

# **An Analysis of Factors Affecting the Implementation of Small Municipal Police Agencies: An Open-Systems Approach**

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**Abstract** This manuscript reviews the factors that may affect the decision by local government leaders, particularly in small municipalities, when determining whether or not to implement a police department. Although this paper is based on research conducted within a small Florida municipality, it is useful in suggesting what geographical, political, and environmental factors may be considered within an open-systems approach in an effort to guide decision makers through the many intricate and subtle issues that affect the level of policing services. Case study examples are provided through text boxes to demonstrate key points and provide more ‘texture’ (or illustrations) to the study.

**Keywords** Law enforcement · Service contracting · Open systems · Policing

## **Introduction**

Throughout the growth of American governments, cities and other political subdivisions have historically and legally been authorized to provide citizens with many services — including police protection. Modern laws in many states require that municipalities provide police protection and many other services for residents. Although many small and large city governments have professionally managed and efficiently operated police organizations, others suffer from ineffectiveness, corruption, negligence, and malfeasance by officers. Unprofessional police activities can result in liability claims, criminal charges, and the loss of public legitimacy and

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trust. While policing services are often provided directly by municipal government, many small cities have limited resources, and therefore must pursue other avenues, such as contracting with state or county law enforcement agencies. This latter issue is especially evident with the recent economic downturn in many local and state governments. Through these contractual agreements, alternative service providers often provide investigative and protective functions to their communities for less money and with less administrative red-tape than municipalities may face when managing their own, in-house, full-service police departments.

With the advent of population growth or decline, economic prosperity or depression, political division, or jurisdictional issues, however, cities that were once content with outside law enforcement services find that they are no longer satisfied with these arrangements. Local government leaders in these areas may feel that their cities would be better served by establishing direct service providers rather than becoming customers of law enforcement services. This article focuses on several key factors that must be considered when exploring the implementation of a police agency in a city that uses outside services. Similar factors are often considered when a municipality considers dissolving its police department.

### **Policing as an Open System**

Several decades ago, the early closed systems approach focused on internal elements of an organization. Organizations and the operations they conducted were seen as operating distinctly and relatively autonomously from outside elements such as politics, external stakeholders, and environmental issues such as the economy. Conversely, today's open systems approach, which began its popularity in the 1960's, emphasizes the importance of the environment in shaping an organization's structures and processes (Maguire 2003). In an open system, organizations are necessarily and inescapably tied to the economy, political tides, perceived/real crises, demands from local citizens, and other related factors. Police organizations are often labeled as one of the most visible forms of government in today's society, as they are often the first or primary responders when citizens face emergencies, request protection, face unknown dangers, or request assistance. Clearly, policing systems are not and *cannot* be closed off from their operating environment, but rather function much more efficiently and effectively when they are open to and dependent upon fluctuating resources, requests, and information from a diverse group of individuals and issues both inside and outside of the organization.

In an open system, police departments exist in ever-changing environments. The role of organizational administrators is to adjust the organization to environmental change and carefully weigh and consider different options that may impact organizational effectiveness (Fyfe et al. 1997). This occurs from the moment these organizations are created, until they are disbanded or they are consolidated with other government agencies. Most studies have focused on levels of police agency staffing and their relative strengths, and have been related to one of three viewpoints: 1) the public choice perspective, 2) the conflict perspective, or 3) the organizational perspective (Ammons 2001; Swanson et al. 2001).

The public choice perspective assumes that governmental policies are influenced by public demand. An increase in crime would necessarily lead to an increase in citizen demand for police services, and result in more officers being hired and/or being stationed on the street (Nalla et al. 1997). Public Choice theory emphasizes that citizen demand for increased law enforcement services is reflected in the resulting municipal expenditures for police. A sub-set of public choice theory, Rational Public Choice Theory, is also discussed by Nalla et al. (1997). This view claims that citizens act rationally in the face of rising crime rates, demanding greater police protection and police services, resulting in better policing. Modern police forces may, themselves, be the result of public demand for social order, and evidence of police force growth corresponding to increases in the crime rate may be evidence of this perspective.

The conflict perspectives states that conflict, whether economic or racial/ethnic, drives competition for scarce resources (Sever 2001, 2003). Subsets of conflict theory include the Economic Conflict theory and Racial Conflict theory. Critical to Economic Conflict theory is the idea that economic inequality and unemployment are measures of class conflict. As economically powerful groups have political power and thereby influence legislation and laws, the upper-class has more influence over the police than do other classes. This view stresses the importance of economic marginalization, and the idea that law and social control institutions, such as the police, are designed to control marginalized populations. Unemployment measures may be evidence of economic marginalization (Bohm 1984; Nalla et al. 1997). The other subset of the conflict perspective, Racial Conflict Theory, argues that as culturally and racially dissimilar groups become more visible, the dominant social class becomes increasingly fearful of crime and more threatened by the other races. This results in an increase in police strength, as the dominant race perceives a threat from minority populations (Kane 2003). This threat may be the result of fears and stereotypes associated with the dominant race, unfamiliarity based on real or perceived segregation of groups (Sever 2003), or unbalanced involvement in criminal activity by the minority population (Nalla et al. 1997).

Finally, the organizational perspective suggests that the police organization, including politics, unionization, and organizational structure create pressures on the strength or size of a police department (Stucky 2005). Additional organization factors, such as organizational inertia (or the inability or resistance of an organization to take needed action to change or become efficient) may also play an important role in this viewpoint (Nalla et al. 1997). While certainly the later would play a significant part in determining year-to-year budgetary considerations, the development of an entirely new police agency to meet the needs of a city's population would obviously not be a good example of organizational inertia. Continuing with contracted services as a 'status quo' decision, however, may be an example of inertia.

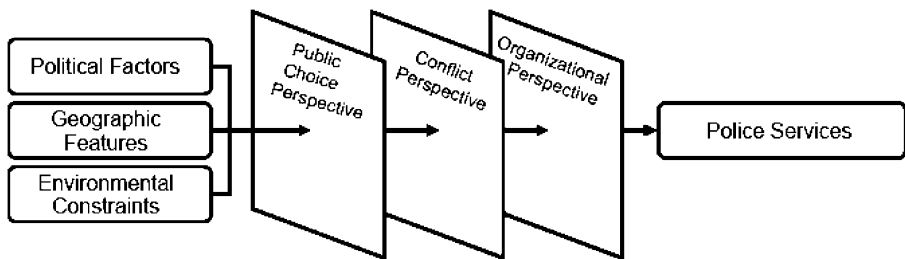
Although these perspectives clearly explain forces that influence police staffing, conceptually, three components directly influence police organizations as a whole and must be considered and investigated when strategically planning, developing, and implementing a police agency. These components are: 1) political factors, 2) geographic features, and 3) environmental constraints. It is important to understand that the authors view these variables as having substantial overlap within and

amongst one another. For example, political factors may be directly influenced by environmental constraints, as much as environmental constraints may be affected by political factors. The follow sections will review each area in a more comprehensive manner to illustrate this point (Fig. 1).

### Political Factors

The American system of policing is decentralized as a result of the multilevel of government agencies, resulting in a wide array of agency practices across municipalities and communities. The influence of political issues on local government policing has been marginally studied in the literature, suggesting that the structure of local government can affect policy outcomes (Stucky 2005). These studies can be traced to Wilson's (1968) discussion relating local politics to police organizational behavior. Wilson's discussion of police organizations was rooted in the relationship between local governmental institutions, political values, and the practices of local government in the 1960s. Wilson argued that the style of policing by local police agencies, whether the watchman style, the legalistic style, or the service style, largely depended on the local political culture. The legalistic style of policing reflects a bureaucratic approach to policing; this style of policing supports that officers should take an enforcement approach to situations, and that the decision making within the organization should be largely top-down. The watchman style, however, stressed the order-maintenance function of policing. Police in organizations that followed this model were more likely to be involved in order-maintenance type activities, civic order, and a deep involvement with the community they serve. Finally, those police organizations that followed a service orientation emphasized community resident satisfaction, and therefore took all requests from the community for both law enforcement and order-maintenance as a high priority; major crimes would take precedence over minor infractions, and arrests would be viewed as a last resort over other sanctions. Wilson's study compared the arrest rates for minor offenses in 146 cities, concluding that politics played a role in the type of policing conducted by municipal officers (see also: Langworthy 1985; Zhao et al. 2006).

Levitt (1997) found that increases in the size of police forces in large cities were disproportionately concentrated in election years for mayor and governor. His study examined a link between elections and the timing of changes in the manpower size



**Fig. 1** Factors influencing police organizations. “Perspectives,” as filters may operate differently based on the situational context; in other words, during a time of high crime, the conflict filter may be affecting more outcome than the organizational filter or public choice filter

of police agencies. While the economic performance of a city is largely outside of the control of a city's mayor, Levitt argued that "police are an ideal target for political manipulation since police departments are organized at the city level" (Levitt 1997, p. 274). As there may be rapid turn-over within police officer positions, and police recruit class sizes are easy to control, mayoral influence on the size of a police department can be easy to accomplish. Levitt found that changes in the size of police forces mirror the political cycle in large cities, growing by nearly 2% on average in gubernatorial and mayoral election years, but with absolutely no growth in non-election years.

Jacobs and Helms (1997) also discussed political pressure in regards to police agency size. Their research, focusing on economic inequality and movements in crime rates, found that unemployment, non-White/White income ratios, and inequality indicators were insignificant, but shifts in the strength of the Republican Party and the tax base did have a relationship to changes in police strength. They argued that Republican leaders, campaigning on advocacy of tough law and order measures, get elected and strengthen law enforcement agencies to a greater extent than did their Democratic counterparts.

Often, however, the community involvement in policing stems not from what politicians may say about crime in their neighborhood, but from reports on the evening news and in the daily newspaper. In an attempt to explain why some cities may invest proportionately more resources in than local police than others, Feinberg (2002) explored the influence that local newspaper coverage has on the relative size of municipal policing agencies. Feinberg conducted a content analysis of selected newspaper stories as a predictor of perceived threat and actual criminal threat in a community. While only a small percentage of crimes and police activities are presented in the media, and are they are often 'sensationalized' to the point that they no longer portray accurate representations of the prevalence of crime or the effectiveness of police intervention, the study showed that news coverage does shape criminal justice policy-making and police employment levels. Although Feinberg's study reviewed large police agencies, it shows that when there is a greater amount of news coverage there is a greater concern about crime, this results in greater employment of police officers and more policies aimed at stopping crime.

In attempting to replicate Wilson's earlier studies on the political influence of police organizations, Zhao et al. (2006) concluded that politics no longer are a strong predictor of organizational behavior among large police agencies in America. The authors base their findings on three factors. The first was the dramatic increase in crime rates which occurred shortly after the completion of Wilson's study in the 1960s, 1970s, and the 1980s. Politicians at all levels of government began using the fear of crime in their appeals for votes, and promised to get tough on crime if elected to office. The second factor was associated with changes in police organizations that resulted in specialization of units and formalization of rules and policies among almost all large American police organizations. Finally, Zhao et al. speculated that the expanding influence of the federal government in local and state police policies and practices. While the research of Zhao et al. calls into question the influence of politics in regard to the organizational structure of a police organization, their manuscript only reinforces that politics and political agenda play an important role in policing. This may be especially true in small town policing.

Payne et al. (2004) remark that policing in rural areas and small towns may largely be a reflection of the relationship between the police and the community they serve. Officers in rural and small town areas are more likely to be more closely tied to, and more responsive to, residents than officers from urban areas might be. Weisheit and Wells (1996) argued that rural and small town policing and crime were not merely subsets of urban issues, but that the research literature had minimized differences, creating “stereotypical images of crime based on an urban example” (p. 380). Smaller communities have a larger extent of relationships between the people who live there. This “density of acquaintanceships” (Freudenberg 1986) creates close connections among citizens and close personal ties between the police and members of the community, and may lead rural citizens to be more aware of crime and criminal activity (Falcone et al. 2002; Liederbach and Frank 2003). However, rural citizens may also be less supportive of government intrusion and unreceptive to outsiders (Weisheit and Wells 1996). Certainly political influence might play an even larger role in small town policing than in urban areas.

### TEXT BOX 1: A Case Study of Political Factors

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The authors conducted a review of policing services in a small central Florida city to determine political factors surrounding a call for a new police department by several city leaders. Part of this review included a detailed search of public records and newspaper archives regarding policing within the city. Prior to 1995, the city had its own police department. It employed approximately six individuals, including the police chief. During this time, the needs of the community were far different than the modern city. The population in 1995 was just over 4,000 people, and the community had not yet begun the immense building and development projects that were currently underway. The most recent population estimates of 9,000 showed that the city looked, worked, and operated far differently now than it did ten years ago.

In the early 1990’s, there was growing concern amongst citizens and other officials in this city that key members of the city police force were involved in conduct that was inappropriate and/or illegal—including claims of embezzlement of funds and sexual misconduct. The department existed in turmoil, going through three chiefs of police in three years, then a take-over of the department by a new mayor, who became the self-appointed police commissioner. The fervor created by these concerns resulted in the city council voting to disband the police department and instead enter into a contractual service agreement with the county Sheriff. In September of 1995, the city enacted a resolution to request and to authorize the Sheriff to assume the rendition of law enforcement services within the corporate limits of the city.

In 1999, the city again raised the question of a police department, with a non-binding referendum that asked city residents whether they supporting resurrecting the disbanded agency. At that time, the city paid the county over a quarter of a million dollars per year for law enforcement services. The referendum, held at the end of December 1999, was not supported; citizens voted 366 to 55 to keep the services of the sheriff’s office.

The city continued over the next several years to renegotiate contracts for law enforcement services with the sheriff’s office, working with four different elected or appointed Sheriffs during that time period. While most considered the price that the city paid for the initial contracted services to be low for the extent of the services provided, over the next several years the cost of the contracted services continued to rise, to the current contract at over one million dollars.

Additional political factors include the fact that the city is a community that includes two distinct groups of citizens. One sector of the community includes individuals with deep-seeded roots and history in this community. These are individuals whom have grown up in this area, or moved here within the last decade to escape the urban sprawl of other growing areas. A second group of individuals have come to the city more recently to find affordable housing and land that is otherwise not available in the adjacent markets. Whether new or old, the citizens in this city are faced with immense potential for municipal growth and development. Choices made by the city council and local governments will likely affect their quality of life for many generations to come.

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## Geographic Features

Geographic features are perhaps the largest and most diverse area of influence in implementation decisions. Geographic issues may include obvious issues—such as the location of a community (urban, rural or in between); the nature of surrounding communities (more or less resourceful) or its unique physical features (mountains, resorts, lakes, or wooded areas, or example). Each of these issues has potential implications for policing. For example, more rural locales may find that they have limited resources and therefore must rely more heavily on neighboring communities for policing support when exceptional needs or instances arise. The natural resources of a city may also influence police manpower. Lakes, rivers, ski mountains, waterfalls, and beaches all require additional law enforcement patrols, as well as specialized equipment and training. Municipalities with unique features may want to consider specialized patrol, such as a marine patrol unit to patrol waterways, or equestrian or four-wheeled patrol for mountainous areas.

The characteristics of a community may also be able to help determine the appropriate size of a police department. Ports for travel, malls and shopping areas, entertainment venues, teen gatherings, parks and waterways, areas of traffic congestion, and high population density can frequently require additional law enforcement resources. Travel centers, including airports, railroad stations, interchanges, highways and seaports can all lead to an increase in the amount of police needed by an agency. Additional travel related features that may create an increase in police employees include highway rest stops, toll roads, truck stops, walking/biking trail systems, and railroad crossings. Each of these can add additional duties to a department by creating additional needs for patrols for criminal activity, passenger or container screening, and traffic monitoring and traffic law enforcement.

While many malls and shopping areas often provide their own private security, many law enforcement agencies often provide additional personnel resources for traffic control for large events, shoplifting arrests, nighttime security, and crowd control. These same functions are often also provided for entertainment venues, and teen gatherings. Some municipalities have community policing offices housed in malls or shopping areas to create a stronger bond between the community served and the police agency Weisheit and Wells (1996), in their discussion of research on crime, point out that approximately one quarter of the population of the United States live in areas that would be considered rural. Although population density may also be considered an environmental constraint in addition to a geographical factor in regards to policing, Crank and Giacomazzi (2007) report that little research has focused on non-urban police departments and community dynamics in such an environment.

### TEXT BOX 2: A Case Study of Geographical Factors

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The authors conducted a review of a small central Florida city to determine geographical factors surrounding a call for a new police department. This review included review of city maps, growth and urban development plans, and individual evaluation of geographic features.

Local government information and public records showed that the city was 3.1 square miles in size and reported a population density of 2,860.3 people per square mile. The relatively low urban density suggested that there was plenty of room to grow, and city leaders reported residential and

commercial development plans currently underway. The city is largely characterized by subdivisions consisting of single family homes, town-homes, and some apartment complexes, along with two central core areas of business and commercial use. The city also has laid-out but not developed areas, and growth plans depict many additional miles of residential streets. Size characteristics suggest a population that will require police services at the moderately-low end of the continuum for now, however additional annexations and growth may require moderate levels of policing service. The city's location on a state highway and future access to the Florida Turnpike provide easy access to the community. This is clearly a positive geographical feature; however, there is a modest price to pay. As with most communities that border major interstates, there is a slight potential for increases in armed robberies and drug trafficking, particularly for businesses and locations near the interstate. New construction that will allow access and egress from the Turnpike to the city may present additional calls for police service and additional patrol needs. In addition, traffic volumes, particularly on main arteries, are increasing annually within the city limits. The city also has parks and natural resources which may affect the level of police services, including several large recreational-use lakes and parks. If the city decides to develop its own police department, consideration must be given to specialized forms of patrol, including the possibility of incorporating a marine unit to patrol waterways and investigate water-related crimes and accidents, and horseback or ATV patrol for parks with trails.

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### Environmental Constraints

The delivery of policing services may also be affected by environmental issues. This category includes much of the world outside a police agency. Public organizations are defined by a number of conceptual components (Maguire 2003), and Selden and Sowa (2004) report that organizational theory has produced a plethora of models exploring organizational performance. The dynamics and performance of organizations, coupled with their interface with the environment, has become an important topic of investigation in organization theory literature (Keats and Hitt 1988). Environmental characteristics are referred to as contextual variables (Wan 1995), and the first step in specifying the environment is to delineate the community characteristic of socio-economics, demographics, and other environmental conditions that shape the demand for service. To understand police service delivery, it is important to consider the various contexts in which policing takes place. The police officer is not a scientist working in a sterile laboratory. An officer's laboratory is an entire community of people and all of their needs and does not exist in a sterile or controlled environment.

In recent years, some scholars have placed their focus on advocating and developing more comprehensive and multi-dimensional frameworks for organizational performance, and it is emphasized that a concept as complex as organizational performance may be more appropriately captured through multi-dimensional framework than through a single construct. Multi-dimensional models of organizational performance have gained prominence among public management scholars because of the argument that the nature of public organizations demands such frameworks to capture the organization's multiple dimensions (Selden and Sowa 2004). Today's strategy researchers focus on the relationships among organizational environments, strategy process, and organizational performance. According to Boyne and Walker (2004), strategy content can be conceptualized as a general approach that describes the organization's position and how it interacts with its environment to maintain or improve its performance.

## Methodology

Because of the relative dearth of information on the factors associated with the implementation of a police in smaller municipalities, the authors adopted a triangulation approach to collecting data and research on this topic. Through a triangulated model of research fostered by Polkinghorn (1983), we can begin to illustrate the factors which are most often taken into account when municipalities consider implementation issues by using two related, yet different sets of data to relate to a third unknown.

### Data Set One

Late in November of 2006, the authors of this project conducted an in-depth analysis of the geographic, political, and environmental factors associated with in-house provision of police services versus contracted police services in a small municipality in central Florida. During a seven month process, the researchers met with various stakeholders involved in this issue—including the City Manager, Mayor, all Council members, and the local Sheriff's office. They also attended a public meeting where citizens were allowed to provide commentary on their views of local policing needs. Beyond individual and public meetings, the team also reviewed related documents on community needs, growth patterns and expectations, citizen's requests, and 'master plans' for emergency services and growth within the local community. Based on this information, in May of 2007, the research team presented a final study to the City Commission and local community on expected needs and suggested courses of action for effective policing in this small municipality. The results of that analysis are one portion of the data used in this study.

### Data Set Two

Through the course of collecting data for the aforementioned study, the researchers became familiar with a study conducted by Jeff Goltz at the University of Central Florida. Goltz conducted a cross sectional study using organizational and environmental data from one-third of the local police organizations in Florida. Organizational performance data was reported by each police agency in a data collection spreadsheet and the environmental data came from three sources: the University of Florida's Bureau of Economic and Business Research (BEBR), the 2000 U.S. Census, and the 2005 Florida Department of Law Enforcement Total Crime Index. In a confirmatory analysis using structural equation modeling and path analysis to analyze the sample of 113 police organizations, Goltz (2006, 2007) discovered four significant effects of the environment on police agency resources and performance. Goltz's findings contribute to the discussion of the implementation of a small police agency because the study sample included fifty-nine police departments, or 52%, that have less than one hundred officers.

## Findings

First, propensity of crime indicators have a medium negative effect on resources (Propensity of Crime → Resourcefulness:  $\Gamma = -.52$ ). This finding indicates that communities with lower crime rates, lower percentages of the population age 15–24, lower minority populations, and a higher educated population require *less* police resources. Second, social economic disparity indicators have a very significant effect on resources (Social Economic Disparity → Resourcefulness:  $\Gamma = .60$ ). Conversely, this finding indicates that communities with higher poverty rates, higher unemployment, and higher rental rates require *more* police resources. Third, population density has a medium negative effect on crime clearance (POPDEN → CLEAR:  $\Gamma = -.27$ ). In other words, an increase in population density leads to a decrease in crime clearance or higher population density requires more resources for criminal investigation.

Lastly, the total causal effects of the environmental constraints (population density, propensity of crime, social economic disparity) on police agency efficiency are significant. Goltz's research indicates that the total causal effect of environmental constraints on the technical efficiency of police agencies is significant (.65). Efficiency in this research is a combination of traditional core police inputs and outputs (budget, calls for service, reported crimes, arrests, and traffic citations). Undoubtedly, the environment “drives” efficiency in police service delivery.

Environmental constraints reflect the complexity of the specific physical, cultural, social, and economic surroundings that shape the demand for police services. Crime experts generally believe that some of the best predictors of crime are employment status, income, education levels, age, and ethnicity (Bayley 1994). Although the police have been given most of the responsibility for not properly dealing with crime, significant long-term reductions in crime can only be achieved by changing the social conditions that breed crime (Fyfe et al. 1997). Therefore, when planning for the implementation a city police agency, large or small, three constructs of environmental constraints must be incorporated into key resource decision-making: 1) population and population density, 2) propensity of crime, and 3) social economic disparity.

### Population and Population Density

The costs for police per square mile in densely populated areas are significantly higher than the costs elsewhere (Clark 1970). However, despite this higher cost to citizens in urban areas, urban police are no more effective at solving community crime than their rural or small-town counterparts (Falcone et al. 2002). Population growth, as experienced in many communities, contributes to high population density. Large, dense jurisdictions are more complex and the more dispersed the population the more elaborate the requirements for resources and formal structure. According to Walker and Katz (2002) the police-population ratio is the traditional measure of the level of police protection in a community. In 2004 the United States had 429,630 municipal law enforcement officers with an average of 2.3 officers for every 1,000 people, and 246,104 county law enforcement officers with an average of 2.7 officers for every 1,000 people (Federal Bureau of Investigation 2004; see also Goltz 2006).

In the state of Florida in 2004, there were 16,663 municipal law enforcement officers with an average of 2.42 officers for every 1,000 people, and 17,945 county law enforcement officers with an average of 1.67 officers for every 1,000 people (Florida Department of Law Enforcement, n.d.; see also Goltz 2006, 2007).

Variation in police staffing ratios can be attributed to many different factors and characteristics of a jurisdiction. One of these factors is the difference between “service population” and “resident population.” For the purposes of most studies and reports on police staffing ratios, a jurisdiction’s population is defined as the number of people who identify the jurisdiction as their permanent home. However, when considering proper size for a police department or law enforcement service ratio, populations should also include all persons that may require police service. Examples of additional populations that may require police services include tourists, shoppers, “snow-birds,” and commuters. Undoubtedly, the population served and population density are primary determinates in the size, or personnel resources, of a police agency. Although there is no sure recipe for the ‘proper’ size of a police force, many related issues must be taken into account.

### Propensity of Crime Indicators

While the population size may have an influence on police agencies, another factor discussed in the literature includes the relationship between minority populations and the police force. Sever (2003) reports that minority population is an important determinate of police force strength, citing 28 studies that tested the size of police forces and their expenditures in relation to the size of their associated minority populations. Sever (2001) found that the percentage of the population who were Black had non-significant impact on police strength where Blacks accounted for less than 30% of the population; above that point, there became a stronger Black-police strength relationship. The percentage of Blacks had a stronger positive impact on police strength in a subset of cities containing both wealthy and poor Blacks, seeming to support the idea that the relationship is based more on the race than poverty. Sever (2001) remarks, however, that it is impossible for a simple percentage to determine political influence over police strength levels. Additional factors, including the race of police bureaucrats, fear of crime, and the public’s perception of the minority population are all difficult to ascertain and collect.

Crime rates and calls-for-service are highly related to the proportion of juveniles in a population, or the average age of a city. Far greater offender and victim rates are found among young people in their teenage years until their mid-twenties. Jurisdictions with a proportionally younger populations demand more police service than jurisdictions with older populations. The literature documents that socio-economic characteristics can be a predictor of police services; specifically, that lower income populations tend to demand a somewhat higher level of police services.

When observing general crime patterns, it is evident that youth involvement in criminal activity is a serious matter. While some teenagers are labeled deviant for a while, they usually mature out of it (Pope 1993). Weis et al. (1996)

report that many studies have indicated that involvement in crime increases throughout the teen years, peaks at about age 17, and drops dramatically thereafter. Statistics indicate that young people are arrested at a disproportionate rate to their numbers in the population. Youths 17 and under make up about 10 percent of the population in the U.S., but account for 27 percent of the index crime arrests and 17 percent of the arrests for all crimes. Conversely, adults 50 and over make up 32 percent of the population, but only account for about 10 percent of arrests (Siegel et al. 2006). Undoubtedly, criminal activity is more prevalent among younger persons and the highest arrest rates are for individuals under the age of 25 (Mooney et al. 2002).

Dropping out of high school is positively associated with later criminal activity because criminal behavior increases in the year following a drop out from school, and it has a positive long-term effect on criminal behavior (Thornberry et al. 1996). According to the National Center for Education Statistics in the year 2000, 11 percent of 16–24 year-olds were high school dropouts. Compared to those that complete high school, dropouts are more likely to be unemployed and engage in criminal activity (Mooney et al. 2002).

In addition to age and educational indicators, the literature indicates that ethnicity of a community affects crime rates and the impact on police services. At the aggregate level, a disproportionate number of African-Americans and Hispanics are imprisoned in the United States (Mooney et al. 2002; Phillips 1993). In agreement, Hawkins (1993) believes that one of the most pervasive facts in America in the late twentieth-century is the disproportionate representation of African-Americans, Native Americans, and Latinos that are arrested, convicted, and punished for crimes. Although evidence of racial bias exists in the justice system, Siegel et al. (2006) believe that it is also possible that African-American youths are arrested at a disproportionately high rate because they are currently committing more crime. Similarly, Hawkins states that the most consistently reported findings have been the high rate of crime found among African-Americans. Although African-Americans represent about 12 percent of the population, they account for 33 percent of the crime index total (Mooney et al. 2002). In their research, Cernkovich et al. (2000) report that African Americans are more likely to be unemployed, have lower incomes than their white counterparts, report lower levels of economic satisfaction, and report higher levels of income-generating crime.

Official statistics are used to measure crime, and official crime statistics are collected by the Federal Bureau of Investigation in the Uniform Crime Reports (UCR). The UCR, and its associated *crime index* is the most well known source of information used to measure police agency productivity. The crime index is composed of the rate per 100,000 population of common crimes, and is only based on each jurisdiction's residential population (Fyfe et al. 1997). Crimes exemplified in the UCR Crime Index are murder, assault, robbery, rape, burglary, larceny, and auto theft (Swanson et al. 2001). Not only does the UCR list crime rates based on the crimes committed per population, it also lists the actual number of crimes and the percentage change over time (Mooney et al. 2002). Crime rates tend to be higher in big cities, or in urban areas, than in small towns or suburban and rural areas, and in 1999, both violent and property crimes were highest in southern states (Ammons 2001; Mooney et al. 2002).

## Social Economic Disparity Indicators

A theoretical approach in establishing a framework for thinking about an individual's involvement in crime is the investment in human capital and earning power: both achieved through education and the experience of working for income (Phillips 1993). Unemployment rates are tied to educational status (Mooney et al. 2002). Most crime in this country is born in environments saturated in poverty, where the unemployment is highest, and where the education is poorest. Crime is heavily concentrated in the small geographic areas of inner cities, pockets of rural poverty (Clark 1970), and Phillips notes that a higher intelligence quotient significantly decreases the probability of arrest. Moreover, crime is more prevalent in poorer neighborhoods and low-income citizens are the heaviest users of police services (Walker 1992).

Housing costs represent a major burden for the poor in the United States. The lack of affordable housing has produced a housing crisis that increasingly affects the poor. In the late 1990's, rents rose about as twice as much the consumer price index and the increases in rent now exceed inflation everywhere in the country. In 1999, more than 4 million households received some form of public housing assistance. The concentration of poor families that live in federal rent subsidized housing, or Section 8 housing, remain in low income areas where crime is higher. Moreover, the Center for Budget Policy Priorities reports that the number of low-income renters has increased by 70 percent in the past 25 years (Mooney et al. 2002).

Together, the literature and the confirmatory analysis seem to suggest that environmental indicators affect the delivery of police services, resources and performance. Therefore, when implementing a new police agency of any size, simplistic estimations of police resources based solely on the population of a community must be replaced with evidence-based decision-making based on the totality of the environment. Succinctly, administrators and politicians must take into account the population density, age of the population, minority population, education levels of the population, poverty rates, unemployment rates, and rental rates when establishing resource needs. All of these environmental indicators contribute to the core responsibility of the police: effective and efficient response and reaction to crime.

## Conclusion

The results of this review should be viewed comprehensively as well as through several different perspectives. The first perspective includes the economic resources available to a government entity to provide police services. If the bottom line cost of service provision is the driving force behind the decision to contract out service or to create an in-house department, the immediate start-up costs associated with creating a new police department may far exceed the costs associated with contractual services. The largest initial costs in creating a new department may be: liability insurance; recruiting, training, and retaining an appropriate number of quality law enforcement officers and staff (given the aggressive hiring practices and salaries of other local law enforcement agencies); and related resources such as vehicles, a

facility to house the unit, and equipment. In addition, there may be a need for civilian or sworn personnel or outsourcing at an additional cost for record keeping, criminal investigations, property and evidence, training, recruiting, youth services, and communications.

A second perspective relates to the “ownership” of a law enforcement unit within a local jurisdiction. With regards to this issue, the central question becomes, “Why do citizens want their own police department?” and “What has caused them to feel this way?” Beyond the issue of financing, the most frequent and significant factor is the difference between direct provision, internal control, and accountability of law enforcement services. Before a successful direction for law enforcement services can be charted, there will need to be a consensus of an appropriate course of action within the local community and elected city leaders.

A final consideration involves the uncertainty surrounding the creation of a new department. This is not a simple task, or an exact science. There is no direct ‘recipe’ for success in creating this new element of local government service delivery, and no effort can be viewed as a panacea. The cost of such action is also somewhat difficult to directly define, as it may change drastically based on unforeseen elements such as negative changes in tax rates (which may affect the City’s ability to pay for a new department), limited numbers of qualified candidates willing to work in the department (which may affect salary rates), changes in the expected number of citizens within the city limits (which may affect the needed number of officers on patrol), and changes in types of crime (which may affect how law enforcement is carried out), among other things.

Clearly, the literature, theory, modeling, and research discussed in this article confirm the importance of understanding the operating environment when investigating the implementation of a city police agency. Law enforcement is a labor-intensive service industry and police personnel costs make up 80 to 90 percent of a police budget (Fyfe et al. 1997; Thibault et al. 2001). Therefore, city administrators are cautioned not to make police resource decisions based on simplistic comparative resource analysis of other cities similar in size without considering the environmental constructs and indicators that effect police resources and performance that have been discussed and illustrated in great detail in this manuscript. Implementation decisions should be carefully weighed on several different fronts, keeping in mind the changing face of the location, the needs of citizens, the stability of the political climate, and the economic forecast of the community, amongst other issues.

This study focused on implementation issues in a small municipality in Florida. Obviously, it is a starting point for future research and it therefore has some limitations. Other studies should continue to build upon this vein of research, and perhaps expand the issues considered in this study to include other small municipalities in other states; state-level police agencies in the US; or even municipal or state police agencies in other countries. Additional research should also attempt to determine and expand the concepts associated with open policing systems and effective implementation strategies. Still, this research is an important contribution to the field as it attempts to begin the dialog and create a body of knowledge on what factors are important in the implementation of police forces in small municipalities in the US.

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