The Relationship Between Economic Conditions, Policing, and Crime Trends

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An Addendum to *The Impact of the Economic Downturn on American Police Agencies*

COPS
COMMUNITY ORIENTED POLICING SERVICES
U.S. DEPARTMENT OF JUSTICE

U.S. Department of Justice
Office of Community Oriented Policing Services
Office of the Director
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COPS

Dear Colleagues,

As law enforcement agencies throughout the nation continue to face challenges brought about by the current economic climate, the importance of community policing cannot be overstated. The core mission of the United States Department of Justice (USDOJ) is the protection of the American people, and the law enforcement community plays a central role in the advancement of this mission.

As a component of the Justice Department, the COPS Office is committed to acting as the voice for state and local law enforcement agencies within the federal government. For nearly two years we have been tracking the changes that have been occurring in law enforcement agencies across the country and believe that the recent economic downturn will continue to have a serious impact on the way American police agencies operate for the foreseeable future.

The COPS Office is determined to help build the framework necessary to enable our law enforcement partners to make the most of these limited resources and to continue to develop and promote promising and effective public safety practices. In advancing these goals, the COPS Office recently awarded more than $100 million in new grants that supported the hiring and retention of approximately 800 officers in agencies across the country. This year's funding continued our emphasis on helping law enforcement agencies address specific community public safety problems. In addition, we provided nearly $12 million in Community Policing Development grants to identify and advance best practices throughout the nation.

This report is part of our ongoing commitment to assisting local law enforcement agencies thrive in the current economy. It builds on the report we released last year, "The Impact of the Economic Downturn on American Police Agencies," which was the first federal analysis that examined the impact the economy has had on the law enforcement community. In the following pages you will find an overview of what we know about the interactions of crime rates, the economy, and police staffing and practices. By bringing together years of research on these complicated issues into a single, concise report, we hope that it will help you in understanding that the relationship between the economy and crime is not as straightforward as we may sometimes wish, but that quality policing–grounded in the community policing philosophy–can reduce crime and improve the health and safety of our communities. As always, we at the COPS Office are grateful for the opportunity to be of service to American law enforcement.

Sincerely,

Bernard K. Melekian, Director
Office of Community Oriented Policing Services

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About the COPS Office

The Office of Community Oriented Policing Services (COPS Office) is the component of the U.S. Department of Justice responsible for advancing the practice of community policing by the nation's state, local, territory, and tribal law enforcement agencies through information and grant resources.

Community policing is a philosophy that promotes organizational strategies that support the systematic use of partnerships and problem-solving techniques, to proactively address the immediate conditions that give rise to public safety issues such as crime, social disorder, and fear of crime.

Rather than simply responding to crimes once they have been committed, community policing concentrates on preventing crime and eliminating the atmosphere of fear it creates. Earning the trust of the community and making those individuals stakeholders in their own safety enables law enforcement to better understand and address both the needs of the community and the factors that contribute to crime.

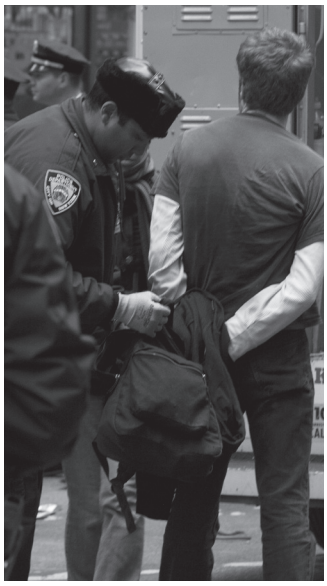
The COPS Office awards grants to state, local, territory, and tribal law enforcement agencies to hire and train community policing professionals, acquire and deploy cutting-edge crime fighting technologies, and develop and test innovative policing strategies. COPS Office funding also provides training and technical assistance to community members and local government leaders and all levels of law enforcement. The COPS Office has produced and compiled a broad range of information resources that can help law enforcement better address specific crime and operational issues, and help community leaders better understand how to work cooperatively with their law enforcement agency to reduce crime.

- Since 1994, the COPS Office has invested nearly $14 billion to add community policing officers to the nation's streets, enhance crime fighting technology, support crime prevention initiatives, and provide training and technical assistance to help advance community policing.
- By the end of FY2011, the COPS Office has funded approximately 123,000 additional officers to more than 13,000 of the nation's 18,000 law enforcement agencies across the country in small and large jurisdictions alike.
- Nearly 600,000 law enforcement personnel, community members, and government leaders have been trained through COPS Office-funded training organizations.
- As of 2011, the COPS Office has distributed more than 6.6 million topic-specific publications, training curricula, white papers, and resource CDs.

COPS Office resources, covering a wide breadth of community policing topics—from school and campus safety to gang violence—are available, at no cost, through its online Resource Information Center at www.cops.usdoj.gov. This easy-to-navigate website is also the grant application portal, providing access to online application forms.

Introduction

The recent economic downturn has been devastating to local economies and, by extension, their local law enforcement agencies. According to a report by the National Institute of Justice, the United States is currently experiencing its 10th economic decline since World War II (Wiseman 2011). Curtailing revenues nationwide have forced local governments to make cuts in spending across the board, which includes spending on public safety. Over the last few years, many agencies have experienced considerable effects from budget constrictions—including mandatory furloughs and hiring freezes—resulting in significant reductions in staffing levels never experienced before. In every corner of the United States, state, local, and tribal police departments are being forced to lay off sworn and civilian staff members, which results in modified operations. At some point, it is likely that these troubling trends will begin to impact public safety—if they haven't already.



In October 2011, the Office of Community Oriented Policing Services (COPS Office) compiled a report on how the current economic conditions are affecting police agencies nationwide. The report, entitled *The Impact of the Economic Downturn on American Police Agencies*, examined a variety of surveys, publications, and data sets to analyze the effect the current fiscal conditions within law enforcement agencies are having on staffing, delivery of services, and organizational management.

As a component of the Justice Department, the COPS Office is committed to act as the voice for state and local law enforcement agencies within the federal government. As police department's nationwide face reductions to their operating budgets many agencies have had to reduce or discontinue training programs, eliminate plans to acquire new technologies, and in the worst cases, make severe cuts to personnel. Consequently, one of the biggest issues identified by law enforcement agencies in relation to the economic downturn is the need to "prove their worth" to local policy makers in order to justify budget allocations and staffing levels. All too often, the "value" of a law enforcement agency is measured by the number of arrests that are made, or through fluctuations in the crime rate. However, the value of law enforcement goes much deeper than crime reduction alone. Local law enforcement agencies are frequently the most public face of government to citizens; a perceived one-stop shop for handling any type of complaint, whether criminal or not. Therefore, the value and legitimacy of a department is determined by the totality of its community interactions, not just the crimes it solves. The importance of this cannot be overlooked in efforts to prove the worth of a department in lean economic times, even though it is much more difficult to measure in a quantifiable way.

When arguing "the value" of police officers, the public, media, and policy makers too often judge "police success" solely on crime numbers, thereby ignoring other value that policing provides to neighborhoods.

There are a number of reasons why it is difficult to reliably demonstrate a causal relationship between the economy and crime, the number of police and crime, or the effects of police budgets on crime, all of which will be discussed in this report. What is important to understand is that the value of police cannot simply be measured through crime rates alone. When arguing "the value" of police officers, the public, media,

and policy makers too often judge "police success" solely on crime numbers, thereby ignoring other value that policing provides to neighborhoods and local communities. It is important that community members and stakeholders alike recognize and value the myriad benefits police bring to their community, including safety and prevention efforts, leadership, and community cohesion.

The COPS Office is committed to assisting local law enforcement agencies to thrive in the current economy and it is our goal to provide the best available resources, information, and guidance to the field in order to help shape the new reality of American policing. This report intends to provide insight into the complexities that exist when trying to determine a causal relationship between the economic decline and crime. By understanding how and why these measures are inadequate in defending police value or justifying staffing levels, law enforcement officials will be better prepared when faced with the difficult questions and decisions regarding resource allocation, crime prevention strategies, and the development of sustainable policies and procedures that will facilitate the highest levels of public safety.

The Relationship between Economic Conditions and Crime Is Complex

Many believe that crime is likely to escalate when economic conditions deteriorate. Rational choice theories support the belief that during times of high unemployment there is a greater likelihood that individuals determine that engaging in illegitimate opportunities to gain wealth—namely through criminal activities such as robbery, burglary, and theft—is in their own rational self interest. Others believe that economic downturns are likely to decrease criminal opportunities and thereby decrease crime. When unemployment is high, more people will be staying home when they typically would have been away at work. In turn, this increases the number of "guardians" watching over their property, making a home less of a target for a burglary than it would have once been. Further, potential robbery targets are likely to be carrying less cash, wearing less expensive jewelry, and may be more willing to defend their property in times of economic hardship. These factors change the cost benefit ratio affecting a motivated offenders' decision to commit crime. Within these circumstances, the possible costs may be considered to outweigh the benefits, which could result in less crime.

Of course both of these positions are dependent on the assumption that crime is a rational act based on opportunity and risk on the part of the offender. This can be a questionable assumption to make. There is much evidence that criminals—at best—engage in *limited* rational decision making and, therefore, these theories may have limited explanatory power. Such explanations are also likely to be dependent on the type of criminal activity—for example, perhaps burglary and robbery are more dependent on economic conditions where other types of less economically motivated violent crime maybe less so.

Other types of theories for criminal behavior, such as strain theory, argue that economic downturns put increased strain on individuals that will make them more likely to seize on criminal opportunities as outlets for this strain (Agnew 1985). In fact, there are a plethora of different criminological theories that could potentially be used to either support or negate the relationship between changes in economic conditions and crime.

In addition to understanding basic theories of criminal behavior, it is also important to understand the different ways in which researchers have measured the concept of "economic adversity." Numerous studies have attempted to operationalize the construct through a number of measureable factors such as: the gross-domestic product (GDP), unemployment rates, declining wages, and others. Studies to date have shown mixed and often contradictory results regarding the relationship between economic adversity and changes in crime. While many assume that crime will flourish in times of economic strife, little empirical evidence has supported this notion. Research suggests that sometimes significant downturns result in an increase in crime rates, and sometimes they do not (Cook and Zarkin 1985; Chiricos and Delone 1992; Bushway, Cook, and Phillips 2010; Smith, Devine, and Shelby 1992).

For example, during the 1960s and early 1970s, the United States experienced a period of economic expansion while simultaneously experiencing escalating rates of crime and delinquency (Lafree 1998). Yet in the early 1990s, during another period of economic expansion, crime and delinquency rates began to drop, reaching a 30-year low by the early 2000s (Blumestein and Wallman 2006). In these two historical instances, economic expansion on a broad scale had contradicting effects on crime rates.

Much of the research focusing on large scale relationships between crime and the economy has examined how the "business cycle" affects crime. Studies that have found a statistically significant relationship (although slight) between the economy and crime have used measures that compare these short-term fluctuations, or business cycles. The National Bureau of Economic Research (NBER) has defined a cycle to include two phases: trough to peak (the "expansion phase") and peak to trough (the "contraction phase"—or "recession"). Since the 1930s, the typical pattern has been of sustained expansion followed by relatively short contraction. The NBER's Business Cycle Data Committee asserts:

> *During a recession, a significant decline in economic activity spreads across the economy and can last from a few months to more than a year. Similarly, during an expansion, economic activity rises substantially, spreads across the economy, and usually lasts for several years (National Bureau of Economic Research).*

When attempting to identify the effects of the economy on crime, it is important to recognize the potential influence one variable may have on the other. Identifying economic variables that affect crime is difficult because although there may be a correlation between the two (i.e., changes in one mirror the changes in the other), this does not mean

necessarily that there is direct causation (Koinis and Yearwood, 2009), as it is difficult to identify and account for all of the possible intervening factors. For these reasons, it is understandable that research has yielded such inconsistent and contradictory results.

Without reliable evidence to support how or why the economy has an effect on crime rates, many researchers have written off such claims as a function of poor measurement and model misspecification (Greenberg 2001; Raphael and Winter-Ebmer 2001). Others have argued that adverse economic conditions may yield increases in crime rates, but *only under certain conditions*. For example, rather than simply associating increases in crime rates to declining economic conditions, Cantor and Land (1985)[1] argue that "increases in some adverse economic conditions, such as unemployment rates, may yield higher crime rates only to the extent that significant simultaneous or subsequent shifts in routine activities do not limit criminal opportunities." Other research has mirrored this belief, providing evidence to support the idea that simply attributing a linear connection between an economic decline and increases in crime rates will fail to capture the range of behavioral realities that shape the broader economic and social contexts within which crimes will take place (Baumer, Rosenfeld, and Wolff forthcoming).

While many assume that crime will flourish in times of economic strife, little empirical evidence has supported this notion.

In their recent work, Baumer, Rosenfeld, and Wolff (forthcoming) evaluate the influence on crime rates of four indicators of economic adversity—namely, rising unemployment, consumer pessimism, declining wages, and GDP. In an attempt to take their analysis a step further than previous studies, these researchers also examined "both the additive effects of these conditions and the degree to which their effects are moderated by inflation levels, unemployment insurance, illicit drug involvement, incarceration rates, and police force size."(1)

This study also examines these variables of economic adversity and their effects on rates of property crime (robberies and burglaries), total homicide, and rates of homicide disaggregated by age. Evidence from this study implies that several commonly considered indicators of economic adversity do have effects on crime rates; however, these effects differ depending on the rate of inflation and levels of objective risk. Most notably, increases in unemployment are much more likely to yield elevated property crime rates when inflation levels are particularly high and, in fact it was pointed out that unemployment is not significantly associated with property crime at below-average levels of inflation. These findings emphasize the need to consider conditional relationships when assessing the role of economic conditions on crime, particularly in our current economic environment when unemployment is high but the rate of inflation remains at historic lows (Baumer et al. forthcoming, 19). Overall, while this study provides greater examination into the interactive effects of many economic indicators typically associated with fluctuations in crime rates, the general conclusion emphasizes the need for future empirical research linking the economy and crime to move beyond examination of simple main effects and consider the pos-

1. As cited in Baumer, Eric P., Richard Rosenfeld, and Kevin T. Wolff. (Forthcoming). "Are the Criminogenic Consequences of Economic Downturns Conditional? Assessing Potential Moderators of the Link between Adverse Economic Conditions and Crime Rates." In *Youth Violence and Economic Conditions*, ed. Richard Rosenfeld, Mark Edberg, Xiangming Fang, and Curtis Florence. New York: NYU Press.

sibility of theoretically informed conditional effects (Baumer, Rosenfeld, and Wolff forthcoming, 21).

Another consideration that must be taken into account is the different "timing types" associated with economic change. Researchers typically identify three timing types associated with changes in economic indicators; leading, lagging, or coincident—depending on how they relate to changes within the economy as a whole. These timing types are defined as follows:

- Leading: Leading economic indicators are those that change prior to changes in the overall economy. Stock market returns are an example of a leading indicator, because the stock market tends to exhibit signs of decline before the economy declines, and it improves before the economy begins to move out of a recession into a more stable climate. Such leading indicators are important, insomuch as they help to predict what the economy will look like in the future.
- Lagged: A lagged economic indicator is one that does not change immediately alongside the overall economy, but instead will experience changes months and sometimes years after the economy does. City budgets for example, tend to lag economic conditions anywhere between 18 months to several years. Similarly, unemployment rates are a form of a lagged economic indicator in that unemployment generally increases 2 or 3 quarters after a faltering economy begins to improve.
- Coincident: A coincident economic indicator is one that moves alongside the economy. The Gross Domestic Product is an example of a coincident indicator because it changes with the economy instead of before or after.[2]

Increases in unemployment are much more likely to yield elevated property crime rates when inflation levels are particularly high. . . .but [right now] the rate of inflation remains at historic lows.

It is difficult to determine the amount of time it takes before the economic changes can be said to have an effect on criminality. While some assume that crime rates should change at the same time as the economy (coincidentally), others believe that there is a lag before crime rates would be affected. Further complicating matters, the length of the lag may vary by any number of factors, such as the type of crime, location (density of population), extent of downturn, etc. This poses problems for many law enforcement agencies when trying to justify why, in light of recent lay-offs, crime has not sky rocketed. One reason for this may be due in part to the lagged effects of such conditions. Laying-off officers today does not mean that crime immediately goes up tomorrow. However, over time, it is possible that the effects of such lay-offs on crime and social disorder, depending on their magnitude, will become evident as more time passes without the same staffing levels and mechanisms of social control in place.

Another problematic issue in examining the relationship between crime and the economy is the use of aggregate crime data to develop conclusions about the nature and causes of crime overall. Just because a particular category of crime is on average down across the nation does not mean it is universally declining; it can still be up in particular

2. http://economics.about.com/cs/businesscycles/a/economic_ind.htm?p=1

cities. Similarly, within cities crime rates can follow different trends in different neighborhoods; some neighborhoods mirroring the city-wide trend and others differing greatly. Yet there are those who continue to attempt to draw conclusions about the impact of the economy on crime by comparing the health of the national economy to the nation's Part I crime rates as determined by the FBI's Uniform Crime Reporting (UCR) system. Because of the immense variation in crime rates, economic variables, and intervening factors, this use of nationally aggregate data makes it the least likely form of analysis to yield informative evidence regarding the relationship.

Simply put, crime trends and economic conditions are subject to a great deal of variation in local circumstances.

Therefore, it is not surprising that differences in the levels of measurement used to examine this relationship have resulted in inconsistent results. For example, in 1987, Chiricos reviewed 67 research studies that analyzed the relationship between unemployment and property crime. Through his examination, he found that the "level of aggregation" of the data strongly influenced the conclusions of the study. Studies that used city-level data displayed a larger proportion of significant results (for both negative and positive relationships) than did those that used state-level data. What Chiricos suggested was that while state-level data was likely to include a wider variety of economic factors, making it a more heterogeneous sample, city-level data may be more homogenous and therefore, more likely to be reflective of the specific trends within that given city (Chiricos 1987).

These findings illustrate the difficulty in identifying significant explanatory evidence regarding the causes and effects of crime when using measures of aggregate crime rates. In order to draw conclusions about the causes of crime from aggregate associations between economic characteristics and acts of crime, one must be able to justify that the aggregate relationship holds up at the individual level (Oberwittler and Wikstrom 2009). Simply put, crime trends and economic conditions are subject to a great deal of variation in local circumstances. Therefore, it is important to understand crime within the appropriate framework. Pioneers in the study of environmental criminology, Brantingham and Brantingham, shaped the criminal framework as such:

> *Crime must be thought of as a broad range of actual behaviors, which, while sometimes appearing similar, may be the results of many different incentives or etiological processes….Crime is, for analytic purposes, similar to a backache. Backaches will never be attributable to any single cause; neither will criminal acts. Such events can be the result of a variety of causes. No single factor or etiology is likely to explain all similar criminal events (1993, 5–6).*

As the Brantinghams' have asserted, crime is an event. It is a behavior. Further, it is an event that is complex and varied. Theft and robbery are different. Assault and burglary are different. Attempting to find causal relationships between crime and any singular variable will often miss the vast array of competing influences that likely had some effect on the criminal event itself, although they may share certain things in common. Just as one crime is not comparable to another, the same is true

when comparing the places with which crime occur. Each jurisdiction is different, and it is only when these differences can be accounted for and understood that the crime/economy relationship can be unraveled.

Research has shown that upwards of 50 percent of all crime is concentrated within about 3 or 4 percent of a given city (Weisburd et al. 2004). Therefore, simply looking at the overall crime rate across the city may give a very skewed and unrealistic perception as to the crime problems within that city as a whole. "A number of very active crime areas within a larger geographic unit might for example give the impression of an overall crime-prone area, when in fact most of the places in the larger geographic unit have low levels of crime" (Weisburd, Bernasco, and Bruinsma 2009, 20). In the same way one crime type is not comparable to another, the same is true when analyzing causal affects across varying levels of analysis.

Take, for instance, a county. When analyzing crime such as burglary, at the county level, certain towns will be identified as problematic. In fact, a hot spot analysis map may indicate that the entire town is a hot spot of crime versus the rest of the county. However, when looking only at the town, it may be that the majority of incidents were on two or three blocks. At the town level, crime can be more accurately identified within smaller geographic areas.

Many of the problems related to the use of aggregate level data to explain the causes of crime do not disappear entirely with smaller units of analysis. For instance, many studies have examined crime patterns using much smaller geographic units, such as census blocks or street faces. However, when there is a high level of variability within an area being studied, even at very local levels of geography, there is the possibility that the true local area effects are masked or misconstrued.

It is difficult to determine the amount of time it takes before the economic changes can be said to have an effect on criminality.

We have established that there are a number of issues that inhibit one's ability to attribute a causal relationship between the economy and crime. Up to this point though, we have discussed the relationship assuming that the economic indicators act as independent variables, having an effect on crime rates. However, it is also possible that the inability to account for the causal direction between the two variables additionally influences findings, as crime is also likely to have an impact on local economies.

For example, broken windows argues that social disorder and a loss of collective efficacy creates fear of crime on the part of citizens, which can lead to even more crime and physical decay. These neighborhoods then become more vulnerable to frequent social disorder and criminal activity. Therefore, it may be that crime (or the perception of crime) may be driving people out of certain areas, which in effect can negatively affect local businesses, property values, and ultimately the socio-economic conditions of the area where the perceived disorder originated.

With the understanding that fear of crime and the direct costs associated with property crime may discourage home-buyers, a number of studies have examined the relationship between crime and changes in property value. In 1978, Thaler conducted a study in Rochester, New York, which

found that an increase in property crime by one standard deviation decreased property values by 3 percent. More recently, in 2001 Bowes and Ihlanfeldt found that an increase in crime per acre per year in census tracks in Atlanta caused a 3 percent reduction in housing prices. These finds suggest that, rather than the economy affecting crime, that crime rates can actually affect local economies.

The relationship between the economy and crime is complex and difficult to disentangle both in theory and in measurement. The causal relationship between the two is difficult to establish and to test and is likely very dependent on local circumstances. Similarly the relationship between police staffing levels and crime is not easily examined or explained.

The Relationship between Police and Crime Is Also Complex

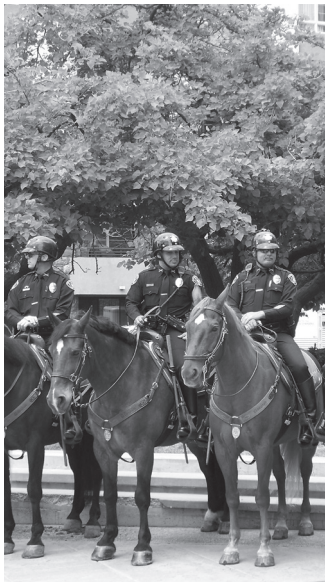
There are a number of reasons why some assume that increasing police staffing levels will inevitably lead to lower crime rates, including that police act as a deterrent, that they arrest prolific offenders (thus taking them off the streets), and that they are substantively involved in working with the community to develop solutions to crime and disorder problems. Others argue that there is little reason to suspect that the police have a measureable impact on crime, mainly because so much crime goes unreported to police, that only a small percentage of offenders are arrested, or because criminals are not entirely rational actors who are swayed by the presence of police. The reality is that existing evidence regarding the impact of police tells a much more nuanced story regarding what is a complex relationship.

Overall, early research found little relationship between increases in police presence and crime rates. However, more recent studies on this relationship—that addressed many of the methodological flaws in the older work—have found greater evidence in favor of the increases in the number of officers to impact crime rates. For example, Levitt (2004) estimates that increases in the number of law enforcement officers between 1991 and 2001 resulted in a 5–6 percent reduction in crime rates nationally. Levitt (2002) also examined changes in police staffing levels related to election cycles and crime rates. He found that in 122 large cities between 1975 and 1995 a 10 percent increase in the police force resulted in approximately a 5 percent decrease in crime. Marvell and Moody (1994) also found a substantial impact of police strength on crime, finding that each additional officer results in approximately 24 fewer crimes. More recently, Di Tella and Schargrodsky (2004) and Klick and Tabarrok (2005) demonstrated that increased police presence due to terrorist threats reduced crime in surrounding areas in two different cities.

Similarly, three major studies have examined the specific effect that the COPS hiring grant programs have on crime rates, all finding significant results. Zhao, Scheider, and Thurman (2002) examined 6,100 agencies between 1995 and 1999 and found that the COPS hiring and innovative

grant programs resulted in significant reductions in local crime rates in cities with populations over 10,000; demonstrating that each dollar of hiring grant funding per resident contributed to declines of 5.26 violent crimes and 21.63 property crimes per 100,000 population.

Another methodologically rigorous study from the U.S. Government Accountability Office (2005) (GAO) used data from 4,247 COPS funded agencies and concluded that after controlling for a wide range of other factors, the COPS hiring grants had a statistically significant negative impact on crime rates. For the years 1994 to 2001, the GAO found that crime rates reduced due to the COPS Office grant expenditures on officer hiring amounted to about 8 percent of the total decline in index crimes and 13 percent of the total decline in violent crimes from 1993 levels. Overall, they found that a 1 percent increase in the size of the police force decreased property crime by .25 percent and violent crime by 1 percent (GAO 2005). Evans and Owens (2007) also examined 2,074 COPS Office funded cities and found significant drops in crime in the years following receipt of a COPS hiring grant in five of seven index crimes (auto theft by 3.3 percent, burglary by 2.2 percent, robbery by 5 percent, homicides by 3.2 percent, aggravated assault by 3.6 percent).



It is clear that some level of police presence is necessary in order to maintain order, and evidence suggests that the size of the force does matter in the ability to control crime.

In addition, research that has examined instances where there is a complete absence of police—due to strikes, for example—has consistently shown that crime rates skyrocket in these situations (Sherman and Eck 2002). It is clear that some level of police presence is necessary in order to maintain order, and evidence suggests that the size of the force does matter in the ability to control crime at a macro level.

However, the more specific and timely questions we should be discussing are: (1) Does decreasing the number of existing officers result in increases in crime and, if so, what is the extent of this increase? (2) Is there a percentage of staffing decreases up to which a department can still maintain their effectiveness but beyond which law and order cannot be realistically controlled? These questions have taken on a sense of urgency in the current economy, as some departments have reduced their size by significant margins. For example, in the last 4 years, Flint, Michigan, has gone from over 250 officers to just 125. Stockton, California, saw a 25 percent drop in their force over 3 years. Camden, New Jersey, laid off nearly half of its police force in one day in 2009—effectively eliminating every employee with less than 14 years of service (COPS Office 2012).

A number of issues make these two questions difficult to answer in a global sense. There are three general challenges to establishing the relationship between policing and crime rates, as well as one specific to the current economic climate and our ability to tie force reductions to crime increases.

First, increases in police may produce reductions in crime; however, increasing crime may also result in jurisdictions increasing the number of police in response to it. This can produce a "simultaneity problem," in that it is difficult to determine which of the two variables influenced the other. Did more police cause a reduction in crime rates, or did increasing crime rates affect the number of police? Having an independent and dependent variable that can influence one another at the same

time makes determination of effects difficult to assess. Second, when comparing cities to one another, it may not be known if crime increases or changes in police staffing levels came first; a causal ordering problem. Third, measures of police staffing levels and crime rates are not always reliable, introducing an unknown measurement error (Eck and Maguire 2000).

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– Joshua Freeman, Flint (MI) city councilman

Lastly, we know from research that an increased police focus on a crime problem can actually lead to increased reporting, which in turn will make traditional measures of crime, such as the UCR that counts "incidents known to law enforcement," appear to spike despite the focused effort on reduction. For example, when states began to pass mandatory arrest laws for domestic violence in the early 1990s, a common by-product of the laws—which also helped raise awareness of the crime—was increased reporting to police, regardless of whether they made an arrest (Archer et al. 2002). In reality it is not that the number of incidents was increasing, it was simply that more were being made known to law enforcement and therefore tracked by crime statistics. This phenomenon sets a new baseline that will level off and eventually (if the police responses are effective) decline as incidents actually decline while reporting rates remain constant.

In cities with dramatic decreases in police staffing levels, the opposite may in fact occur. Do people even call to report crime to a police department that they know has experienced a dramatic cut in service levels? What about when agencies make public announcements about types of incidents they will no longer respond to? Flint councilman Joshua Freeman was recently quoted on his belief that the layoffs in his city have contributed to a sense of lawlessness. "I think that people in this city believe that there aren't any consequences for their actions, because the city doesn't have the resources to implement consequences" (Rudolf 2012). If the UCR can only capture crimes reported to law enforcement, what happens to the crime rate when citizens no longer believe there is anything to be gained by calling a police force they believe to be incapable of responding? Official crime statistics may in fact decrease even as the crime incidents increase.

More important than the findings on the influence of police strength on crime, however, is that research has consistently supported the conclusion that there is no one-size-fits-all solution to either preventing or responding to crime across communities and crime types. Crime is not evenly distributed across communities or even across neighborhoods within communities. For example, Spelman and Eck (1989) have estimated that 10 percent of the victims in the United States are involved in 40 percent of the victimizations, and 10 percent of the places are the sites of about 60 percent of the crimes.

The types of crime also vary significantly across communities, and the single most commonly used data set to compare crime rates is the FBI's UCR, which focuses on only seven crime types that, while serious, may completely miss the primary crime concerns expressed by citizens in a given community. In addition, crime—particularly violent crime—remains for the most part concentrated in poor, urban neighbor-

hoods and "it's deeply enmeshed with other hallmarks of poverty such as unemployment, substandard education and housing, and splintered families"(Rudolf 2012). Chronic poverty is not necessarily a predictor of crime, but violence is persistent in areas of deep economic distress. And it is in these areas of economic distress that we find police agencies with the sharpest declines in the number of officers and least able to deploy the types of policing that have been proven effective.

Because it is not just the number of officers that matter, it is what they do while on the job. Most research considers only the effects of generic changes in the size of a police force, and

> *thus do not account for the possibility that not only the absolute number but also the composition of the personnel changes may affect crime. For example, adding detectives may have different effects than adding patrol officers, as might adding management versus front-line personnel. (Heaton 2010)*

Garicano and Heaton (2010) have demonstrated that particular types of investments in personnel, such as the use of specialized units and the selection of educated personnel, can be associated with larger crime reductions in certain circumstances.

Also significant is the capacity of the officers to perform their jobs well, which goes beyond the skills and education they brought with them to the job or acquired in the academy. Capacity includes having the training, equipment, analytical resources, organizational support for problem solving and relationship building, and the time and experience needed to do those things well. Unfortunately, this is exactly the sort of capacity that is cut from agencies as a defense against reducing their staff. The Police Executive Research Foundation (PERF) found in their September 2010 survey of their membership that 68 percent of agencies had eliminated or reduced training, and 55 percent had eliminated or cut back plans to acquire new technology (PERF 2010). Reductions in training over time can lead to the sorts of mistakes on the job that lead to agencies being sued or officers injured and killed. Technology has the ability to be a significant force multiplier, but only if agencies are able to keep up with what is available and deploy it effectively.

The PERF survey also reported that more than half of the chiefs would eliminate civilian staff before reducing officers. However, eliminating civilian positions does not necessarily eliminate a task that needs be done. When civilians are let go, sworn personnel may be brought in off the streets to fill those jobs, leading to a functional reduction in the force even if all sworn staff remain employed. And reductions in the number of officers available, whether through sworn lay-offs or by redeployment to previously civilian jobs, will ultimately mean that less manpower hours can be devoted to policing, therefore affecting the delivery of police services. For some agencies this has meant issuing policies that eliminate responding to certain types of incidents, such as burglar alarms, non-injury vehicle accidents, and motor vehicle thefts (PERF 2010). For many others, this has meant losing the time available for proactive problem solving and building the community relationships necessary to be effective.

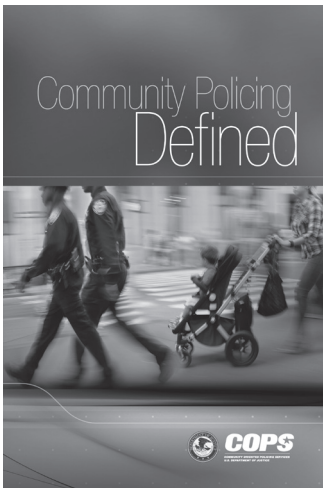
It is not just the number of officers that matter, it is what they do while on the job.

This matters because the level of impact that officers have on crime is also influenced by their capacity to understand and react to specific problems in focused ways in concert with the community. Research has confirmed that much of the effectiveness of police depends on the specific type of policing that they employ and the specific activities that they undertake. In perhaps the most comprehensive review to date, Sherman and Eck (2002) concluded that "the more focused the police strategy, the more likely it is to prevent crime" (321). As David Kennedy was recently quoted, "if you're committed to the wrong strategy, no number of cops will be good enough.…There turn out to be ways to get on the right side of the dynamics of violent crime without having an awful lot of people" (Rudolf 2012).

Policing *Quality* Is What Will Mitigate the Effects of This New Economy

Research has shown that some policing strategies are more effective than others at reducing crime and producing other positive outcomes for communities. Not surprisingly, we believe that the community policing philosophy provides the best currently available overarching approach to guide these activities. The COPS Office defines community policing as:

> *A philosophy that promotes organizational strategies, which support the systematic use of partnerships and problem solving techniques, to proactively address the immediate conditions that give rise to public safety issues, such as crime, social disorder, and fear of crime.*



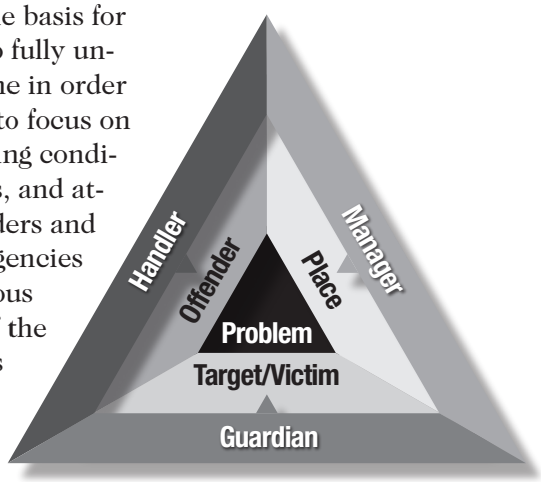
▲ Above, the COPS Office publication *Community Policing Defined.*

Despite repeated efforts, it appears there continues to be widespread misunderstanding regarding the nature and scope of community policing and how it is implemented in practice. In some respects, community policing has become a victim of its own success, as widespread adoption has lead to widely varying levels of understanding regarding the implementation of its central tenets. We encourage readers to examine the COPS publication *Community Policing Defined*, which describes the philosophy in detail. Instead of reiterating this, we will focus on more specific crime control approaches stemming from the philosophy.

In order to be most effective at reducing crime, it is critical that police first develop a nuanced understanding of the nature of their specific crime and public safety problems. As discussed earlier, although they share certain things in common, not all crimes or public safety problems are created equally, nor do they manifest themselves in the same way across locations. It is important that police invest in clearly specifying the crime problems that they are seeking to address and define them in their proper scope. For example, robbery of tourists is likely a different phenomenon compared to convenience store robberies, or burglaries of single family homes compared to burglaries of businesses.

To be most effective, after clearly identifying a specific public safety problem, agencies should identify certain common elements. Specifically, agencies should seek to better understand the nature of all six

aspects of the crime triangle: offenders and their handlers, victims and their guardians, and places and their managers. This analysis doesn't necessarily need to be overly complex in order to serve as the basis for the generation of effective solutions. Agencies do not need to fully understand the often complex "causal" factors that lead to crime in order to be most effective. Rather, agencies should be encouraged to focus on developing a better understanding of the immediate underlying conditions that are present that give rise to public safety problems, and attempt to increase the perceived risk on the part of the offenders and reduce the attractiveness of specific targets and locations. Agencies should focus their efforts on the presence or absence of various opportunities for crime and the convergence of all aspects of the crime triangle. Although agencies should consider all aspects of the triangle, they only need to reduce the presence of a single aspect of it in order to reduce the likelihood of incidents occurring.



Six Aspects of the Crime Triangle

Eck, John E. 2003. "Police Problems: The Complexity of Problem Theory, Research and Evaluation." In Johannes Knutsson, ed. *Problem-Oriented Policing: From Innovation to Mainstream.* Crime Prevention Studies, vol. 15. pp. 79–114. Monsey, New York: Criminal Justice Press and Devon, U.K.: Willan Publishing.

It is also likely that in their examination of the nature of the problem, agencies will discover that the majority of their crime and public safety problems are committed by a relatively limited number of prolific offenders, targeting the same repeat victims, in a very limited number of geographic locations. The evidence on the concentrated nature of offending is persuasive, as well as the effectiveness of tailored approaches to address them. This concentrated and focused use of police is particularly important in times of declining resources.

In addition to tailoring responses to specific circumstances, responses that take a comprehensive and multi-faceted approach to problems tend to be most effective. While arrests (particularly those targeting prolific offenders) will likely be a part of the solution to any crime problem, it is unlikely that arrests in and of themselves will be sufficient to produce long term crime reductions. Agencies are encouraged to examine responses that address all aspects of the problem—typically involving some efforts at prevention and intervention in addition to targeted enforcement efforts. Using focused deterrence messages—that is, providing offenders with clear incentives for compliance and communicating and following through on clear consequences for non-compliance—have also been shown to be effective to violence reduction strategies in particular.

Many complex public safety problems are often beyond the ability of police resources to address alone. Therefore, we encourage the development of partnerships with specific stakeholders who have their own resources that they can bring to bear on the public safety issues. It is important that stakeholders have a vested interest in solving the problems themselves and have a high level of motivation for involvement. To be most effective, agencies should be strategic in who they "invite to the table" to be a part of any solutions. For most public safety problems/issues, having individuals from different segments of society (business community, faith based organizations, private security, active citizen groups, etc.) can act as dramatic force multipliers in the development of comprehensive approaches. Again, as police resources shrink, the collaborative problem-solving model that calls upon others to take central roles (and bring real resources to bear) in public safety is more critical than ever.

A particularly important partnership that is all too often underutilized is between law enforcement agencies and academic researchers. An example of this kind of collaborative effort can be seen in Philadelphia, Pennsylvania's SMART Policing Initiative funded under the Department of Justice's Bureau of Justice Statistics. The Philadelphia police department partnered with researchers at Temple University to study the effects of foot patrol on crime. Since the 1980s the common belief was that while police foot patrols could improve a community's perception of the police and reduce fear of crime, they didn't actually have an effect on crime itself. However, through this partnership, Philadelphia PD and the researchers were able to develop a randomized controlled experiment using 250 officers patrolling 60 violent crime locations, measuring the difference in outcomes between comparable areas that received different policing styles. As it turned out, after 3 months, violent crime in the areas that received increased foot patrol decreased by 23 percent when compared to the areas that did not. Further, the research team is working to analyze information from the experiment in order to determine what factors contributed to the reduction in crime, and identify both the strategies the officers used and policing styles that yielded positive results. These findings will help to inform future police executive practice and patrol management. The results from the Philadelphia Foot Patrol Experiment illustrates the ways in which law enforcement's partnerships with academia could be very important, particularly as new means of police service delivery are identified (Ratcliffe et al. 2011).

Despite repeated efforts, there appears to continue to be widespread misunderstanding regarding the nature and scope of community policing and how it is implemented in practice.

In addition to developing new focused collaborative ways to address crime problems, we encourage agencies to think critically about the use of resources regarding police duties and responsibilities less directly tied to public safety. For example, developing easier report taking mechanisms such as through on-line reporting systems or the use of volunteers to take police reports can result in dramatic time savings for officers. In addition, agencies should think critically about their emergency response and call prioritization. Rapid response sometimes leads to the apprehension of suspects and is warranted in true emergency situations, however, research has shown that decreases in response times typically do not result in increases in arrests or decreases in crime. In addition, agencies should carefully examine their routine random patrol, which has been shown to have limited effectiveness in the literature, keeping in mind that random patrol should be considered as part of broader crime reduction (hot spot focused) or fear reduction strategies.

Conclusion

It is difficult to reliably demonstrate a causal relationship between the economy, the number of police, and crime, and attempts to focus on those relationships run the risk of missing the true value that police can bring to our communities—which cannot simply be measured through crime rates alone. The challenges in understanding these multi-directional relationships only expand for attempting to look at them on a national level; public safety is an inherently local condition. The health of the economy will likely always have both direct and indirect effects on crime and safety, but to differing extents across communities and neighborhoods.

This report does not represent a comprehensive review of all that is known about the interplay of economic conditions, police operations, and the impact of both on crime, but it does highlight some of the most important things we do, and do not, understand. And what is ultimately most important is that community members recognize and value the myriad benefits police can bring to their community beyond enforcing the laws, particularly when the police bring a belief in the benefits of collaborative problem solving to the way they do business. It is the communities who focus on the quality of the police services, rather than just the quantity, that will be best positioned to weather any economic storm.

As police resources shrink, the collaborative problem-solving model that calls upon others to take up central roles… in public safety is more critical than ever.

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Many agencies have recently experienced budget constrictions resulting in significant reductions in staffing levels. In every corner of the United States agencies are being forced to lay off sworn and civilian staff members. Many believe that at some point it is likely that these troubling trends will begin to impact public safety—if they haven't already.

While a logical presumption, it is difficult to reliably demonstrate a causal relationship between the economy and crime, the number of police and crime, or the effects of police budgets on crime. This report intends to provide insight into the complexities that exist. By understanding how and why many common measures are inadequate, officials will be better prepared when faced with difficult questions regarding resource allocation, crime prevention strategies, and the development of sustainable plans to facilitate the highest levels of public safety.

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