.1611

40.4460

Q28I

Constant

The most significant factors in determining officers' knowledge of community policing are listed below (based on *Wald* values):

#### Exhibit 22.

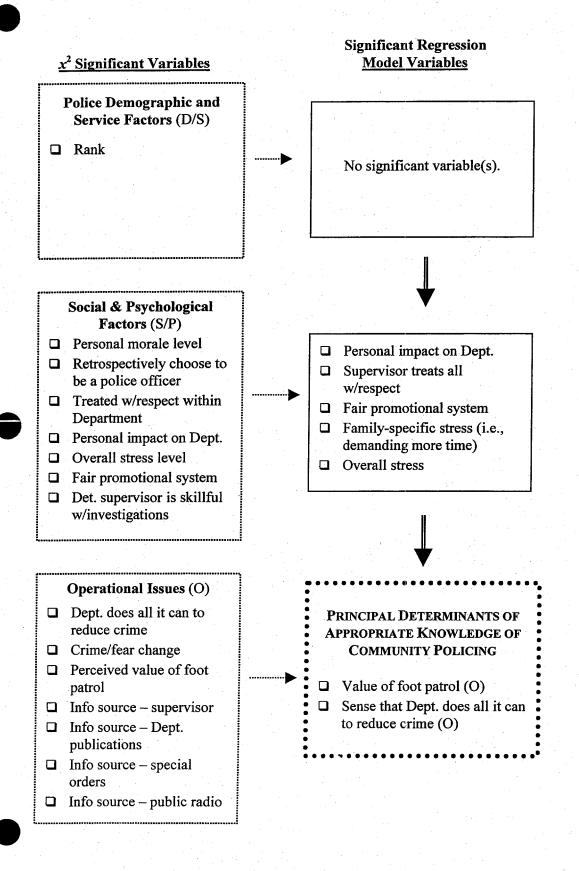
## **Summary of Significant Department Operational Indicators** of Police Officer Knowledge of Community Policing

Belief that:	Wald Value
Foot patrol more effective than motor vehicle patrol in reducing crime and fear.	10.23**
The Department does what is expected to reduce crime.	3.84*
** n< 01 * n< 05	

The belief that foot patrols are more effective than car patrols in reducing fear of crime plays the most significant role in officers' knowledge of community policing. Those who believe in the effectiveness of foot patrols were more than twice as likely to have appropriate knowledge.

The conviction that the Department is doing what is expected to reduce crime followed as an important indicator. Such confidence increases the likelihood of appropriate knowledge by nearly 100 percent.

# Exhibit 23. RESULTS OF THE POLICE OFFICER KNOWLEDGE MODEL



### Police Officer Acceptance and Commitment to Community Policing

Officers' level of acceptance and commitment to community policing are organized as distinct concepts in the analysis. Two variables served as the measurement of acceptance – (1) officers' perception of whether citizens working closer with police to solve local problems would significantly reduce crime, and (2) whether officers would be more effective if they made a greater effort to learn about citizens' concerns. The two were combined into a dichotomous variable, with a value of "1" signifying that an officer's affirmative response to the notion that citizens working closely with police would reduce crime *and* police would be more effective if officers make an effort to learn about citizens' concerns. A value of "0" was assigned if only one or none of the two cases was affirmed. The result of this *acceptance* variable is as follows:

1	High acceptance leve	l for comm	unity policing (n=	=886) 83	3.3%

O Partial or no acceptance (
$$n=177$$
) 16.7%

Commitment to community policing was also measured by combining two variables – (1) agreement with the statement that measures of citizen satisfaction with police services should be an indicator of police success, and (2) a self-reported effort made to get to know residents while they are working out on the street. The new variable consisted of a coding value of "1" if the respondent agreed with both statements, and "0" for agreement with only one or none of the statements. The result of this *commitment* variable is as follows:

0 Partial or no commitment (n=539) 58.8%

<sup>\*</sup> The acceptance and commitment models are presented under one heading in an effort to reduce the level of such redundancy in the report, and is not intended to imply an association between the two models.

# Impact of Police <u>Demographic and Service Factors</u> on Officers' Acceptance and Commitment to Community Policing

Our examination of police officer likelihood to accept and commit to community policing practices began with an analysis of demographic characteristics and police service factors. Initial chi-square analyses indicated that officers' *acceptance* of community policing varies according to rank and years of service. The higher the rank and seniority of officers, the more likely they are to accept community policing principles.

Commitment level is dependent on length of service and gender. Though unaffected by rank, male officers are more likely to be committed than female officers. Seniority also affects the level of commitment. The longer officers have been on the job, the more likely they are to be committed.

Race, district of assignment, and work shift are not significantly related to either acceptance or commitment to community policing. Chi-square analyses also confirmed the significance of previous model variables (i.e., knowledge and acceptance) within the respective models (Exhibit 24).

Exhibit 24.

Chi-Square Results for Officers' Acceptance and Commitment to Community Policing
by Police Demographic and Service Factors

	$x^2 va$	$x^2$ values			
	df	Acceptance	Commitment		
Gender	1	.88	6.73**		
Race	4	3.39	8.40		
Rank	2	19.64**	.13		
District	13	18.08	16.31		
Years of service	4	17.00**	15.07**		
Work shift	2	5.51	3.09		
Knowledge	1	12.72**	2.90		
Acceptance	1		11.65**		

<sup>\*\*</sup> p<.01 \* p<.05

The acceptance model is also significant when applying logistic regression methods to examine the influence of independent factors ( $x^2$ =41.06; p <.05; -2LL=437.99; n=537; overall correct=83%; Nagelkerke  $R^2$ =.13). However, rank is the only significant indicator of acceptance among the group variables (Exhibit 25). The major difference is between police (patrol) officers and those in the uniformed command personnel ranks of sergeant, lieutenant, and captain. Command personnel are three times more likely to accept the concept of community policing than patrol officers. Detective personnel within the varying ranks (i.e., detective, sergeant-detective, lieutenant-detective, and captain-detective) are not significantly different from the police officer rank. The effect of length of service, though significant at the bivariate level, diminishes in the regression analysis.

In the *commitment* model, the effects of the police demographic and service variables are largely rendered insignificant. Acceptance of community policing is the only relevant factor for commitment to community policing ( $x^2$ =41.82; p<.05; -2LL=574.00; n=451; overall correct=63.41%; Nagelkerke  $R^2$ =.119) (Exhibit 26).

#### Exhibit 25.

### Logistic Regression Results for Impact of Police Demographic and Service Factors on Officers' Acceptance of Community Policing

Number of cases included in the analysis: 537

Dependent Variable. ACCEPT

Beginning Block Number 0. Initial Log Likelihood Function

-2 Log Likelihood 479.75857

437.987 -2 Log Likelihood Goodness of Fit 505.916 Cox & Snell - R^2 Nagelkerke - R^2 .074 .125

Chi-Square df Significance .0407 41.057 Model 41.057 27 Block .0407 Step 41.057 27 .0407

Classification Table for ACCEPT The Cut Value is .50

The Cut value 13 .3	•	Pred	icted	
		Partial Accept	Highly Accept	Percent Correct
		P	Н	
Observed		<del> </del>		
Partial Accept	P	1	87	1.14%
Highly Accept	Н	2	447	99.55%
			Overal	1 83 43%

					Overal.	1 83.43	88
		Variables	in the Eo	nuation -			
Variable	В	S.E.	Wald	df	Sig	R	Exp(B)
KNOWLEDG	.4520	.2490	3.2961	1	.0694	.0520	1.5714
GENDER	2000	.4146	.2327	1	.6295	.0000	.8188
RACE		* *	1.3971	4	.8447	.0000	
RACE(1)	.2886	.3114	.8587	1	.3541	.0000	1.3345
RACE(2)	2624	.5203	.2543	1	.6140	.0000	.7692
RACE(3)	.0230	1.1829	.0004	1	.9845	.0000	1.0233
RACE(4)	3654	1.2264	.0888	1	.7658	.0000	. 6939
RANK1			5.9930	2	.0500	.0645	
RANK1(1)	.3396	.3908	.7551	1	.3849	.0000	1.4044
RANK1(2)	1.3670	.5676	5.7996	1	.0160	.0891	3.9236
DISTRICT			13.6369	13	.3999	.0000	
DISTRICT(1)	5339	.5821	.8414	1	.3590	.0000	.5863
DISTRICT(2)	-,3709	.6329	.3435	1	.5578	.0000	.6901
DISTRICT(3)	.1524	.6193	.0606	1	.8056	.0000	1.1646
DISTRICT (4)	.3152	.7739	.1659	1	.6838	.0000	1.3705
DISTRICT(5)	1799	.7351	.0599	1	.8067	.0000	.8354
DISTRICT(6)	-1.0741	.6751	2.5316	1	.1116	0333	.3416
DISTRICT(7)	5191	.5806	.7992	1	.3713	.0000	.5951
DISTRICT(8)	0172	.7368	.0005	1	.9814	.0000	.9830
DISTRICT(9)	.5677	.7775	.5332	1	.4653	.0000	1.7643
DISTRICT (10)	4.6888	22.2474	.0444	1	.8331	.0000	108.7258
DISTRICT(11)	-1.0361	.6458	2.5743	1	.1086	0346	.3548
DISTRICT(12)	2612	.5658	.2131	1	.6444	.0000	.7701
DISTRICT (13)	.7286	.7672	.9020	1	.3422	.0000	2.0722
JOBYEARS			1.9923	4	.7372	.0000	
JOBYEARS (1)	.1199	.3843	.0973	1	.7551	.0000	1.1273
JOBYEARS (2)	0666	.3850	.0300	1	.8626	.0000	.9355
JOBYEARS (3)	.3031	.5154	.3459	1	5565	.0000	1.3541
JOBYEARS (4)	.5019	.4912	1.0442	. 1	.3069	.0000	1.6519
SHIFT			2.2190	2	.3297	.0000	
SHIFT(1)	0716	.3022	.0562	1	.8127	.0000	.9309
SHIFT(2)	4954	.3392	2.1324	. 1	.1442	0166	.6093
Constant	1.6344	.7505	4.7419	1	.0294		

### Exhibit 26.

### Logistic Regression Results for Impact of Police Demographic and Service Factors on Officers' Commitment to Community Policing

Number of cases included in the analysis: 475

Dependent Variable. COMMIT1

Beginning Block Number 0. Initial Log Likelihood Function -2 Log Likelihood 644.60946

-2 Log Likelihood	574.002
Goodness of Fit	449.438
Cox & Snell - R^2	.089
Nagelkerke - R^2	.119

	Chi-Square	df	Significance
Model	 41.816	28	.0451
Block	41.816	28	.0451
Step	41.816	28	.0451

Classification Table for COMMIT1 The Cut Value is .50

		Pred: Partial Committe	Percent Correct		
		P	н		
Observed Partial Committe	P	199	59	77.13%	
Highly Committed	Н	106	87	45.08%	
			Overal	L 63.41%	

		Variables	in the Eq	uation			
Variable	В	S.E.	Wald	df	Sig	R	Exp(B)
GENDER	6137	.3880	2.5016	1	.1137	0285	.5413
RACE			7.8999	4	.0953	.0000	
RACE(1)	.6688	,2581	6.7120	1	.0096	.0875	1.9518
RACE(2)	.3308	.4427	.5582	1	.4550	.0000	1.3920
RACE(3)	1.3927	1.2642	1.2136	1	.2706	.0000	4.0257
RACE(4)	.1822	1.2873	.0200	. 1	.8874	.0000	1.1999
RANK1			4.3804	. 2	.1119	.0249	
RANK1(1)	4290	.2990	2.0587	1	.1513	0098	.6512
RANK1(2)	6369	.3359	3.5953	1	.0579	0509	.5289
DISTRICT			12.3423	13	.4998	.0000	
DISTRICT(1)	2259	.4660	.2349	1	.6279	.0000	.7978
DISTRICT(2)	7536	.5093	2.1898	1	.1389	0176	.4707
DISTRICT(3)	5585	.4676	1.4270	1	.2323	.0000	.5720
DISTRICT(4)	-1.1640	.5601	4.3191	1	.0377	0614	.3122
DISTRICT(5)	.1203	.5659	.0452	1	.8316	.0000	1.1279
DISTRICT(6)	.0915	.5929	.0238	1	.8774	.0000	1.0958
DISTRICT (7)	5548	.4696	1.3959	1	.2374	.0000	.5742
DISTRICT(8)	0368	.5655	.0042	1	.9481	.0000	.9638
DISTRICT (9)	0991	.5079	.0381	1	.8452	.0000	.9056
DISTRICT(10)	-4.5660	8.2176	.3087	1 .	.5785	.0000	.0104
DISTRICT (11)	4779	.5608	.7263	1	.3941	.0000	.6201
DISTRICT (12)	0703	.4431	.0252	1	.8739	.0000	.9321
DISTRICT (13)	8048	.4983	2.6087	1	.1063	0314	.4472
JOBYEARS			7.8356	4	.0978	.0000	
JOBYEARS (1)	.1698	.3479	.2381	1	.6256	.0000	1.1850
JOBYEARS (2)	1269	.3448	.1355	1	.7128	.0000	.8808
JOBYEARS (3)	.4499	4038	1.2409	1	.2653	.0000	1.5681
JOBYEARS (4)	.7221	. 3922	3.3892	. 1	.0656	.0475	2.0587
SHIFT			1.2775	2	.5279	.0000	
SHIFT(1)	2057	.2353	.7642	1	.3820	.0000	.8141
SHIFT(2)	.1212	.2998	.1635	1	.6859	.0000	1.1289
KNOWLEDG	.0499	.2042	.0596	1	.8071	.0000	1.0511
ACCEPT2	.8153	.2969	7.5422	1	.0060	.0949	2.2599
Constant	1553	.6712	.0535	1	.8171		

Impact of Police <u>Social and Psychological Factors</u> on Officers' Acceptance and Commitment to Community Policing

Acceptance

Of the 26 social and psychological factors analyzed at the bivariate level, eight variables are significantly associated with officers' acceptance of community policing. These are (1) personal morale level, (2) the perception of being treated with respect within the Department, (3) perceptions about the fairness of the promotional system, (4) retrospectively choosing to be a police officer, (5) the number of personal assault experiences during the previous year, (6) the proportion of field supervisors, (7) being treated with respect by supervisors, and (8) supervisors' effectiveness in discussing work-related problems.

The first four factors all have to do with officers' organizational mind-set. In general, the higher officers' morale level and sense of fair treatment within the Department, the more likely they are to accept community policing principles.

Officers who were assaulted while on-duty more than 5 times during the previous 12 months indicate a significantly lower level of acceptance.<sup>24</sup>

The ratio of patrol officers to supervisors in the sergeant rank is also significant. Officers who consider the level of sergeant personnel in the field to be insufficient and/or that supervisors are ineffective in discussing work-related issues or lacking in respect for subordinates are less likely to accept community policing principles (Exhibit 27).

Commitment

Applying the same 26 social and psychological variables, seven factors (primarily related to supervisory issues) are significantly associated with commitment to community policing.

- 1. The perception of being treated with respect within the Department;
- 2. The perception that their personal knowledge and experiences have an impact on the future of the Department;
- 3. Detective supervisors' investigation skills;
- 4. Supervisors' knowledge and leadership skills;
- 5. Supervisors' effectiveness in discussing work-related problems;
- 6. Whether supervisors praise good work; and
- 7. Inform officers of what is fairly expected.

Police officers' perceived personal impact on the Department and sense of being respected significantly affect their level of commitment. Interactions with supervisors are also significant factors. The more confidence officers have in their supervisors' ability, the more likely they are to be committed to community policing. Those supervisors who praise good work and apply rules fairly are more likely to have committed subordinate officers.

<sup>&</sup>lt;sup>24</sup> There were 65 officers among the 1,383 respondent sample (5% of total) who indicated being assaulted more than 5 times in the previous year. They were primarily males from the patrol rank, working the first-half shift (i.e., 3 pm-11 pm) in Districts 1, 2 and 4.

Exhibit 27.

Chi-Square Results for Officers' Acceptance of and Commitment to Community Policing by Police Social and Psychological Factors

		<i>x</i> <sup>2</sup> 1	values
Social and Psychological Factors	df	Acceptance	Commitmen
Personal morale level	1	17.24**	1.02
Choose to be a police officer again	1	9.42**	1.10
Choice of assignments over next 10 years	24	34.49	25.78
Treated with respect	1	12.46**	14.70**
There are enough sergeants to supervise	1	12.61**	.03
Supervisor has no time for good field training	1	1.35	1.77
Supervisor treats all with respect	1	4.28*	.62
Supervisor looks out for welfare of subordinates	1	1.15	1.93
Supervisor applies rules fairly	1	3.21	2.60
Supervisor is an effective leader	1	2.42	5.64*
Supervisor is well respected	1	2.97	.61
There are not enough lieutenants to supervise	. 1	3.64	2.44
Detective supervisor is skillful with investigations	1	.05	8.63*
Rise to attention	1	.28	1.18
Supervisor praises good work	1	.29	9.26**
Useful to discuss work-related problem with supervisor	1	4.45*	10.63**
Supervisor handles duties effectively	1	.57	1.60
Supervisor informs what is fairly expected	. 1	.13	6.62*
Supervisor accessible for service calls	1	2.09	4.86
Supervisor earned rank	1	2.78	2.67
My impact on organization	3	6.89	28.00**
Promotions fair	1	6.65**	1.55
Job motivation	6	6.38	11.65
Overall stress level	3	.98	.65
Family-related stress	1	.58	.92
Number of times assaults during previous 12 months	4	16.33**	2.50

<sup>\*\*</sup> p<.01 \* p<.05

In the multivariate analysis, the regression-significant demographic and police service variable(s) associated with acceptance in the previous regression analysis (i.e., rank) as well as the knowledge variable were "entered" in the model with the 26 social and psychological variables. Logistic regression confirmed the significance of the *acceptance* model [ $x^2$ =91.56; df=60; p<.01; n=279; -2LL=179.72; overall correct=85%; Nagelkerke  $R^2$ =.450] (Exhibit 28).

However, only personal knowledge of community policing and supervisors' skills/effectiveness remained significant to acceptance. Police personnel with appropriate level

of knowledge of community policing are more likely to accept community policing principles than their counterparts. Whether the supervisor is regarded as a skillful officer also has an impact on subordinate officers' acceptance of community policing. Rank, fair treatment, supervisor's time and availability, personal impact, and promotional system fairness were rendered insignificant.

Exhibit 28.

# Logistic Regression Results for Impact of Police Social and Psychological Factors on Officers' Acceptance of Community Policing

Number of cases included in the analysis: 279

Dependent Variable.. ACCEPT
Beginning Block Number 0. Initial Log Likelihood Function
-2 Log Likelihood 271.28341

-2 Log Likelihood	179.720
Goodness of Fit	211.294
Cox & Snell - R^2	.280
Nagelkerke - R^2	.450

		Chi-Square	df	Significance
Model		91.563	60	.0054
Block		91.563	60	.0054
Step		91.563	60	.0054

Classification Table for ACCEPT2 The Cut Value is .50

	Pred		
	Limited or no	Significant acc	Percent Correct
	L	S	
Observed			
Limited/no accept	L 21	32	39.62%
Significant accept	S 11	215	95.13%
		Overal	1 84.59%

Exhibit 28 cont d.		Variables	in the	Equation			
Variable	В	S.E.	Wald	df	Sig	R	Exp(B)
RANK1			2.0257	2	.3632	.0000	
RANK1(1)	.7171	.7914	.8211		.3649	.0000	
RANK1(2)	1.0652	.8793	1.4674		.2258	.0000	
Q1RECODE	4876	.2510	3.7738		.0521	0809	
Q3A	2621	.5319	.2428		.6222	.0000	
Q7A	.2021	.5515	16.6333		.7331	.0000	
Q7A(1)	5710	1.0616	.2893		.5907	.0000	
Q7A(1)	.7003	1.4743	.2256		.6348	.0000	
Q7A(2)	.8322	.8677	.9200		.3375	.0000	
Q7A(3)	6.6827	164.2754	.9200		.9676	.0000	
	3.0824	1.4200	4.7116		.0300		
Q7A(5) Q7A(6)		1.3026				.1000	21.8098
- ' '	.5895		.2048		.6509	.0000	1.8030
Q7A(7)	1.6990	1.1850	2.0556		.1516	.0143	5.4685
Q7A(8)	-1.0480	1.9848	.2788	1	.5975	.0000	3507
Q7A(9)	0094	1.2210	.0001		.9939	.0000	.9907
Q7A(10)	7.7427	56.7568	.0186		.8915		2304.7409
Q7A(11)	.4551	1.2086	.1418		.7065	.0000	1.5764
Q7A(12)	-1.6061	1.6062	.9998	1	.3174	.0000	.2007
Q7A(13)	4286	1.3985	.0939	1	.7592	.0000	.6514
Q7A(14)	2.0434	1.4591	1.9613	1	.1614	.0000	7.7172
Q7A(15)	.1940	2.0214	.0092	1	.9236	.0000	1.2140
Q7A(16)	10.0652	25.9957	.1499	1	.6986	.0000	23510.047
Q7A(17)	0601	1.8715	.0010		.9744	.0000	.9417
Q7A(18)	9.8682	89.0706	.0123	1	.9118	.0000	19307.247
Q7A(19)	6.8408	164.2709	.0017	1	.9668	.0000	935.2136
Q7A(20)	.9087	1.1087	.6717	1	.4125	.0000	2.4810
Q7A(21)	2.5059	1.2930	3.7559	. 1	.0526	.0805	12.2551
Q40	.5837	.5278	1.2230	1	.2688	.0000	1.7927
R59A	.5385	.5596	.9260	1	.3359	.0000	1.7135
R59B	1022	.4985	.0421	1	.8375	.0000	.9028
R59C	1.4614	.8274	3.1198	1	.0773	.0642	4.3118
R59D	0401	.7538	.0028	1	.9576	.0000	.9607
R59E	-1.7904	.9361	3.6582	1	.0558	0782	.1669
R59F	.0788	1.0097	.0061	1	.9378	.0000	1.0820
R59G	1999	.8969	.0497	1	.8237	.0000	.8188
R59H	.5583	.5472	1.0412	1	.3075	.0000	1.7478
R59I	-1.8170	. 6924	6.8865	1	.0087	1342	.1625
R59J	.1049	.5755	.0333	1	.8553	.0000	1.1107
R59K	3848	.5785	.4425	1	.5059	.0000	.6806
R59L	.4460	.5753	.6012	1	.4381	.0000	1.5621
R59M	6755	.8455	.6382	1	.4244	.0000	.5089
R59N	.9191	.7251	1.6068	ī	.2049	.0000	2.5071
R590	0498	.8032	.0038	ī	.9506	.0000	.9515
R59P	6920	.9421	.5395	1	.4626	.0000	.5006
Q63	.0320	.5121	1.4933	3	.6838	.0000	.3000
Q63(1)	8035	.6666	1.4532	ĭ	.2280	.0000	.4477
Q63(2)	5274	.7315	.5198	1	.4709	.0000	.5902
Q63 (3).	3500	.8627	.1646	. 1	.6849	.0000	.7047
R64	.3950	.4855	.6619	1	.4159	.0000	1.4843
Q67A	.0500	. 1055	4.7291	5	.4498	.0000	1.4043
Q67A(1)	-1.3042	.8753	2.2202	1	.1362	0285	.2714
Q67A(2)	7091	.6502	1.1894	1	.2754	.0000	.4921
Q67A(3)	5694	.7195	.6261	1	.4288	.0000	
Q67A(4)	4.1759	88.1036	.0022	1	.9622	.0000	.5659
Q67A(5)	1.5230	1.5050	1.0240	1	.3116		65.0954
STRESS1	1.5250	1.5050	2.3469	3		.0000	4.5859
STRESS1(1)	4126	1.3144		1	.5036	.0000	CC10
			.0986		.7536	.0000	.6619
STRESS1(2) STRESS1(3)	-1.0392	1.4093	.5437	. 1	.4609	.0000	.3537
• •	.0641	1.6079	.0016	1	.9682	.0000	1.0662
FAMSUPPT	2106	.1725	1.4912	1	.2220	.0000	.8101
Q69	05.61	7016	9.1436	4	.0576	.0649	
Q69(1)	.9561	.7316	1.7081	1	.1912	.0000	2.6016
Q69 (2)	. 4267	.5261	.6576	1	.4174	.0000	1.5321
Q69 (3)	1.3686	1.0090	1.8398	1	.1750	0000	3.9299
Q69(4)	-1.7212	.9700	3.1485	1	.0760	0651	.1789
KNOWLEDG	. 9860	.4748	4.3132	1	.0378	.0923	2.6806
Constant	3.5025	2.3946	2.1394	1	.1436		

Since the regression analysis did not indicate any significant variables among the demographic and police service factors, *commitment* was run only with the knowledge and acceptance variables "entered" in the model with the 26 social and psychological variables. The logistic regression for the *commitment* model was significant [ $x^2$ =62.907; p<.05; df=38; - 2LL=328.685; df=38; n=289; overall correct=69%; Nagelkerke  $R^2$ =.264] (Exhibit 29). The results indicate that supervisors' investigative skills and effectiveness, personal impact on the organization, and knowledge of community policing are significant factors in officers' commitment to community policing practices (Exhibit 30).

Exhibit 30.

Summary of Significant Police Social and Psychological Indicators of Officers' Acceptance of and Commitment to Community Policing

	<i>Wald</i> Value				
	Acceptance	Commitment			
Personal impact on Department	n/s	9.50*			
Knowledge of community policing	4.31*	8.37*			
Supervisor skillful in managing investigations	6.89*	6.99*			

<sup>\*</sup> p<.05. n/s= no significance.

#### Exhibit 29.

## Logistic Regression Results for Impact of Police Social and Psychological Factors on Officers' Commitment to Community Policing

Number of cases included in the analysis: 289

Dependent Variable.. COMMIT1
Beginning Block Number 0. Initial Log Likelihood Function
-2 Log Likelihood 391.59177

-2 Log Likelihood 328.685 Goodness of Fit 274.474 Cox & Snell - R^2 .196 Nagelkerke - R^2 .264

Model 62.907 38 .0067
Block 62.907 38 .0067
Step 62.907 38 .0067

Classification Table for COMMIT1 The Cut Value is .50

Predicted
Partial Committee Highly Committed Percent Correct
PH

Observed
Partial Committed P 133 37 78.24%

Highly Committed H 53 66 55.46%

Overail

68.86%

		- Variab	oles in th	ne Equ	ation -		
$A^{\alpha}$							
Variable	В -	S.E.	Wald	df	Sig	. R	Exp(B)
Q1RECODE	.2056	.1656	1.5399	1	.2146	.0000	1.2282
Q3A	6482	.3849	2.8363	1	.0922	0462	.5230
Q40(1)	1588	.3319	.2289	1	.6324	.0000	.8532
R59A	.2407	.3445	.4880	1	.4848	.0000	1.2721
R59B	3998	.3293	1.4739	1	.2247	.0000	.6705
R59C	4375	.5381	.6612	1	.4162	.0000	.6456
R59D	3138	.5063	.3841	1	.5354	.0000	.7307
R59E	5730	.5581	1.0542	1	.3045	.0000	.5638
R59F	.9802	.6184	2.5120	1	.1130	.0362	2.6650
R59G	3818	.5231	.5326	1	.4655	.0000	.6827
R59H	.3181	.3157	1.0151	1	.3137	.0000	1.3744
R59I	1.0709	.4048	6.9999	1	.0082	.1130	2.9181
R59J	0537	.3366	.0254	1	.8734	.0000	.9478
R59K	.2076	.3709	.3133	1	.5757	.0000	1.2307
R59L	.4632	.4046	1.3110	1	.2522	.0000	1.5892
R59M	6123	.5144	1.4167	1	.2339	.0000	.5421
R59N	.4871	.4632	1.1057	1	.2930	.0000	1.6276
R590	.6785	.5136	1.7448	1	.1865	.0000	1.9708
				1			
R59P	-1.0189	.5747	3.1432		.0762	0540	.3610
Q63	0.488		9.5023	3	.0233	.0946	
Q63(1)	3475	.3634	.9144	1	.3390	.0000	.7064
Q63(2)	-1.2980	.4516	8.2606	1	.0041	1264	.2731
Q63 (3)	9648	.5054	3.6437	1	.0563	0648	.3811
R64	5158	.3113	2.7462	1 .	.0975	0437	.5970
Q67A			1.9753	5	.8525	.0000	
Q67A(1)	2450	.6042	.1644	1	.6851	.0000	.7827
Q67A(2)	3631	.3940	.8492	1	.3568	.0000	. 6955
Q67A(3)	.0151	.4112	.0014	1	.9706	.0000	1.0153
Q67A(4)	.8726	1.3287	.4313	1	.5114	.0000	2.3931
Q67A(5)	0700	.8144	.0074	1	.9315	.0000	.9324
STRESS1			7.6475	3	.0539	.0649	
STRESS1(1)	-1.1828	.7745	2.3323	1	.1267	0291	.3064
STRESS1(2)	5877	8229	.5100	1	.4751	.0000	.5556
STRESS1(3)	0301	.9418	.0010	1	.9745	.0000	.9703
FAMSUPPT	.1157	.1099	1.1089	1	.2923	.0000	1.1227
Q69			.6002	4	.9630	.0000	
Q69(1)	.2079	.4499	.2135	1	.6441	.0000	1.2311
Q69(2)	.2057	.3443	.3569	1	.5502	.0000	1.2284
Q69 (3)	0614	.5519	.0124	. 1	.9114	.0000	.9405
Q69(4)	.0057	.6790	.0001	1	.9934	.0000	1.0057
KNOWLEDG	. 8809	.3044	8.3718	1	.0038	.1276	2.4130
ACCEPT2	.6828	.4018	2.8886	1	.0892	.0476	1.9794
Constant	.7581	1.3886	.2980	1	.5851		
					. 5001		

## Impact of Police <u>Operational Issues</u> on Officers' Acceptance and Commitment to Community Policing

### Acceptance

In analyzing the relationship between attitudes toward Department operational issues and the acceptance of community policing, we found that officers who support foot patrols, respond to a relatively low or moderate volume of high priority calls, reported receiving good support from the DA's office, and less frequently use television or newspaper as sources of information are more accepting of community policing than those with alternate or dissimilar responses on these items (Exhibit 31).

Exhibit 31.

Chi-Square Results for Impact of Police Operational Issues on Officers' Acceptance and Commitment to Community Policing

Survey	Question # Operational Issues	df	Acceptance	Commitment
Q43	Dept. does what is expected to reduce crime	1	.07	2.95
Q50r	Effectiveness of Dept. in crime prevention	1	1.72	8.76*
Q51	2 year change in crime/fear of crime	2	5.06	8.76*
Q66r	Foot patrols reduce fear of crime	1	19.06**	3.85*
Q54r	Avg. priority 1 & 2 call per tour of duty	2	15.73**	1.80
Q66A	Rate quality of police services by Dept.	3	3.20	3.98*
Q66B	Rate support provided by DA's office	.3	10.76*	10.06
Q66C	Rate support provided by judges	3	5.52	7.65
Q28A	Info source fellow officer	1	1.32	.05
Q28B	Info source supervisor	1	.33	.30
Q28C	Info source – Dept. publication	1	1.44	7.50**
Q28D	Info source special order	1	.89	16.02**
Q28E	Info source training bulletins	1	1.88	1.67
Q28F	Info source rumors	1	1.34	1.32
Q28G	Info source radio	1	1.42	1.92
Q28H	Info source TV	1	4.82*	.68
Q28I	Info source newspapers	1	4.48*	.63

<sup>\*\*</sup> p<.01 \* p<.05

The regression-significant independent variables from the demographic and social-psychological blocks (i.e., supervisor skills and personal impact) as well as the knowledge and acceptance variables were included in the analysis of operational issues. The model was significant ( $x^2$ =53.02; df=30; p<.05; -2LL=135.05; n=216; overall correct=88%; and Nagelkerke

 $R^2$ =.37), with officers' perceived value of foot patrols and supervisor's skills as the key factors in the model that affect their acceptance of community policing principles (Exhibit 32). Those who believe that foot patrols are more effective for crime reduction than car patrols are twice as likely, and officers who consider their supervisor as a skillful and effective manager are 60 percent more likely to accept community policing.

Exhibit 32.

Logistic Regression Results for Impact of Police Operational Issues on Officers' Acceptance of Community Policing

Number of cases included in the analysis: 216

Dependent Variable.. ACCEPT
Beginning Block Number 0. Initial Log Likelihood Function
-2 Log Likelihood 188.06932

135.048
270.029
.218
.374

	Chi-Square	df Si	gnificance
Model	53.022	30	.0059
Block	53.022	30	.0059
Step	53.022	30	.0059

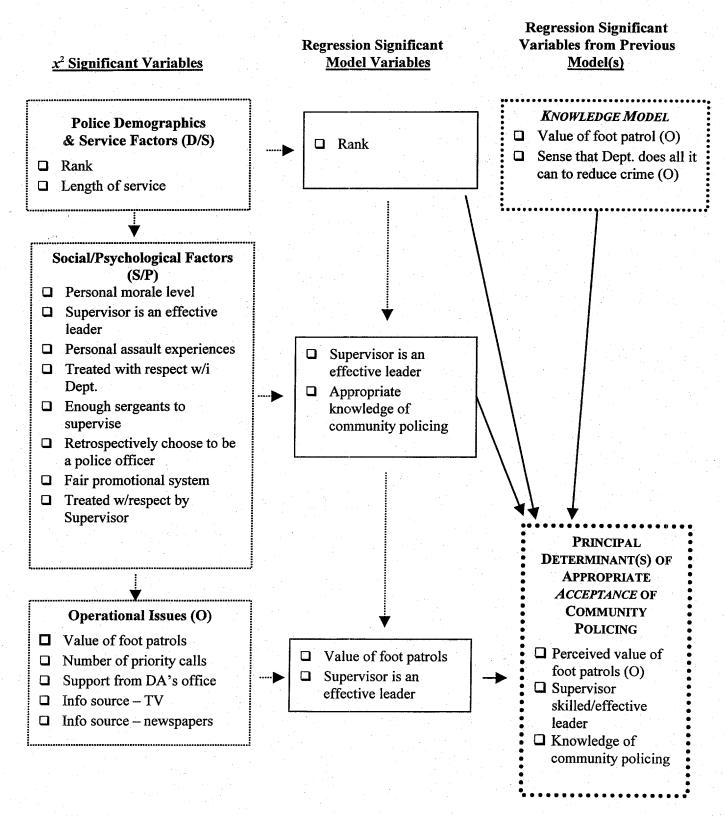
Classification Table for ACCEPT2 The Cut Value is .50

		Limited/no accept		ept Percent Correct
		L	s	
Observed Limited/no accept	L	12	22	35.29%
Significant accept	S	5	177	97.25%
			Overal	1 87.50%

· · · · · · · · · · · · · · · · · · ·		- Variables	in the	Equation			
Variable	В	S.E.	Wald	df	Sig	R	Exp(B)
Variable	-	2.2.		-	9		
RANK1			5.6553	2	.0592	.0938	
RANK1(1)	2.0918	.9253	5.1112	1	.0238	.1286	8.0996
RANK1(2)	1.1262	1.0023	1.2626	1	.2612	.0000	3.0840
O1RECODE	1814	.2706	.4495	1	.5026	.0000	.8341
R59I	-1.1896	. 6067	3.8454	1	.0499	0991	.3043
KNOWLEDG	.6939	.5013	1.9163	1	.1663	.0000	2.0015
043	7950	.5597	2.0176	1	.1555	0097	.4516
050R	-1.0554	.7480	1.9911	1	.1582	.0000	.3480
051			1.4606	2	.4818	.0000	
Q51(1)	8.1155	20.0346	.1641	1	.6854	.0000	3346.0076
Q51(2)	.5836	.5110	1.3043	1	.2534	.0000	1.7924
FOOTPAT	1.1578	. 5340	4.7020	1	.0301	.1199	3.1831
054R			.2679	2	.8746	.0000	
Q54R(1)	.2734	.5594	.2389	1	.6250	.0000	1.3144
Q54R(2)	0523	.7827	.0045	1	.9467	.0000	.9490
Q66A			.7174	3	.8691	.0000	
Q66A(1)	1834	.9159	.0401	1	.8413	.0000	.8325
Q66A(2)	.3299	1.0321	.1022	1	.7492	.0000	1.3909
Q66A(3)	.5047	1.6425	.0944	1	.7586	.0000	1.6565
Q66B			9.9939	3	.0586	.1457	
Q66B(1)	3.7570	1.8004	4.3545	1	.0369	.1119	42.8184
Q66B(2)	3.3880	1.7441	3.7733	1	.0521	.0971	29.6059
Q66B(3)	2.0654	1.8080	1.3050	1	.2533	.0000	7.8885
Q66C			3.0840	3	.3789	.0000	
Q66C(1)	-5.4015	56.3658	.0092	1	.9237	.0000	.0045
Q66C(2)	-7.8668	56.3456	.0195	1	.8890	.0000	.0004
Q66C(3)	-7.3839	56.3473	.0172	1	.8957	.0000	.0006
Q28A	1789	.2221	.6487	1	.4206	.0000	.8362
Q28B	.0126	.1816	.0048	1	.9446	0000	1.0127
Q28C	1630	.2416	.4552	1	.4999	.0000	.8496
Q28D	.0559	.2240	.0623	1	.8030	.0000	1.0575
Q28E	0140	.2162	.0042	1	.9484	.0000	.9861
Q28F	1582	.2070	.5847	1	.4445	.0000	.8536
Q28G	0893	.2566	.1212	1	.7277	.0000	.9145
Q28H	1150	.3268	.1237	1	.7250	.0000	.8914
Q28I	.3223		1.4818	1	.2235	.0000	1.3802
Constant	6.0353	56.3919	.0115	1	.9148		•

Exhibit 33.

RESULTS OF THE POLICE OFFICER ACCEPTANCE MODEL



Commitment

The  $x^2$  test results indicate that six of the 17 Department operational variables are significantly associated with commitment to community policing. Officers who frequently consult (1) Department publications and (2) special orders for their information; and (3) those who feel that the Department is effective in crime prevention, (4) those who feel that crime/fear among Boston citizens has diminished during the previous 2 years; (5) who feel adequately supported by the DA' office, and (6) those who perceive a significant crime/fear reduction value to foot patrols are more likely to be committed to community policing than their counterparts.

The regression-significant factors from the demographic/police service and social/psychological blocks (i.e., supervisor skills and personal impact) and the general knowledge and acceptance variables were included in the analysis of operational issues. However, the resulting model is not significant in determining commitment ( $x^2$ =39.14; df=31; p=.150; n=185). Though the belief in foot patrols and general acceptance of community policing are the most prevalent factors, none of the model variables have a statistically significant impact on predicting commitment to community policing (Exhibit 34).

### Exhibit 34.

## Logistic Regression Results for Impact of Police Operational Issues on Officers' Commitment to Community Policing

df Significance

Number of cases included in the analysis: 185

Dependent Variable.. COMMIT1
Beginning Block Number 0. Initial Log Likelihood Function
-2 Log Likelihood 254.50966

-2 Log Likelihood	215.365
Goodness of Fit	195.186
Cox & Snell - R^2	.191
Nagelkerke - R^2	.255

	4			
Model	39.144	31	.1495	
Block	39,144	31	.1495	
Step	39.144	31	.1495	

Chi-Square

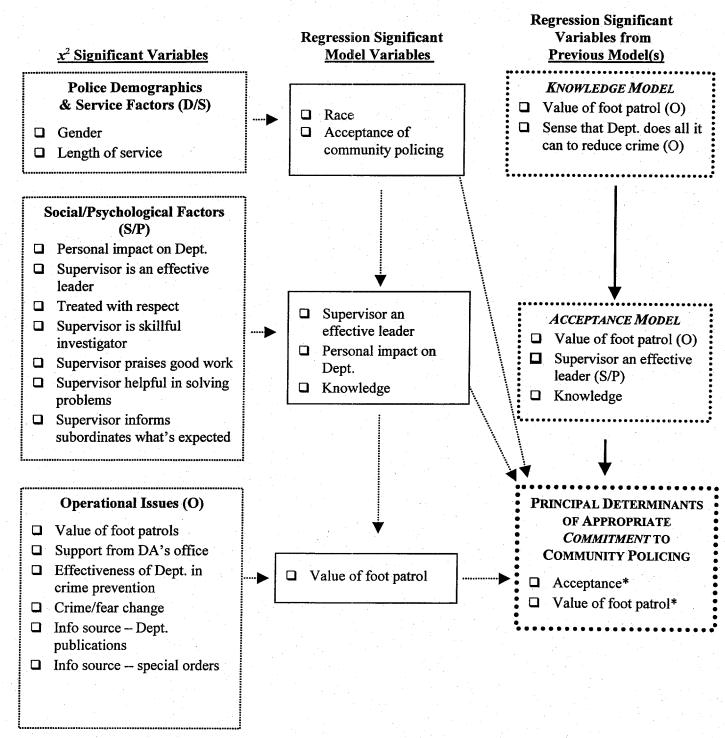
Classification Table for COMMIT1 The Cut Value is .50

		Pred	ıcted		
•	Partial	Committed	Highly	Committed	Percent Correct
		P		H	
Observed	+		ļ. <u></u>		
Partial Committed F	•	74		28	72.55%
Highly Committed H		35		48	57.83%
	1.			Overal	1 65.95%

		- Variables	in the	Equation			
Variable	В	S.E.	Wald	df	Sig	R	Exp(B)
R59I	.3988	.4287	.8655	1	.3522	.0000	1.4900
KNOWLEDG	1928	.3720	.2684	1	.6044	.0000	.8247
Q43	0808	.3792	.0454	1	.8313	.0000	.9224
Q50R	5295	.6133	.7453	. 1	.3880	.0000	.5889
Q51		•	2.0192	2	.3644	.0000	
Q51(1)	-1.1036	.7767	2.0189	1	.1554	0086	.3317
Q51(2)	0831	.3894	.0456	1	.8309	.0000	.9202
FOOTPAT	.7110	.3743	3.6083	1	.0515	.0795	2.0361
054R			.7293	2	.6944	.0000	
Q54R(1)	.2463	.3882	.4023	. 1	.5259	.0000	1.2792
Q54R(2)	.4251	.5699	.5563	1	.4558	.0000	1.5297
066A			.2467	3	.9697	.0000	
Q66A(1)	2149	.7697	.0780	1	.7801	.0000	.8066
Q66A(2)	3802	.8324	.2086	1	.6478	.0000	.6837
Q66A(3)	3175	1.5870	.0400	1	.8414	.0000	.7280
Q66B			4.4509	3	.2167	.0000	
Q66B(1)	.7248	1.6587	.1910	1	.6621	.0000	2.0644
Q66B(2)	0416	1.6495	.0006	1	.9799	.0000	.9593
Q66B(3)	.7295	1.7075	.1825	1	.6692	.0000	2.0740
Q66C			.4033	3	.9396	.0000	
Q66C(1)	5.5250	13.5181	.1670	1	.6828	.0000	250.8825
Q66C(2)	5.3563	13.5132	.1571	1	.6918	.0000	211.9466
Q66C(3)	5.5515	13.5171	.1687	1	.6813	.0000	257.6328
Q28A	1653	.1681	.9675	1	.3253	.0000	.8476
Q28B	.1987	.1419	1.9608	1	.1614	.0000	1.2198
Q28C	2384	.1621	2.1640	1	.1413	0254	.7879
Q28D	1120	.1646	.4630	1	.4962	.0000	.8940
Q28E	.1914	.1490	1.6505	1	.1989	.0000	1.2109
Q28F	.0531	.1417	.1403	1	.7080	.0000	1.0545
Q28G	1959	.1860	1.1087	1	.2924	.0000	.8221
Q28H	.1902	.2520	.5698	1	.4503	.0000	1.2095
Q28I	1224	.2021	.3664	. 1	.5449	.0000	.8848
ACCEPT2	. 9408		3.7043	1	.0543	.0818	2.5619
Q63			5.4221	3	.1434	.0000	
Q63(1)	3633	.4679	.6028	1	.4375	.0000	.6954
Q63 (2)	8228		1.9075	1	.1672	.0000	.4392
Q63 (3)	-1.3178		4.7787	1	.0288	1045	.2677
Constant	-6.6541	13.6583	.2373	1	.6261		•

Exhibit 35.

RESULTS OF THE POLICE OFFICER COMMITMENT MODEL



<sup>\*</sup> Though the overall model was not significant, the significance of these variables was only slightly above the stipulated probability level (p<.05).

### POLICE OFFICER INVOLVEMENT IN COMMUNITY POLICING

Officers' actual involvement in community policing is based on four self-reported measures – (1) the average number of times per week officers make an effort to interact with residents on the street [excluding crime-related incidents and calls for service]; (2) the nature of the activities during such interactions; (3) the average number of hours per week engaged in "prevention-oriented" police work; and (4) their role in crime control efforts.

A new variable (*involvement*) was constructed from these four variables to measure the overall level of community policing type activities performed by officers. Involvement was coded as "1" to represent an appropriate level of involvement and "0" for low level of involvement. Those officers who responded to all four individual measures to a determined degree were coded as 1. Otherwise, a zero code was assigned. Based on this scheme, the following distribution of officers resulted:

1 Full involvement in community policing 51.4%

0 Limited to no involvement 48.6%

## The Relationship Between Police Demographic and Service Factors and Officers' Involvement in Community Policing Activities

The six police demographic and service variables were examined in relation to the involvement variable. Chi-square testing indicated that gender, rank, and length of service are significantly associated with officers' level of community policing activity. Specifically, male officers are more likely than female officers to be involved in community policing activities.

Proportionate involvement also increases with rank. The higher the rank, the greater the likelihood of involvement.

In addition, officers who have been on the police force for 5-15 years are significantly less likely to engage in community policing activities than those who have been employed as a police

officer for shorter or longer periods of time. Distinctions within race, shift, and district assignment are not significant determinants of officer involvement in community policing activities (Exhibit 36). Chi-square analyses also confirmed the significant effect of knowledge (p<.001), acceptance(p<.05), and commitment (p<.05) on involvement.

Exhibit 36.

Chi-Square Results for Officers' Involvement in Community Policing Activities by Police Demographic and Service Factors

Police Demographic and Service Variables	<i>x</i> <sup>2</sup>	df
Gender	6.06*	1
Race	1.81	4
Rank	16.50**	2
District	6.62	13
Years of service	14.50**	4
Shift	.72	2

<sup>\*\*</sup> p<.01 \* p<.05

Logistic regression was performed to estimate the impact of each of the independent variables on the likelihood of being involved in Department community policing activities while controlling for officers' knowledge, acceptance, and commitment to community policing (Exhibit 37). The results indicate a significant correlation within some model variables  $(x^2=95.05; df=29; p<.001; -2LL=521.341; n=607; overall correct=71%; and Nagelkerke <math>R^2=.26$ ).

Rank status and an appropriate knowledge of community policing practices are significant predictors in the model. Individuals within the detective ranks are least likely to be involved in community policing activities. Those within the uniformed command ranks (i.e., Sergeant, Lieutenant, Captain) are twice as likely as police (patrol) officers to indicate such involvement. Police personnel with an appropriate knowledge of community policing practices were also more likely to have involvement.

### Exhibit 37.

### Logistic Regression Results for Impact of Police Demographic and Service Factors on Officers' Involvement in Community Policing Activities

Number of cases included in the analysis: 607

Dependent Variable. INVOLVEMENT recoded activities
Beginning Block Number 0. Initial Log Likelihood Function
-2 Log Likelihood 616.38947

-2 Log Likelihood	521.341
Goodness of Fit	456.238
Cox & Snell - R^2	.190
Nagelkerke - R^2	.255

	Chi-Square	df Sig	nificance
Model	95.049	29	.0000
Block	95.049	29	.0000
Step	95.049	29	.0000

Classification Table for INVOLVED The Cut Value is .50

Predi	LCTEQ			
ad inst	En 1 1	involvement	Dorgont	Corro

	None-lim	ited inv	Full in	volvement	Percent	Correct
		N		F		
Observed	· +					
None-limited inv	N 1	19	7.	5	61.34%	
TOTO TAMEFOCK THE					01.010	
Full involvement	F	56	20:	.	78.21%	
rdii involvement	r	30	20.	•	70.216	
				Overall	70.95%	
	Variables	in the E	muation -			
Variable	B S.E.	Wald		Sia	R	Exp(B)
GENDER51				.1899	.0000	.5993
RACE		2.1441		.7093	.0000	.3333
RACE(1) .17	61 .2737			.5200	.0000	1.1925
RACE(2) .48				3403	0000	1.6160
RACE(2)78				.4972	.0000	.4568
RACE(3)76		.3282		.5667	.0000	.4638
	02 1,3411					.4638
RANK1		11.2431	2	.0036	.1084	
RANK1(1)59		3.5672	1		0504	.5525
RANK1(2) .79	41 .3758			.0346	.0632	2.2125
DISTRICT		2.5511	. 13	.9991	.0000	
DISTRICT(1) .02			1	.9679	.0000	1.0207
DISTRICT(2)05		.0087	1	.9255	.0000	.9502
DISTRICT(3)39	20 .5162	.5768	1	.4476	.0000	.6757
DISTRICT(4)30	33 .5896	.2646	1	.6070	.0000	.7384
DISTRICT(5) .09	31 .6281	.0220	1	.8822	.0000	1.0975
DISTRICT(6)36	62 .6567	.3110	1	.5771	.0000	.6933
DISTRICT(7)22		.1936	1	.6600	.0000	.7990
DISTRICT(8)07		.0151	ī	.9023	.0000	.9246
DISTRICT(9) .21		.1390	1	7093	.0000	1.2416
DISTRICT(10) 4.57		.1147	-	.7348	.0000	97.1123
DISTRICT(11)30		.2439	1		.0000	.7381
DISTRICT(12)13		.0819		.7747		
			1		.0000	.8696
	98 .5355	.2538	1	.6144	.0000	.7635
JOBYEARS		4.0923	4	.3937	.0000	
JOBYEARS(1)00		.0004	1	.9836	.0000	.9924
JOBYEARS (2)36		1.0255	1	.3112	.0000	.6931
JOBYEARS (3) .30		.4896	1	.4841	.0000	1.3612
JOBYEARS (4) .07	46 .4153	.0322	1	.8575	.0000	1.0774
SHIFT		4.5274	2	.1040	.0293	
SHIFT(1) .078	.2512	.0987	1	.7534	.0000	1.0821
SHIFT(2)608		3.5897	1	.0581 -	.0508	.5442
KNOWLEDG 1.702		58.7213	1	.0000	.3034	5.4878
ACCEPT2106		.1314	ī	.7170	.0000	.8986
COMMIT1 .365		2.6358	1	.1045	.0321	1.4417
Constant215		.0770	1	.7815	.0321	1.771/
.21	.,,50	.0,770	÷	.,013		

# Impact of Police Social and Psychological Factors on Officers' Involvement in Community Policing Activities

Nine (9) of the 26 social and psychological variables (i.e., [1] morale, [2] would choose to be a police officer again; [3] respectful treatment within the Department; [4] stress level; [5] supervisor is helpful in problem solving; [6] supervisor's accessibility; [7] supervisor earned the rank; [8] fair promotional system; and [9] personal job motivation) were significantly associated with active participation in community policing activities (Exhibit 38).

Exhibit 38.

Chi-Square Results for Officers' Involvement in Community Policing Activities by Police Social and Psychological Factors

Social and Psychological Factors	$x^2$	df
Personal morale level	6.89**	1
Retrospectively choose to be police officer	10.47**	1
Preferred assignment(s)	23.51	1 1
Treated with respect	23.03**	1
Whether there are enough sergeants to supervise	.09	1
Supervisor has time for good field training	.42	1
Supervisor treats subordinates with respect	1.59	1
Supervisor looks out for welfare of subordinates	2.43	1
Supervisor applies rules fairly	3.57	1
Supervisor is a knowledgeable/effective leader	2.86	1 -
Supervisor is well respected	2.22	1
Whether there are enough lieutenants to supervise	.62	1
Supervisor skillful with investigations	1.30	1
Rise to attention	.54	. 1
Supervisor praises good work	4.80	1
Useful to discuss work related problem with supervisor	12.29*	1
Supervisor handles duties effectively	.03	1
Supervisor informs what is fairly expected	3.68	1.
Supervisor accessible for service calls	6.57*	1
Supervisor earned rank	8.88**	1
Personal impact on Department	2.78	3
Promotional system fairness	7.93**	1
ob motivation	13.22*	. 6
Overall stress	13.99**	3
Family-related stress	.10	1
Number of times assaulted during previous 12 months	6.17	4

<sup>\*\*</sup> p<.01 \* p<.05

In the regression analysis, the social and psychological factors were included into the model with the significant variable from the demographic model analysis (i.e., rank) and the knowledge

variable. The model explains 41 percent of the variation in involvement ( $x^2=101.45$ ; df=41; p<.001; -2LL=281.51; n=278, overall correct=76%, and Nagelkerke  $R^2$ =.41), and indicates that three variables significantly predict the likelihood of officers' involvement in community policing activities – (1) having appropriate knowledge, (2) higher rank, and (3) working with a supervisor with whom it is highly useful to discuss work-related problems (Exhibit 39).

### Exhibit 39.

## Logistic Regression Results for Impact of Police Social and Psychological Factors on Officers' Involvement in Community Policing Activities

Number of cases included in the analysis: 278

Dependent Variable.. INVOLVEMENT recoded activities
Beginning Block Number 0. Initial Log Likelihood Function
-2 Log Likelihood 382.95462

-2 Log Likelihood	281.509
Goodness of Fit	277.433
Cox & Snell - R^2	.306
Nagelkerke - R^2	.409

	Chi-Square	df	Significance
Model	101.446	41	.0000
Block	101.446	41	.0000
Step	101.446	41	.0000

Classification Table for INVOLVED The Cut Value is .50

	Predicted						
	None-limited inv	Full involvement	Percent Correct				
	N	F					
Observed							
None-limited inv N	88	38	69.84%				
Full involvement F	30	122	80.26%				
		Overall	75.54%				

		Variables	in the E	Equation			
Variable	В	S.E.	Wald	df	Sig	R	Exp(B)
Q1RECODE	1495	.1803	.6881	1	4068	.0000	.8611
Q3A	.2461	.4136	.3541	1	.5518	.0000	1.2790
Q40	0980	.3608	.0738	1	.7859	.0000	. 9066
R59A	.2893	.3891	.5527	1	.4572	.0000	1.3355
R59B	.2861	.3684	.6033	1	.4373	.0000	1.3312
R59C	7141	.5927	1.4515	, 1	.2283	.0000	.4896
R59D	.7984	.5419	2.1702	1	.1407	.0211	2.2219
R59E	.6169	.5923	1.0850	1	.2976	.0000	1.8532
R59F	7996	.6437	1.5431	1	.2141	.0000	.4495
R59G	.4638	.5374	.7448	1	.3881	.0000	1.5901
R59H	0385	.3426	.0126	1	.9106	.0000	.9623
R59I	2568	.4404	.3400	1	.5598	.0000	.7735
R59J	1.1767	.3979	8.7456	1	.0631	.1327	3.2436
R59K	0998	.4059	.0605	1	.8057	.0000	.9050
R59L	1.0204	.4479	5.1901	1	.0227	.0913	2.7742
R59M	7055	.5362	1.7307	1	.1883	.0000	.4939
R59N	1402	.4860	.0832	1	.7730	.0000	.8692
R590	7454	.5418	1.8930	1	.1689	.0000	.4745
R59P	1.0176	.6031	2.8476	1	.0915	.0470	2.7667
Q63			2.8493	3	.4155	.0000	
Q63(1)	5975	.4292	1.9383	1	.1639	.0000	.5502
Q63 (2)	1392	.5111	.0741	1	.7854	.0000	.8701
Q63 (3)	5874	.5598	1.1009	1	.2941	.0000	.5558
R64	.3009	.3334	.8144	1	.3668	.0000	1.3511
Q67A			7.8862	5	.1626	.0000	
Q67A(1)	-1.5202	.6910	4.8403	1	.0278	0861	.2187
Q67A(2)	.0353	.4364	.0065	1	.9356	.0000	1.0359
Q67A(3)	2968	.4818	3794	1	.5379	.0000	.7432
Q67A(4)	.4910	2.0126	.0595	1	.8073	.0000	1.6339
Q67A(5)	-1.2097	.8462	2.0434	1	.1529	0106	.2983
STRESS1			6.4852	3	.0902	.0356	
STRESS1(1)	-2.5532	1.1763	4.7112	1	.0300	0841	.0778
STRESS1(2)	-2.5107	1.2169	4.2571	1	.0391	0768	.0812
STRESS1(3)	-3.2423	1.2979	6.2409	1	.0125	1052	.0391
FAMSUPPT	0304	.1220	.0621	1	8032	.0000	.9701
Q69			6.8445	4	.1443	.0000	•
Q69(1)	.9103	.5387	2.8555	1	.0911	.0473	2.4850
Q69(2)	.6014	.3876	2.4084	1	.1207	.0327	1.8247
Q69(3)	5674	.6278	.8168	1	.3661	.0000	.5670
Q69(4)	.3545	.7174	.2442	1	.6212	.0000	1.4255
KNOWLEDG	1.9681	.3483	31.9270	1	.0000	.2795	7.1569
ACCEPT2	2592	.4167	.3869	1	.5339	.0000	.7716
COMMIT1	.4126	.3382	1.4880	1	.2225	.0000	1.5107
RANK1			6.5305	2	.0382	.0813	
RANK1(1)	8937	. 4863	3.3773	1	.0661	0600	.4091
RANK1(2)	.5905	.4845	1.4855	1	.2229	.0000	1.8049
Constant	.7315	1.9292	.1438	1	.7045		

## Impact of Officers' Attitudes Toward Department Operational Issues on Their Involvement in Community Policing Activities

At the bivariate level, four operational variables were significantly associated with officers' level of participation in community policing activities – the belief that foot patrols are most effective in reducing crime and fear, and primarily obtaining information from supervisors or Department publications and special orders (Exhibit 40).

Exhibit 40.

Chi-Square Results for Officers' Involvement in Community Policing Activities by Police Operational Issues

	Department Operational Issues	$x^2$	df
Q43	Dept. does what is expected to reduce crime	.49	1
Q50	Effectiveness of Dept. in crime prevention within city	1.78	1
Q51	Fear of crime on the streets in past 2 years	5.35	2
Q66R	Belief in foot patrols	6.52*	1
Q54	Avg. priority 1 & 2 call per tour of duty	2.70	2
Q66A	Rate quality of police services provided by Dept.	2.10	3
Q66B	Rate support provided by DA's office	7.56	3
Q66C	Rate support provided by judges	7.52	3
Q28A	Info source fellow officer	.01	1
Q28B	Info source supervisor	17.78**	1
Q28C	Info source – Dept. publications	6.59*	1
Q28D	Info source – Dept. special orders	7.43**	1
Q28E	Info source – Dept. training bulletins	.70	1
Q28F	Info source rumors	.02	1
Q28G	Info source radio	3.50	1
Q28H	Info source TV	.02	1
Q28I	Info source newspapers	.01	1

<sup>\*\*</sup> p<.01 \* p<.05

Logistic regression on the *involvement* model further assessed the ability of operational factors to explain the likelihood of officer participation in community policing activities. The analysis included the regression-significant variables from previous models as well as the knowledge, acceptance and commitment variables. The model is significant in explaining approximately 44 percent of the variation in the level of participation ( $x^2$ =80.81; df=31; p<.001; -2LL=196.96; n=204, overall correct=77%; and Nagelkerke  $R^2$ =.44), and indicates that those officers who have appropriate knowledge; those who frequently read the Department's

publications & special orders; and those who accurately assess that crime and fear had decreased in the city during the previous two years are significantly as more likely to be involved in community policing activities than are those who indicate otherwise (Exhibit 41).

Exhibit 41.

# Logistic Regression Results for Impact of Police Operational Issues on Officers' Involvement in Community Policing Activities

Number of cases included in the analysis: 204

Dependent Variable.. INVOLVEMENT recoded activities Beginning Block Number 0. Initial Log Likelihood Function -2 Log Likelihood 277.76365

-2 Log Likelihood	196.958
Goodness of Fit	250.015
Cox & Snell - R^2	.327
Nagelkerke - R^2	.440

	Chi-Squar	Chi-Square df		
Model	80.80	)5 31	.0000	
Block	80.80	)5 31	.0000	
Step	80.80	05 31	.0000	

Classification Table for INVOLVED The Cut Value is .50

Predicted None-limited inv Full involvement Percent Correct F Observed None-limited inv 59 27 68.60% Full involvement 20 98 F 83.05% Overail 76.96%

EXHIBIC 41 CO		- Variable	s in the	Equation			
Variable	В	S.E.	Wald	df	Sig	R	Exp(B)
R59J	.3733	.4692	.6328	1	.4263	.0000	1.4525
KNOWLEDG	2.8025	.4653	36.2787	1	.0000	.3513	16.4857
ACCEPT2	9237	.5105	3.2742	1	.0704	0677	.3970
COMMIT1	.2621	.3864	.4602	1	.4975	.0000	1.2997
RANK1			2.2145	2	.3305	.0000	
RANK1(1)	4656	.5848	.6340	1	.4259	.0000	.6278
RANK1 (2)	.7129	.6936	1.0565	1	.3040	.0000	2.0399
Q43	4658	.4064	1.3137	1	.2517	.0000	.6276
Q50R	.1286	.5907	.0474	1 ·	.8277	.0000	1.1372
Q51			11.8770	2	.0026	.1684	
Q51(1)	3.0499	.8901	11.7392	1	.0006	1873	21.1124
Q51(2)	.2368	.4261	.3087	1	.5785	.0000	1.2671
FOOTPAT	4899	.4180	1.3736	1	.2412	.0000	.6127
Q54R			3.9770	2	.1369	.0000	4.5
Q54R(1)	.0371	.4187	.0079	1	.9293	.0000	1.0378
Q54R(2)	-1.2076	.6334	3.6347	1	.0566	0767	.2989
Q66A			2.3183	3	.5090	.0000	
Q66A(1)	-1.0272	.7589	1.8320	1	.1759	.0000	.3580
Q66A(2)	-1.2776	.8590	2.2123	1	.1369	0276	.2787
Q66A(3)	6715	1.5013	.2001	1	.6547	.0000	.5109
Q66B			4.2451	3	.2362	.0000	
Q66B(1)	5126	1.3056	.1542	1	.6946	.0000	.5989
Q66B(2)	.4186	1.2963	.1043	1	.7468	.0000	1.5198
Q66B(3)	2527	1.3700	.0340	. 1	.8537	.0000	.7767
Q66C			2.5459	3	.4670	.0000	
Q66C(1)	5.0275	22.2590	.0510	1	.8213	.0000	152.5436
Q66C(2)	4.9493	22.2549	.0495	1	.8240	.0000	141.0742
Q66C(3)	4.2636	22.2582	.0367	1	.8481	.0000	71.0641
Q28A	2470	.1745	2.0041	1	.1569	0039	.7812
Q28B	2263	.1441	2.4665	1	.1163	0410	.7975
Q28C	1655	.1855	.7962	1	.3722	.0000	.8475
Q28D	4218	.1946	4.6966	1	.0302	0985	. 6558
Q28E	. 5575	.1896	8.6516	1	.0033	.1547	1.7464
Q28F	.0113	.1601	.0050	. 1	.9438	.0000	1.0114
Q28G	.2764	.2174	1.6170	1	.2035	.0000	1.3184
Q28H	4150	.2794	2.2059	1	.1375	0272	.6604
Q28I	.0433	.2068	.0439	1	.8340	.0000	1.0443
Constant	-2.5250	22.3362	.0128	1	.9100		

When the 15 significant variables from all the models are simultaneously considered in the analysis (with all the other insignificant variables excluded), knowledge and rank are indicated as the most significant predictors of involvement in community policing (Exhibit 42).

### Exhibit 42.

## Logistic Regression Results for Significant Model Variables on Officers' Involvement in Community Policing

Number of cases included in the analysis: 312

Dependent Variable.. INVOLVED Involvement in Community Policing Beginning Block Number 0. Initial Log Likelihood Function -2 Log Likelihood 430.67586

-2 Log Likelihood	354.315
Goodness of Fit	308.351
Cox & Snell - R^2	.217
Nagelkerke - R^2	.290

	Chi-Square	df S	ignificance
Model	76.360	21	.0000
Block	76.360	21	.0000
Step	76.360	21	.0000

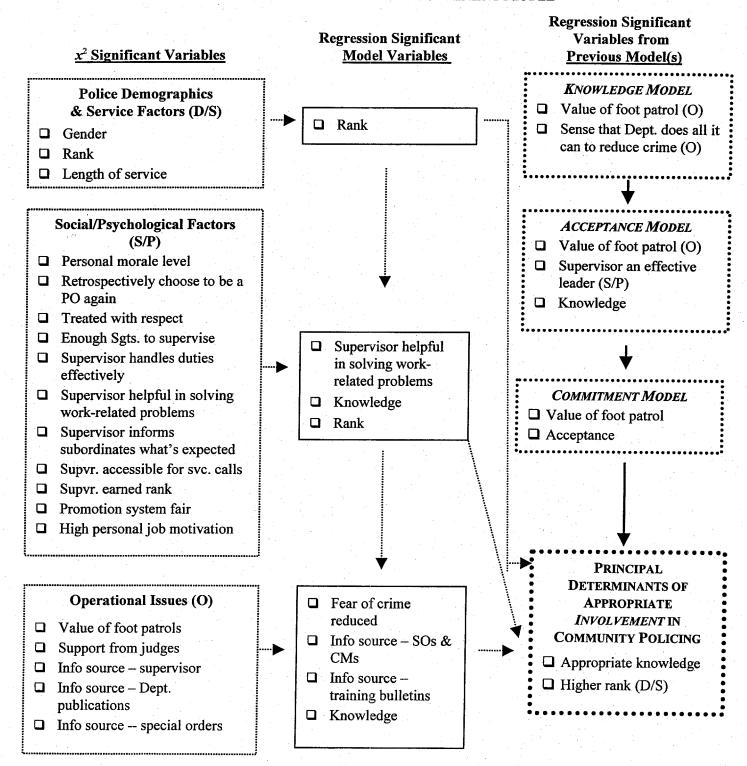
Classification Table for INVOLVED The Cut Value is .50

Predicted None-limited invFull involvement Percent Correct F Observed None-limited inv N 92 52 63.89% Full involvement 39 129 76.79% 70.83% Overall

EXHIBIT 42 CONT. C		Variables	in the	Equation			
A.				_4			
Variable	В	S.E.	Wald	df	Sig	R	Exp(B)
KNOWLEDG	1.8077	.2789	41.9961	1	.0000	.3047	6.0963
ACCEPT2	3313	.3562	.8646	1	.3525	.0000	.7180
COMMIT1	.5193	.2809	3.4167	1,	.0645	.0574	1.6808
RANK1			9.8399	2	.0073	.1164	
RANK1(1)	7416	.3609	4.2210	1	.0399	0718	.4764
RANK1(2)	.7755	.4206	3.3995	1	.0652	.0570	2.1717
R59I	.0225	.3665	.0038	1	.9511	.0000	1.0227
R59L	.3855	.3083	1.5634	1	.2112	.0000	1.4703
Q63			1.0901	3	.7795	.0000	
Q63(1)	1664	.3576	.2165	1	.6417	.0000	.8467
Q63(2)	3551	.4281	.6880	1	.4068	.0000	.7011
Q63(3)	.0525	.4618	.0129	1	.9096	.0000	1.0539
R64	.3458	.2768	1.5602	1	.2116	.0000	1.4131
STRESS1		*	5.5229	3 1	.1373	.0000	
STRESS1(1)	8878	.6536	1.8451	1	.1743	.0000	.4116
STRESS1(2)	-1.2866	.7045	3.3348	1	.0678	0557	.2762
STRESS1(3)	3778	.7942	.2263	1	.6343	.0000	.6854
FAMSUPPT	0705	.1012	.4851	1	.4861	.0000	.9319
Q43	0274	.2752	.0099	1	.9208	.0000	.9730
FOOTPAT	.1555	.2845	.2985	1	.5848	.0000	1.1682
Q51			.2678	2	.8747	.0000	
Q51(1)	2574	.4992	.2660	· 1	.6060	.0000	.7730
Q51(2)	0252	.2985	.0071	1	.9327	.0000	.9751
Q28D	0650	.1125	.3339	1	.5634	.0000	.9371
Q28E	.1317	.1092	1.4552	1	.2277	.0000	1.1408
Constant	-1.1610	1.1401	1.0370	1	.3085		

Exhibit 43.

RESULTS OF THE POLICE OFFICER INVOLVEMENT MODEL



### **CONCLUSIONS**

The primary goal of this research was to determine the effect of distinct factors on citizen and police officer involvement in community policing. Though community policing is the dominant crime control strategy in police departments throughout the United States, the Boston Police Department is a recognized leader in this area. As such, City of Boston was an appropriate venue for the study.

The results indicate that specific factors are significant in determining the extent to which these two groups engage or take an active role in community policing practices.<sup>25</sup> The study also provides empirical assessment on the extent and nature of community policing in Boston, several years after the police department formally transformed its operations to a community policing philosophy and during an unprecedented period of crime reduction within the city for which its community policing efforts received national acclaim. The resulting information can be used to better understand the relevant factors that are most important to the viability and stipulated goals of community policing.

### **Determinants of Citizen Involvement in Community Policing**

The first major component of the research was to determine whether individual and community factors significantly affect residents' knowledge, interest, and involvement in community policing within the City of Boston. Several notable relationships were observed on the continuum from knowledge to involvement in community policing for residents. Approximately 75 percent of residents have appropriate knowledge of community policing. Fifty percent indicate adequate interest, and 39 percent have been actively involved in the community policing process.

Exhibit 44 displays the significant variables among the 38 independent factors considered in the analysis of each model.

<sup>&</sup>lt;sup>25</sup> Though limitations exist in most research endeavors, this is one of the most substantial studies on community policing ever conducted in Boston, and significantly clarifies the available facts on related practices and aspects of professional policing in the city.

Exhibit 44.

## PREDICTORS OF RESIDENTS' KNOWLEDGE, INTEREST, AND INVOLVEMENT IN COMMUNITY POLICING

	Knowledge	Interest	Involvement			
			White Residents	Minority Residents		
Individual-level variables						
Socio-demographic factors						
Sex	*	*				
Race	*	*				
Education	*					
Neighborhood attachment						
Feel a part of neighborhood	*	*	*	*		
Reliable neighbors	*					
Yrs. living in neighborhood	*		*			
Watchful behavior						
Call police when suspicious	*	*	*	*		
Attitudes toward police						
Police get to know residents	*	*	*	*		
Police reduce crime	*	*				
General fear of crime	<b>.</b>					
Perception of neighborhood						
disorder/incivility			*			
Neighborhood location				*		
Previous victimization			*			
Community-level variables						
Racial heterogeneity			*			
Residential mobility	*		*			
Density of offenders						
General arrest rate				*		
Violent crime arrest rate				**************************************		
% Single parent families		*				
% Living in poverty	*					

<sup>\*</sup> p≤.05

### Individual-level variables

Several individual-level variables are determinants of citizen knowledge, interest and involvement in community policing.

Socio-demographic factors

Sex

Men are more likely than women to have appropriate knowledge of and interest in community policing.

Race

White residents are more likely than minority residents to have appropriate knowledge of and interest in community policing.

Education

Higher education has a notable affect on knowledge level. Generally, the proportion of residents who have appropriate knowledge of community policing increases with education. The proportion is highest among residents with a college education.

Neighborhood attachment

Feel a part of neighborhood

Residents who feel a part of their neighborhood are more likely than those who merely consider it a place to live to have appropriate knowledge of, interest, *and* involvement in community policing.

Reliable neighbors

Citizens who feel that they could rely on their neighbors if a serious problem arose are significantly more likely than those who feel otherwise to have appropriate knowledge of and interest in community policing.

Years in the neighborhood

Residents who have lived in their neighborhood for 10 or more years are significantly more likely than other Bostonians to have appropriate knowledge of community policing. White

residents with such neighborhood tenure are more likely than similar minority residents to have appropriate involvement in community policing.

Watchful behavior

Residents who are generally willing to call the police when they see something (criminally) suspicious occurring are more likely than others to have appropriate knowledge of, interest, *and* involvement in community policing.

Attitudes toward the police

Police get to know residents

Citizens who feel that the police officers that work in their neighborhood make an effort to get to know residents are significantly more likely than those who feel otherwise to have appropriate knowledge of, interest, *and* involvement in community policing.

Police reduce crime

Residents who feel the Boston police do all that can be reasonably expected of them to reduce crime in their neighborhood are significantly more likely than those who feel otherwise to have appropriate knowledge of and interest in community policing.

Fear of crime

There is a negative correlation between fear of crime and appropriate knowledge of community policing. The more fear an individual has, the less likely they are to have such knowledge.

Perception of neighborhood disorder/incivility

The perception of neighborhood incivility is a contributing knowledge factor for white residents. Those who perceive that incivility problems exist in their neighborhood are more likely than similar minority residents to have appropriate involvement in community policing.

Neighborhood location

Neighborhood location is a contributing factor for involvement among minority residents.

Those who live in neighborhoods with relative significant crime-related problems are more likely

than similar white residents to have appropriate involvement in community policing.

Previous victimization

Previous victimization is a significant factor for involvement among white residents. Those

who have been the victim of a crime within the previous 12 months are more likely than similar

minority residents to have appropriate involvement in community policing.

Community-level variables

The significant community-level variables convey that several distinct factors are relevant in

determining citizen knowledge, interest and involvement in community policing.

Racial heterogeneity

There is a positive correlation between racial heterogeneity and involvement in community

policing for white residents. As neighborhood racial heterogeneity increases, so does the

likelihood for their involvement in community policing.

Residential mobility

Residents who have lived in neighborhoods with considerable population turnover are

generally significantly less likely than other Bostonians to have appropriate knowledge of

community policing. White residents within such neighborhoods are less likely than similar

minority residents to have appropriate involvement in community policing.

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Density of offenders

General arrest rate

The rate of arrest for all crimes within a neighborhood is a contributing factor for involvement among minority residents. Those who live in neighborhoods with higher rates of arrest for all crimes are more likely than similar white residents to have appropriate involvement in community policing.

Violent crime arrest rate

The rate of arrest for violent crimes within a neighborhood is also a contributing factor for involvement among minority residents. Those who live in neighborhoods with higher rates of arrest for violent crime are more likely than similar white residents to have appropriate involvement in community policing.

Percentage of single parent families

There is a positive correlation between the percentage of single parent families within a neighborhood and interest in community policing for minority residents. Minorities living in neighborhoods with higher proportions of single parent families are more likely than similar white residents to express appropriate interest in community policing.

Percentage of residents living in poverty

Residents who have lived in neighborhoods with higher rates of poverty are more likely than other Bostonians to have appropriate knowledge of community policing.

### **Determinants of Police Officer Involvement in Community Policing**

The other primary goal of the research was to determine whether individual and organizational factors significantly affect police officers' knowledge, acceptance, commitment, and involvement in community policing activities within the City of Boston. Several notable relationships were observed on the continuum from knowledge to involvement in community policing for police officers. Approximately 48 percent of police officers indicate appropriate knowledge of community policing. Eighty-three (83) percent accept it as the Departments' dominant policing philosophy. Forty-one (41) percent are committed to community policing, and 51 percent indicate active involvement in the community policing process. Exhibit 45 displays the significant variables among the 50 independent factors considered in the analysis of each model.

Exhibit 45.

PREDICTORS OF POLICE OFFICER KNOWLEDGE, ACCEPTANCE, COMMITMENT,
AND INVOLVEMENT IN COMMUNITY POLICING

				Involvement
			Commitment	
		Acceptance	*	
	Knowledge	*	*	*
Demographic and Police Service Factors			-	
Rank		*		*
Social and Psychological Factors				
Supervisor treats all with respect	*			
Supervisor skillful with investigations		*	*	
Supervisor effective in discussing work problems				*
Personal impact on Department	*		*	
Fair promotional system	*			
Overall job stress	*			
Family-related stress	*			
Department Operational Issues				
Dept. does what is expected to reduce crime	*			
Perception that crime/fear reduced		•		*
during past 2 years				
Foot patrol effectiveness	*	*	*	
Info sources - Special Orders &				*
Commissioner's Memorandums				
" - Training bulletins				*
* n< 05				

<sup>\*</sup> p≤.05

Demographic and police service factors

Rank

There is a positive correlation between organizational rank and police officers' appropriate acceptance and involvement in community policing. There is a greater likelihood for acceptance and involvement among officers of higher rank than among those in the patrol officer rank.

Social and psychological factors

Supervisor treats all subordinates with respect

Officers who regard their supervisor an individual who consistently treats others with respect are significantly more likely than those who feel otherwise to have appropriate knowledge of community policing.

Detective supervisor skills and effective in managing criminal investigations

Officers who regard the detective supervisor on their shift as skillful and effective in managing criminal investigations are significantly more likely than those who feel otherwise to have appropriate acceptance of and commitment to community policing.

Usefulness of discussing work-related problems with supervisor

Officers who consider it highly useful to discuss work-related problems with their supervisor are significantly more likely than those who feel otherwise to have appropriate involvement in community policing.

Personal impact on the organization

Officers who feel that their knowledge and experience have notable impact on the future of the organization are significantly more likely than those who feel otherwise to have appropriate knowledge of and commitment to community policing. Fairness of the promotional system

Officers who feel that promotions in the Department are fairly made are significantly

more likely than those who feel that it's largely based on political contacts to have appropriate

knowledge of community policing.

Overall job stress

Officers who indicate a having no work-related stress are more likely than those who

report low to high stress levels to have appropriate knowledge of community policing.

Family-related stress

Officers who indicate a high stress level due to demands by their family for more of their

time are more likely than those who report a low family stress level to have appropriate

knowledge of community policing.

Department operational issues

Department does all that can be expected to reduce crime

Officers who feel that the Department does all than can be reasonably expected to reduce

crime in the neighborhoods are significantly more likely than those who feel otherwise to have

appropriate knowledge of community policing.

Perception that crime/fear has been reduced

Officers who believe that residents feel safer/less fearful of crime on the streets of Boston

over the course of the previous 2 years are significantly more likely than those who feel

otherwise to have appropriate involvement in community policing.

Effectiveness of foot patrols in reducing fear of crime

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Officers who believe that foot patrols are more effective than the presence of marked patrol cars in reducing citizens' fear of crime are significantly more likely than those who feel otherwise to have appropriate knowledge, acceptance, and commitment to community policing.

Officer information sources

Officers who make relatively frequent use of Department special orders, commissioner's memorandums, and training bulletins as information sources are significantly more likely than those who do not or who use other sources to have appropriate involvement in community policing.

Impact of officer knowledge, acceptance, and commitment on involvement

Appropriate knowledge of community policing is a key element to police officer acceptance, commitment and involvement in community policing.

### **DISCUSSION**

During the period that the Boston Police Department has been involved in community policing as its dominate crime control policy (1993-present), serious crime continually declined, citizen attitudes toward police and satisfaction with policing efforts improved, and fear of crime dramatically diminished. The city garnered national acclaim for these achievements, citing community policing practices as the major catalyst. With greater interaction and involvement between residents and police officers considered the key component to community policing, the relevance of appropriate research to determine the nature and extent of such involvement was apparent.

Several individual, organizational, and community variables were examined as determinants of citizen and police officer involvement in (as well as knowledge, interest, acceptance, and commitment to) community policing in Boston. The study isolated distinct factors that merit

earnest consideration from public officials and other individuals involved in the development and implementation of criminal justice policy. In addition, the research fosters further empirical deliberation on relevant issues that police administrators would be well advised to consider.

1. What valid, fixed research components are incorporated into the evaluation and refinement of community policing within a police department?

In addition to reported crime figures (and periodic focus groups), citizen surveys are the most common tool used by municipal police agencies to evaluate the effectiveness of their community policing practices. However, they are often inadequately designed, with limited, bivariate indicators used to report the findings.

The current research serves as a benchmark for the empirical consideration of various factors related to community policing practices by incorporating multiple data sources and appropriate analyses that more accurately determine the status of community policing within a jurisdiction. It provides the localized perspective needed for informed decision-making and strategic planning, and contributes to our general knowledge in the topical area. Such research is required in many cities engaged in community policing, with longitudinal methods the most appropriate evaluative technique.

Moreover, systematic research at the municipal level would greatly enhance the capacity to develop, implement, and refine effective policing methods. Among the issues to consider through such a process is the range of time and effort required for a policing method to become successfully ingrained within an organization and constituent population to foster the appropriate level of involvement. Though empirical research may not always yield complimentary results for public initiatives, it serves to refine our understanding and ultimately leads to better methods of policing.

2. How are other relevant crime control activities evaluated?

Other policing initiatives are often publicized as resulting in a certain number of arrests, which largely serve as the major criteria for evaluation. Appropriate follow-up and empirical review is seldom pursued. Issues such as the actual extent of conviction and incarceration, crime displacement, and period of strategy effectiveness are often inadequately addressed. In sorting out the impact of community policing type collaborations and other enforcement strategies, appropriate evaluation methods must be applied.

3. How is supervisor effectiveness determined?

The Boston Police Department has significantly increased its complement of police officers and incorporated numerous changes since 1993 in recruitment and training practices within a community policing framework. Subsequent personnel changes have also occurred within the supervisory ranks, largely through promotions and training. Given the pervasive effect of supervisory personnel, the criteria used to determine supervisor assignments and effectiveness should be relevant and a significant factor in their deployment. In-service competency testing for police officers on relevant issues is one consideration as part of the periodic evaluation of community policing.

4. How is the practice of "Same Cop/Same Neighborhood" monitored and evaluated?

The practice of SC/SN is one of the cornerstones of community policing in Boston and many other jurisdictions. As such, it requires precise monitoring and reporting on actual assignments and time allocation, with information appropriately logged on the frequency and outcomes of specific problem-solving activities and/or interactions undertaken at the patrol level.

5. What other viable approaches is a police department prepared to undertake should serious crime rise again?

The current low rates of crime provide a unique opportunity to determine what factors are most effective in suppressing serious crime. The proposition that community policing practices are a primary contributor to the significant reductions in serious crime experienced during the 1990s can be well tested in the context of economic conditions and other factors. Longitudinal research on the community policing phenomenon can provide a more definitive indication of the precise factors that affect changes in serious crime.

6. Is the extent of opportunities for residents' involvement sufficient and related to community policing?

The ability to mobilize a broad range of residents in community policing type activities represents a significant capacity to achieve favorable outcomes in crime control. However, our research confirms that involvement varies based on residents' interest and concerns. As such, the opportunities for involvement must reflect these aspects. Conventional meetings to improve citizen-police communications and relay crime control options are valid approaches. But, additional, neighborhood-specific opportunities for involvement may help sustain lower crime rates. Citizen patrols and reverse 9-1-1 are among the more recent approaches incorporated into community policing practices in some municipalities.

7. How will community policing evolve to address the prominent population transformation occurring within the U.S.?

Notable changes in population racial demographics will require some changes in policing policies. Language, religion and other cultural issues will continue to affect how police function in the varied neighborhoods of American cities. Engaging different kinds of people in community policing practices will require greater diversification within the police ranks as

police personnel continue to take on the responsibility of managing conflicts among varied groups, finding common order among them, and facilitating their coexistence.

8. How would policing operations, in the context of current community policing practices, be affected by budget cuts (e.g., recruitment, training, promotions, deployment)?

An important element to policing efforts during most of the past decade was the allocation of significant monetary resources from federal, state and local government. Millions of additional dollars have been provided to municipal police agencies and used to fund additional personnel as well as significant amounts of overtime pay and technological enhancements. Funding limitations were a key factor in the initial inability to develop a sound community policing strategy during the late 80s/early 90s in Boston. Now that community policing is well developed and implemented, what effect would budget reductions again impose on community (and general) policing practices, and how would public safety needs be prioritized? Effective police administrators must be prepared to address such issues in ways that sustain/promote appropriate involvement by patrol officers and residents.

Overall, this study enhances our understanding on the important elements of citizen and police officer involvement in community policing. It provides an opportunity to more precise discourse and appropriate refinement of community policing practices. Notwithstanding, significant challenges remain in fostering appropriate involvement in the context of organizational and external factors. Such challenges were evident in 1967 and again in 1997 when the U.S. Department of Justice conducted a symposium on the 30<sup>th</sup> anniversary of the President's Commission on Law Enforcement and Administration of Justice that produced the landmark report on "The Challenge of Crime in a Free Society" (U.S. Department of Justice 1998). Several important conclusions and recommendations focused on the need to improve the

relationship and level of involvement between police and citizens in crime control. The call for appropriate research was also prevalent among their conclusions. Community policing (though not defined as such at the time) was one of the major conceptual breakthroughs advanced by the Commission. The broad-scale implementation of community policing practices within the U.S. demonstrates the resolve and willingness of many individuals to find better ways to crime control within a diverse democratic society. More than 30 years later, we have realized significant achievements in this endeavor, and seek to find ways to sustain our prosperity. At the time (1967), the Commission indicated that the challenges of crime in a free society cannot be met without the deep involvement of its citizens. "Controlling crime is the business of every American....Ordinary citizens must interest themselves in the problems of crime and criminal justice, seek information, express views, get involved" (U.S. Department of Justice 1998: 84). This element remains a crucial component to social tranquility. As such, significant challenges remain. Success is often fleeting and can be affected by factors beyond our control. However, in fostering greater involvement, we enhance the capacity to overcome many obstacles and affect pertinent changes in anti-social behavior and crime control policy.

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