

**What is Known about the Effectiveness of Police Practices?**

Cody W. Telep  
George Mason University

David Weisburd  
Hebrew University and George Mason University

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## **Introduction**

Over the past two decades there have been a number of reviews of the policing evaluation literature focused on the question of what police can do to most effectively address crime and disorder. The 1997 Maryland report to Congress on “What works, what doesn’t, what’s promising” devoted a chapter to police effectiveness (Sherman, 1997), as did the 2002 book version of the report (Sherman & Eck, 2002). Founded in 2000, the Campbell Collaboration Crime and Justice Coordinating Group (see [http://campbellcollaboration.org/crime\\_and\\_justice](http://campbellcollaboration.org/crime_and_justice); Farrington & Petrosino, 2001) has now published over 25 systematic reviews on a variety of criminal justice topics, many of which are relevant to the question of what works in policing. The National Research Council Committee to Review Research on Police Policy and Practices published a 2004 volume on the policing literature, devoting a chapter to police strategies to reduce crime, disorder, and fear of crime (see also Weisburd & Eck, 2004). More recently, Lum and colleagues (2011) have developed the Evidence-Based Policing Matrix (see <http://policingmatrix.org>) to display visually the characteristics and results of the most rigorous police evaluation research. The Office of Justice Programs in the Department of Justice also recently launched a new online initiative (see <http://crimesolutions.gov>) to highlight what programs in law enforcement (and criminal justice more generally) are effective and promising.

Our goal in this paper is not to simply replicate what has already been accomplished in these prior chapters and articles, although we will devote space to reviewing the collective wisdom from these earlier reviews. Instead, we hope to build upon and synthesize these reviews to categorize strategies and tactics based on what police should be doing, what they should not be doing, and what we know too little about to make informed recommendations. Additionally, based on the limited available data, we will discuss how current policing policies and practices

match up with effective practices from the research literature. That is, are police doing what they should be doing? In doing so, we will pay particular attention to the strategies and tactics of the New York City Police Department (NYPD) and assess how well these line up with empirical evidence on police effectiveness in addressing crime and disorder.

We will first briefly review the sources of research evidence we consulted for this review. We then turn to our review of what police should be doing, what police should not be doing, and what we currently know too little about (but which police are currently engaging in). We cover a broad span of police strategies, focusing in particular on a number of innovations in policing that have developed over the past 20 to 30 years (see Weisburd & Braga, 2006). After reviewing the research evidence, we discuss the implications for policing and compare what we know about what strategies police are currently using to what we know is most effective, focusing in particular on strategies in the NYPD.

### **Sources for the Review**

We consulted a number of sources and previous reviews of the policing literature to develop our assessments of what the police should and should not be doing. As noted above, these included the Maryland report chapter on policing (Sherman, 1997; Sherman & Eck, 2002), the NRC (2004; see also Weisburd & Eck, 2004) report on police policy and practices, the Evidence-Based Policing Matrix (Lum et al., 2011) and the Office of Justice Programs' Crimesolutions.gov website. Additionally we reviewed all Campbell Collaboration systematic reviews concerning policing and law enforcement. These include reviews on the effectiveness of police strategies to reduce gun carrying (Koper & Mayo-Wilson, 2006), hot spots policing (Braga, 2007), drug law enforcement (Mazerolle et al., 2007), problem-oriented policing

(Weisburd et al., 2008), second responders for domestic violence (Davis et al., 2008), neighborhood watch (Bennett et al., 2008), and focused deterrence strategies (e.g. pulling levers approaches) (Braga & Weisburd, forth.). We also examined additional prior reviews of the policing effectiveness literature. These included Sherman's (1992a) chapter on police efforts to reduce crime, Eck and Maguire's (2000) chapter on the relevance of policing strategies for explaining the crime drop of the 1990s, Farrington and Welsh's (2005) analysis of experiments in policing (and crime prevention more generally), and Braga and Weisburd's (2007) review of police innovation and crime prevention (see also Weisburd & Braga, 2006).

We were more limited in the resources available to assess what police are currently doing. We relied primarily on the 2007 Law Enforcement Management and Statistics (LEMAS) data collected by the Bureau of Justice Statistics (Reaves, 2010), while also making use of survey data from the Police Executive Research Forum (PERF) on policing strategies related to hot spots (PERF, 2008). We used these multiple reviews and data sources to categorize policing strategies into those that we believe police should be engaging in, those they should not be using, and those about which we currently know too little to make firm recommendations. We discuss each of these areas in detail below.

### **What Should Police be Doing?**

We devote the most attention to perhaps the most important questions of our review. What strategies are most successful, and how should police implement them? We point to a number of successful programs and strategies below that show strong evidence of effectiveness in addressing crime and disorder problems. Although the evaluation literature is often more focused on the question of "does it work?" we provide, as much as possible, relevant information

on what police agencies should actually be doing to implement these different strategies. For example, as we discuss more below, hot spots policing is effective in reducing crime and disorder, but police agencies also need to know what exactly officers should be doing at crime hot spots. Thus we discuss both what works and how police can best adopt what works.

### *Hot spots policing*

The evidence base for hot spots policing is particularly strong, making it a logical place to start in a discussion of what police should be doing. As the NRC (2004: 250) review of police effectiveness noted “...studies that focused police resources on crime hot spots provided the strongest collective evidence of police effectiveness that is now available.” The Braga (2007) Campbell systematic review came to a similar conclusion; although not every hot spots study has shown statistically significant findings (seven of the nine studies included in the Braga review showed significant results), the vast majority of such studies have, suggesting that when police focus in on small geographic areas that experience crime and disorder problems, they can have a significant beneficial impact on crime in these areas. Analyses tend to show that 50 percent of calls or incidents are concentrated in less than five percent of places (e.g. addresses or street segments) in a city (Pierce et al., 1986; Sherman et al., 1989; Weisburd et al., 2004). Moreover, analyses in Seattle suggest there is often street-by-street heterogeneity in crime at the street segment level (Groff et al., 2010). That is, even in “bad” neighborhoods or “bad” beats, there are often many streets that are completely free of crime. The action of crime is often at the street and not the neighborhood level. Thus, police can target a sizable proportion of citywide crime by focusing in on a small number of places (see Weisburd & Telep, 2010).

In Braga’s (2005, 2007) meta-analysis of experimental studies, he found an overall moderate mean effect size, suggesting a significant benefit of the hot spots approach in treatment

compared to control areas. As Braga (2007: 18) concluded “extant evaluation research seems to provide fairly robust evidence that hot spots policing is an effective crime prevention strategy.” Importantly, there was little or no evidence to suggest that spatial displacement was a major concern in hot spots interventions. That is, crime did not simply shift from hot spots to nearby areas (see also Weisburd et al., 2006). Indeed, a more likely outcome of such interventions was a diffusion of crime control benefits (Clarke & Weisburd, 1994) in which areas surrounding the target hot spots also showed a crime and disorder decrease. Braga is currently updating the review to include more recent studies and updated effect size calculations.

The evidence for hot spots policing is particularly persuasive because it draws from a series of randomized field trials (Braga, 2005), a rarity in policing research. The first of these, the Minneapolis Hot Spots Patrol Experiment (Sherman & Weisburd, 1995), used computerized mapping of crime calls to identify 110 hot spots of roughly street-block length. Police patrol was doubled on average for the experimental sites over a ten-month period. The study found that the experimental as compared with the control hot spots experienced statistically significant reductions in crime calls and observed disorder. More general crime and disorder effects are also reported in four other randomized controlled experiments that tested a more tailored, problem-oriented approach to dealing with crime hot spots (see more below on problem-oriented policing). In the Jersey City Problem-Oriented Policing in Violent Places experiment (Braga et al., 1999), strong statistically significant reductions in total crime incidents and total crime calls were found in the treatment hot spots relative to the control hot spots. In the Jersey City Drug Market Analysis Program experiment (Weisburd & Green, 1995), a step-wise problem solving model was found to be more effective at reducing disorder at drug hot spots than generalized enforcement. In the Oakland Beat Health study, Mazerolle and colleagues (2000) also reported

strong reductions in crime and disorder in an evaluation of civil remedy interventions at high drug crime addresses and blocks. In Lowell, Massachusetts, a problem-oriented policing intervention to address disorder was associated with a statistically significant 20 percent reduction in crime and disorder calls for service at the treatment hot spots compared to the control hot spots (Braga & Bond, 2008). Systematic observations confirmed the official crime data results, showing significant reductions in social and physical disorder at the treatment places relative to the control places.

### What should police be doing at crime hot spots?

While the evidence on the effectiveness of hot spots policing is persuasive, there still remains the question of what specifically police officers should be doing at hot spots to most effectively reduce crime. The literature thus far has not provided the same level of guidance. As Braga (2007: 19) notes “Unfortunately, the results of this review provide criminal justice policy makers and practitioners with little insight on what types of policing strategies are most preferable in controlling crime hot spots.” Thus the discussion below will be more tentative than the overall conclusion that hot spots policing is effective in reducing in crime and disorder. Nonetheless, the existing literature does shed some light on what police should be doing to more effectively and efficiently address crime hot spots.

The initial hot spots study in Minneapolis suggested that increased police presence alone leads to some crime and disorder reduction (Sherman & Weisburd, 1995). Officers in Minneapolis were not given specific instructions on what activities to engage in while present in hot spots. They simply were told to increase patrol time in the treatment hot spots, and the activities they engaged in ranged a good deal from more proactive problem solving efforts to simply sitting in the car parked in the center of a hot spot street segment. Despite the more

general approach, the experiment still showed a significant crime control benefit. While the study did not include a systematic examination of officer activities in the hot spots, subsequent analyses by Koper (1995) do provide some insight into how much time officers should be spending in hot spots to maximize residual deterrence. Using survival analysis techniques, he found that each additional minute of time officers spent in a hot spot increased survival time by 23 percent. Survival time here refers to the amount of time after officers departed a hot spot before disorderly activity occurred. Ten minutes was a critical threshold; at that point the residual deterrence benefits were greater than an officer simply driving through the hot spot. The ideal deal time spent in the hot spot was 14 to 15 minutes; after about 15 minutes, there were diminishing returns and increased time did not lead to greater improvements in residual deterrence. This phenomenon is often referred to as the “Koper curve” as graphing the duration response curve shows the benefits of increased officer time spent in the hot spot until a plateau point is reached at around 15 minutes (see Koper, 1995, Figure 1). As Koper (1995: 668) notes “police can maximize crime and disorder reduction at hot spots by making proactive, medium-length stops at these locations on a random, intermittent basis in a manner similar to Sherman’s (1990) crackdown-backoff rotation strategy.” Both Koper (1995) and Sherman (1990) argue for an approach in which police travel between hot spots, spending about 15 minutes in each hot spot to maximize residual deterrence, and moving from hot spot to hot spot in an unpredictable order, so that potential offenders recognize a greater cost of offending in these areas because police enforcement could increase at any moment (see also Sherman, 2009).

While Koper’s (1995) analyses have been influential in agency efforts to implement hot spots policing,<sup>1</sup> only recently have his specific recommendations been applied in the design of a

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<sup>1</sup> See, for example, Deputy Chief Hassan Aden’s (Alexandria, Virginia Police Department) statement about evidence-based policing at: <http://gemini.gmu.edu/cebcp/HallofFame/Aden.html>



hot spots policing experiment. The Sacramento Police Department recently undertook a three month hot spots randomized experiment, led by Sgt. Renee Mitchell.<sup>2</sup> Officers were explicitly instructed to rotate between treatment group hot spots and to spend about 15 minutes in each hot spot and initial results suggest strong adherence with experimental protocols. The study was also noteworthy in that the department and Sgt. Mitchell ran the trial without any outside funding and with only limited consultation with researchers. Initial results suggest the Koper (1995) approach to hot spots policing had a significant impact on crime. Treatment group hot spots had significantly fewer calls for service and Part I crime incidents than control group hot spots when comparing the three month period of the experiment in 2011 to the same period in 2010. On average, each treatment hot spot had a decline of 3.57 calls for service, compared to an increase of 4.43 calls in the control hot spots (Mitchell, Telep, & Weisburd, in progress).

The Braga and Bond (2008) experiment in Lowell also included a mediation analysis to assess which hot spots strategies were most effective in reducing crime. Results suggested that situational prevention strategies (see Clarke, 1983, 1995) had the strongest impact on crime and disorder. Situational strategies are concerned with the physical, organizational, and social environments that make crime possible, and they focus on efforts to disrupt situational dynamics that allow crime to occur by, for example, increasing risks or effort for potential offenders or reducing the attractiveness of potential targets. Such approaches are often a prominent part of hot spots interventions, particularly those involving problem solving (see more below) and include things like securing lots, razing abandoned buildings, and cleaning up graffiti. Increases in misdemeanor arrests made some contribution to the crime control gains in the treatment hot spots, but were not as influential as the situational efforts. Social service interventions did not

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<sup>2</sup> The experiment received fairly extensive press coverage in Sacramento when it was announced. The *Sacramento Bee* article is available at: <http://www.sacbee.com/2011/02/13/3398667/sacramento-tests-hot-spot-policing.html>

have a significant impact on crime and disorder. These findings suggest not only the importance of situational crime prevention as a strategy for addressing crime facilitators in hot spots, but also that aggressive order maintenance through increases in misdemeanor arrests may not be the most effective way of addressing high disorder places. We discuss later the potential negative consequences of intensive enforcement in the form of decreased perceptions of police legitimacy (see Braga & Weisburd, 2010). We also discuss this issue more later in the context of New York City, but we note here that even if arrest is one means of reducing crime in hot spots, the findings of Braga and Bond (2008) imply it is certainly not the only (or most effective) way, suggesting the need to develop more multi-faceted approaches to dealing with high crime areas.

An additional promising approach for dealing with crime hot spots is having officers incorporate principles from problem-oriented policing. We discuss problem-oriented policing more below, but note here the results of an important recent experimental study in Jacksonville, Florida (Taylor et al., 2011). This study was the first to compare different hot spot treatments in the same study with one treatment group receiving a more standard saturation patrol response and the second receiving a problem-oriented response that focused on officers analyzing problems in the hot spot and responding with a more tailored solution. Results showed a decrease in crime (though not a statistically significant decrease) in the saturation patrol hot spots, but this decrease lasted only during the intervention period and disappeared quickly thereafter. In the problem-oriented policing hot spots, there was no significant crime decline during the intervention period, but in the 90 days after the experiment, street violence declined by 33 percent (a statistically significant decline). These results offer the first experimental evidence suggesting that problem-oriented approaches to dealing with crime hot spots may be more effective than simply increasing patrols in high crime areas. They also suggest that

problem solving approaches may take more time to show beneficial results, but any successes that come from a problem-oriented framework may be more long-lasting in nature. Unfortunately, the follow-up period in the study is only 90 days, making it difficult to assess long term effects of the hot spots treatment, a problem in nearly all hot spots studies and policing intervention studies more generally.

Braga and Weisburd (2010) detail the desirability of problem-oriented policing as a strategy for long-term crime reduction in chronic hot spots. They recognize that even when agencies use problem solving approaches, they often tend to prioritize more traditional, enforcement-oriented responses (see more below). Drawing upon the results of Braga and Bond (2008) and other hot spots studies, they argue that “situational” problem-oriented policing is not only more innovative but also more likely to produce significant crime control benefits. As they conclude “based on the available empirical evidence, we believe that police departments should strive to develop situational prevention strategies to deal with crime hot spots. Careful analyses of crime problems at crime hot spots seem likely to yield prevention strategies that will be well positioned to change the situations and dynamics that cause crime to cluster at specific locations” (Braga & Weisburd, 2010: 182-183). We revisit this issue below and discuss potential problems agencies face in moving towards the use of more innovative approaches to tackle crime hot spots.

Effective hot spots policing also requires that police devote sufficient resources to crime mapping and crime analysis, so that timely data on hot spots are easily available to officers. While research suggests that high crime areas remain hot over time when examining year-to-year trends in crime incidents (Weisburd et al., 2004), police cannot necessarily rely on annual data in making day-to-day deployment decisions. The temporal dimension of crime concentration in hot

spots has not received the same level of attention as the spatial dimension (see Ratcliffe, 2002; Townsley, 2008: 62). Police agencies must find a balance between targeting areas that have shown some stability in crime rates over time, while also allowing for flexibility in shifting resources when data suggest the movement of hot spots or the emergence of new hot spots. These ideas are central in the new focus on predictive policing in many agencies.<sup>3</sup> Predictive policing, in fact, takes these ideas a step further by trying to identify hot spots before they emerge through careful crime analysis. To date, the effectiveness of predictive policing has not been rigorously assessed, but its focus on trying to allocate police resources to high crime areas in a timely manner fits in well with much of the hot spots policing literature.

Finally, we briefly discuss here the prospects of applying principles from the correctional treatment literature to dealing with crime hot spots. The risk-needs-responsivity model (RNR) of correctional treatment argues that treatment resources should be focused on high risk clients, should address criminogenic risk factors, and should be responsive to the client's specific needs while generally focusing on effective cognitive-behavioral principles (Andrews & Bonta, 2010; Andrews et al., 1990). While these principles do not necessarily apply directly to policing, in combination with recent research on crime and place in Seattle, they can help inform crime control strategies. First, the risk principle applies quite clearly to policing tactics. Police should be directing their resources at the highest risk clients, in other words chronic crime hot spots.

The need principle is a bit trickier; what are the criminogenic needs of places that need to be addressed? Recent research by Weisburd and colleagues (forth.) provides new insights into the key risk factors that help explain whether places become hot spots or not. Weisburd et al. (forth.) combined 16 years of data on crime incidents geocoded to street segments with an array

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<sup>3</sup> See <http://www.nij.gov/topics/law-enforcement/strategies/predictive-policing/symposium/> for more on the recent National Institute of Justice conference on predictive policing.

of data on characteristics of these streets. While we do not have the space to review all of the findings from their study here, they overall find that social and opportunity factors are very highly concentrated at the street block level, and these concentrations are generally very closely linked to concentrations of crime. This suggests that certain factors may contribute to street segments remaining hot spots of crime over time, and hence could be viewed as criminogenic risk factors for a street becoming (and remaining) a crime hot spot.

Some of these factors are easier for the police to address than others. For example, the number of employees working on a block is a strong predictor of a street segment being a chronic hot spot. While the police have little control over the number of people working on a block, they can control the level of guardianship they provide on each block and how they approach the potential crime attractors and generators on each block (e.g. working to install CCTV in parking areas on streets with many employees to reduce car break-ins; see Brantingham & Brantingham, 1995). Low levels of collective efficacy (see Sampson et al., 1997), measured by active voter rates on the block, were also a strong predictor of a street segment being a crime hot spot. Weisburd and colleagues (forth.) argue that the police alone may not be able to raise levels of collective efficacy, but the police can play some role in increasing levels of social cohesion and trust on blocks. Police may be able to have a more direct impact on the activities of high risk juveniles (defined as those with high rates of truancy and poor school performance). Higher numbers of high risk juveniles on a block substantially increased the likelihood a street would be a chronic hot spot. Increased enforcement from police could reduce levels of truancy and limit the amount time these juveniles spend on their street unsupervised.

Finally, the responsivity principle in the context of crime hot spots suggests the need to systematically assess the conditions of hot spots to better tailor intervention approaches. This is exactly in line with the problem-oriented approach discussed above and described in more detail below. Our knowledge of hot spots may not yet be advanced enough to argue, as is done in the correctional literature with cognitive-behavioral approaches (see Andrews & Bonta, 2010), that there is a single appropriate framework for hot spots treatments, although the studies above suggest the general effectiveness of problem solving and situational approaches. Further study of interventions in crime hot spots could eventually lead to the creation of risk assessment tools, already used quite commonly in correctional interventions, designed specifically for places (see Sherman, 1998). These risk and need assessments could not only help guide police interventions, but also help suggest relevant agencies and groups for the police to partner with to appropriately address a hot spot's criminogenic needs.

### *Problem-oriented policing*

Problem-oriented policing (POP) was described above as a frequent strategy in hot spots interventions, but the problem-oriented framework can be applied to an array of different geographic units (or even individual offenders) and types of problems. Herman Goldstein (1979) originally advocated for a paradigm shift in policing that would replace the primarily reactive, incident driven "standard model of policing" (see below; Weisburd & Eck, 2004) with a model that required the police to be proactive in identifying underlying problems that could be targeted to alleviate crime and disorder at their roots. He termed this new approach "problem-oriented policing" (POP) to accentuate its call for police to focus on problems and not on the everyday management of police agencies. Goldstein also expanded the traditional mandate of policing

beyond crime and law enforcement. He argued that the police had to deal with an array of problems in the community, including not only crime but also social and physical disorders.

Goldstein's model was elaborated and extended by John Eck and William Spelman (1987) who drew upon Goldstein's idea to create a straightforward model for implementing POP, which has become widely accepted. In an application of problem solving in Newport News, in which Goldstein acted as a consultant, they developed the SARA model for problem solving. SARA is an acronym representing four steps they suggest police should follow when implementing problem-oriented policing. "Scanning" is the first step, and involves the police identifying and prioritizing potential problems in their jurisdiction. After potential problems have been identified, the next step is "Analysis." This involves the police thoroughly analyzing the identified problem(s) using a variety of data sources so that appropriate responses can be developed. The third step, "Response," has the police developing and implementing interventions designed to solve the problem(s). Finally, once the response has been administered, the final step is "Assessment" which involves assessing the impact of the response.

Weisburd and colleagues (2010) conducted a Campbell review on the effects of POP (i.e. studies that followed the SARA model) on crime and disorder, finding a modest but statistically significant impact among 10 experimental and quasi-experimental studies. It should be noted though that some of the studies in this review that showed smaller effects (or backfire effects) experienced implementation issues that threatened treatment fidelity. The more successfully implemented studies tended to show stronger effects. Additionally, Weisburd et al. (2010) also collected less rigorous but more numerous pre/post studies without a comparison group. While the internal validity of these studies is weaker than those in the main analysis, these studies are notable in the remarkable consistency of positive findings. Weisburd et al. (2010: 164) conclude

that “POP as an approach has significant promise to ameliorate crime and disorder problems broadly defined.”

### How should police be implementing problem-oriented policing?

As the Weisburd et al. (2010) review notes, problem-oriented policing covers a broad array of responses to a wide range of problems and our evidence base of rigorous studies remains quite limited. This makes it difficult to give specific recommendations as to how police agencies should deal with certain types of problems. Goldstein’s (1979) notion of problem-oriented policing, however, was not designed to provide agencies with specific ways of handling problems. Indeed, Goldstein (1979, 1990) rejected such one-size fits all tactics that had been typical in the reform era of policing (see discussion later). Essential to problem-oriented policing is the careful analysis of problems to design tailor-made solutions. That is not to say that more rigorous research in this area would be unhelpful. While individualized solutions are important, it is also the case that police agencies across the U.S. often face very similar types of problems that may respond to similar types of solutions. The Center for Problem-Oriented Policing (<http://www.popcenter.org>) has recognized this, creating over 60 problem-specific guides for police that provide recommendations on how agencies can tackle a number of different problems ranging from abandoned cars to street robbery. These guides would likely benefit from additional rigorous evaluations of problem-oriented policing interventions covering a range of problems.

In their Campbell review, Weisburd and colleagues (2008) do provide some limited guidance on the types of problem-oriented policing interventions that seem to be most effective. First, and as noted earlier, hot spots policing interventions that use problem-oriented policing



have shown particularly successful results. In such studies, it is difficult to disentangle whether problem solving or the focus on small geographic areas is driving the success, but the two strategies seem to work quite well in concert. Second, problem-oriented policing appears most effective when police departments are on board and fully committed to the tenets of problem-oriented policing. In Stone's (1993) problem-oriented policing project in Atlanta public housing for example, the program suffered greatly because the Atlanta Police Department was not fully committed to problem-oriented policing. Third, program expectations must be realistic. Officer caseload must be kept to a manageable level and police should not be expected to tackle major problems in a short period of time. In the Minneapolis Repeat Call Address Policing (RECAP) study (Sherman et al., 1989), for example, officers were overwhelmed by dealing with more than 200 problem addresses in a 12-month period. Conversely, Braga and colleagues (1999) gave officers a more manageable 12 hot spot caseload in the Jersey City experiment, and officers were more effective in implementing the response. Fourth, based on limited evidence, collaboration with outside criminal justice agencies appears to be an effective approach in problem-oriented policing. The two probationer-police partnerships included in the review (Knoxville Police Department, 2002; Thomas, 1998) were particularly successful in reducing recidivism.

In terms of using the SARA model to guide problem-oriented policing, Braga and Weisburd (2006) note that police agencies typically fail to conduct the in-depth problem-analysis advocated by Goldstein (1990). Indeed they often engage in a form of "shallow problem solving" that involves only peripheral analysis of crime data and a largely law enforcement-oriented response (see also Cordner & Biebel, 2005). While we do not want to advocate shallow adherence to the SARA model, the evidence cited here suggests that even shallow problem analysis is effective in reducing crime and disorder. This also suggests that if police were to

more closely follow the SARA model and expand their repertoire of responses beyond traditional law enforcement they might enjoy even greater crime control benefits from problem-oriented policing. The assessment phase in SARA also tends to be a weak area for many police agencies, but one that is incredibly important to inform police practice. As Sherman (1998) notes, evidence-based policing involves not only police using strategies and tactics shown to be effective, but also agencies constantly evaluating their practices. The assessment phase of the SARA model provides a framework for agencies to consistently learn from and improve their problem solving projects.

*Pulling levers (focused deterrence strategies)*

A recent systematic review of focused deterrence strategies by Braga and Weisburd (forth.) suggests these strategies have significant positive impacts on crime, particularly violent crime. The overall idea of such approaches is that police can increase the certainty, swiftness, and severity of punishment in a number of innovative ways, often by directly interacting with offenders and potential offenders and communicating clear incentives for compliance and clear consequences for criminal activity (Kennedy, 2009). While Braga and Weisburd review a number of different focused deterrence interventions, many of these strategies employ the “pulling levers” framework popularized in Boston with Operation Ceasefire (Braga et al., 2001) in which gangs were notified that violence would no longer be tolerated and if violence did occur, every available legal lever would be pulled to bring an immediate and certain harsh response. Pulling levers approaches have generally been targeted at gang and gun violence and have often been a component of interventions funded under Project Safe Neighborhoods (McGarrell et al., 2010).

While Operation Ceasefire was associated with significant declines in young adult homicide in Boston, the lack of a randomized controlled design raises significant questions regarding the validity of the findings. Because the intervention was citywide, there was no comparison group. Braga et al. (2001) did find the crime decline in Boston was unique when compared to other major U.S. cities and other cities in Massachusetts. Both the NRC (2004) report on policing and the NRC (2005) report on research related to firearms noted that Operation Ceasefire and similar studies in other cities seemed promising, but these reports also argued the evidence base was too small to reach firm conclusions. Importantly, the Braga and Weisburd (forth.) review included 11 eligible studies in the main analysis (10 focused on policing), nine of which were published after the two NRC reports were released, indicating this is an area where the evidence base has grown quickly. This remains, however, an area of study without any randomized experiments specifically focused on policing. Randomized designs are more difficult here than in other police interventions, such as hot spots, because focused deterrence strategies often are implemented citywide, making it difficult to come up with a sufficient number of units (i.e. cities) that can be randomized. Keeping in mind this methodological limitation, the Braga and Weisburd (forth.) results overall suggest strong positive findings for focused deterrence approaches. Ten of the 11 eligible studies showed significant positive impacts on crime.

#### What should police be doing in focused deterrence approaches?

As Braga and Weisburd (forth.) note, focused deterrence strategies are a subgroup of problem-oriented policing interventions and as a result, exact strategies should vary by city and be tailored to the specific gang and gun crime problems a jurisdiction faces. In other words, it is important for agencies to not simply copy exactly what was done in Boston in Operation

Ceasefire (Braga, 2008). The framework used in Boston is useful, but the same tactics and strategies may not be appropriate across jurisdictions. It is more important that the police (if they are taking the lead in developing such a strategy) focus on developing a working group of representatives from various governmental and social service agencies and conduct a careful analysis to assess underlying issues and tailor strategies to the dynamics of the local gang and/or gun violence problem. As Braga and Weisburd (forth.) conclude “police departments...can be effective in controlling specific crime problems when they engage a variety of partners, and tailor an array of tactics to address underlying criminogenic conditions and dynamics.” That is, the interagency working group carefully analyzing local conditions to develop an appropriate tailored strategy appears to be the key to effectiveness in pulling levers and other focused deterrence approaches.

The work of Braga and colleagues (2008) in Lowell is a good example of the need to use analysis and tailor responses to local dynamics. The Project Safe Neighborhoods task force carefully analyzed homicide and assaults to develop a two-pronged approach to deal with different types of gangs. For Hispanic gangs in Lowell, a more traditional pulling levers approach was used that focused on sending a strong message to chronic offenders that violence would no longer be tolerated. Unlike Boston, Lowell also had a sizable Asian gang problem. Asian gangs typically are more organized than Hispanic and African-American youth gangs and they often are more secretive and have a lesser street presence, making it more difficult to communicate deterrent messages. The task force was able to take advantage of the fact that Asian gangs are also often tied to adult criminal organizations. In Lowell, Asian youth gangs were closely tied to gambling operations overseen by older Asians in the community. The importance of these gaming operations to older Asians was an important lever the task force

could pull. Instead of the standard pulling levers response, the task force used older Asian males as guardians to oversee younger gang members. Gaming operators received the strong message that if there was more youth violence, the gambling operations would be shut down. This proved to be a strong deterrent to further violence, but this tailored approach would not have been uncovered without the careful analysis of local conditions by the PSN task force.

Additionally, it is important to emphasize the word *focused* in focused deterrence strategies. These strategies were successful in part because they created a credible deterrent threat (Kennedy, 2009). This was accomplished, to some extent, by narrowing the focus of the intervention to specific offenders and specific geographic areas. Thus, even though Operation Ceasefire was evaluated as a citywide intervention in Boston, “the deterrence message was applied to a relatively small audience (all gang-involved youth in Boston) rather than a general audience (all youth in Boston), and operated by making explicit cause-and-effect connections between the behavior of the target population and the behavior of the authorities” (Braga & Weisburd, forth.). The program was credible because it was realistic to believe the police and their partners could effectively target gang members living and offending in small geographic areas, as opposed to a more generic and less believable claim that the police would be cracking down on all juvenile crime across the city. Therefore, despite evaluations that use the entire city as the unit of analysis (e.g. all youth homicide in Boston), in reality the programs are more focused on specific offenders and specific geographic areas within these larger contexts and hence share much in common with the other effective geographically focused police strategies reviewed above.

### *Directed patrol to prevent gun violence*

Similar to focused deterrence strategies, the evidence base for directed patrol as a strategy to reduce gun violence is promising, although not as methodologically rigorous as hot spots policing and problem-oriented policing. There are no randomized experiments on directed patrol, but multiple quasi-experimental studies suggest that intensive patrol in high gun crime areas can lead to reductions in gun carrying and gun-related violence. These strategies are in some sense a hot spots approach, but the areas targeted in the interventions are typically much larger than hot spots (e.g. police beats or neighborhoods). A systematic review by Koper and Mayo-Wilson (2006) concluded that directed patrol strategies are effective, but cautioned that the results are based on only seven comparisons from four quasi-experimental studies. While six of these seven comparisons showed positive results, there was also wide variation in the overall effects. For example, the declines in gun-related crime ranged from 29 percent to 71 percent across studies and different outcome measures.

#### What should police be doing in directed patrol interventions?

Again, the small number of rigorous studies limits our ability somewhat to make strong recommendations on the particular techniques police should use in directed patrol interventions beyond the general recommendation that more intensive police presence in high gun crime beats seems to be an effective way to address gun crime problems. The Indianapolis directed patrol quasi-experiment provides some suggestive evidence, because it included two intervention beats, which used somewhat different approaches and had differing results (McGarrell et al., 2001). Significant crime control benefits were found only in the beat using more arrests and no significant crime reduction occurred in the beat focusing more on increasing the number of vehicle stops. McGarrell et al. (2001) argue it is unlikely that variation in the rate of gun

seizures can explain the difference, because the more successful beat actually had fewer gun seizures. Instead, they argue that the targeted offender approach in the arrest-oriented beat was more effective because it sent a deterrent message that police were increasing surveillance in the area. Additionally, arresting these individuals may have been an important way to remove individuals responsible for a lot of gun crime from the streets. In contrast, the less successful target site used a more general “wider net approach” that may have diluted enforcement resources, reducing effectiveness and efficiency (McGarrell et al., 2001: 143). Thus the overall approach here is similar to the findings of the focused deterrence strategies reviewed above. When deterrence efforts are focused on the most high risk offenders, and the deterrent threat is credible then there can be significant crime control benefits.

#### *Some community policing programs*

As will be seen below community policing (also commonly referred to as community-oriented policing) appears in both the “what police should be doing” and “what we do not know enough about” categories because it has been defined so broadly and covers such a wide array of programs. Community policing is perhaps the best known and certainly the most widely adopted police innovation of the past three decades (Skogan, 2006). Indeed, recent research suggests that close to 100 percent of larger agencies claim to have adopted community policing (Mastrofski et al., 2007; Reaves, 2010). What exactly adopting community policing entails is less clear. Community policing spans a broad range of programs from neighborhood newsletters and neighborhood substations (e.g. Pate et al., 1986) to foot patrol and neighborhood watch (see later). Community policing definitions typically focus on three components that characterize many programs: some level of community involvement and consultation; decentralization, often increasing discretion to line-level officers; and problem solving (see Office of Community

Oriented Policing Services, 2009; Skogan, 2006). Of these three components, the evidence in terms of crime control is strongest for problem solving as we discussed above. We should note that problem solving and problem-oriented policing are not the same thing (see Braga & Weisburd, 2010), although they do overlap. Problem solving in community policing programs, however, does not always involve even the level of shallow problem analysis often found in POP.

The impact of community consultation on crime and disorder is less clear, and indeed this is the subject of a current Campbell Collaboration systematic review (Weisburd et al., in progress). Initial results from this review do not suggest strong crime control benefits from community consultation programs, although such programs do seem to have positive impacts on increasing citizen satisfaction and enhancing perceptions of legitimacy, which may have some link to crime, as we discuss below (see Gill et al, 2011). This is similar to prior reviews (e.g. NRC, 2004; Sherman & Eck, 2002), which do not find strong evidence of community policing reducing crime and disorder (but see Connell et al., 2008), although there is evidence that community policing programs can reduce citizen fear and increase citizen satisfaction. While our focus in this paper is on crime and disorder and not fear of crime or citizen satisfaction, we still include community policing in this section on effective practices for addressing crime because of the potential relevance of community outreach to citizen perceptions of legitimacy. The observed connection between legitimacy perceptions and compliance behavior suggests a possible link between community outreach efforts that increase legitimacy and reduced crime, an issue we describe in more detail below. That is, even if community policing does not have clear initial impacts on crime and disorder, if in the long-term such programs increase levels of police legitimacy, then there may be a link between community policing and reduced crime.



Among community policing programs, door-to-door visits by officers seem to be an effective approach for both increasing citizen satisfaction and reducing levels of victimization (see NRC, 2004). For example Wycoff et al. (1985) found that efforts by police in a target neighborhood in Houston to initiate more positive, informal contacts with citizens led to lower rates of victimization. The program focused on the quality of police-citizen interactions and so fits in well with our discussion below of police concerns with procedural justice.

#### What types of community-oriented programs should police pursue?

While we do not have a strong and conclusive evidence base on particular community policing programs, aspects of community policing can be combined with some of the successful interventions described above in ways that may increase their overall effectiveness. For example, Braga and Weisburd (2010) describe a community-oriented approach to hot spots policing focused on community consultation on the tactics used in hot spots and efforts to ensure that hot spots policing strategies do not reduce levels of police legitimacy. A number of scholars have recently argued that intensive police interventions such as hot spots policing may erode citizen perceptions of the police (e.g. see Rosenbaum, 2006; Kochel, forth).

This concern over police legitimacy is important for our current discussion about crime control effectiveness, because a growing body of research suggests that when citizens see the police as more legitimate, they are more likely to comply with police directives and the law and cooperate and assist the police (Tyler, 1990, 2004; Tyler & Huo, 2002). Tyler's (1990) research focuses on procedural justice in police-citizen encounters as the key antecedent of legitimacy perceptions. Procedural justice, according to Tyler (2004) includes four components. First, citizens need to participate in the decision process (i.e. be given a voice). Second, neutrality is a key element of procedural justice. Usually citizens do not have enough specialized knowledge to

know if officers are following the correct procedures, but they tend to view a situation as fairer when officers are transparent about why they are resolving a dispute in a particular way. Third, individuals want to be treated with dignity and respect. Individuals want to be treated politely and not face belittling remarks, slurs, or name-calling. Finally, citizens are more likely to view an interaction as fair when they trust the motives of the police. As with neutrality, individuals do not typically know objectively if the decision of an officer was appropriate, but citizens will view the action taken as fairer if the officer shows a genuine concern for the interests of the parties involved (see also Mastrofski, 1999).

Survey research by Tyler (1990, 2004) and field research by Mastrofski et al. (1996) and Paternoster et al. (1997) suggests that when police officers incorporate these components of procedural justice into their interactions with citizens and suspects, citizens are more likely to comply with police directives and the law because they see the police as more legitimate. These increases in legitimacy thus have the potential to reduce crime by increasing compliance behavior. The concern with hot spots policing and other intensive interventions is that citizens may view the increased police presence and aggressive tactics as procedurally unfair, which could damage legitimacy perceptions. Thus, the hot spots intervention may lead to short term crime control gains that could be erased in the long term if compliance behavior is reduced as a result of lower citizen perceptions of police legitimacy. Police therefore should prioritize involving the community and consulting with the community as much as possible in intensive efforts and also should strive to treat citizens in a procedurally fair manner, even in situations that involve arrest. It is situations such as arresting an offender or citing a motorist where procedural justice can play a particularly important role in preserving (or even enhancing) the legitimacy of the police despite the undesirable outcome the citizen is receiving from an officer.

Efforts to enhance police legitimacy are particularly important in minority communities, where police-citizen relationships are often particularly strained. Weitzer and Tuch (2006), for example, found in their national survey of nearly 1,800 adults that half of white respondents were satisfied with the police, but only 22 percent of blacks surveyed were. Forty percent of black respondents said they had been treated unfairly by police because of race compared to just two percent of whites surveyed. Similarly, 54 percent of black respondents felt they had been stopped by the police for no reason, and 48 percent believed they were the victims of excessive police force, while only 16 and 13 percent of white respondents, respectively, felt the same way. Jones-Brown (2007) argues that continued negative experiences with the police help explain the popularity of the “stop snitching” movement among many young minority males. “This movement discourages collaborations between police and minority citizens and can prove detrimental to effective crime-control strategies as information that could potentially improve neighborhood conditions never reaches the police” (Solis et al., 2009: 45). Tyler’s (2004) research suggests that while these legitimacy deficits exist in minority communities, the importance of procedural justice as an antecedent of legitimacy is consistent across racial groups.

Despite arguments that intensive interventions such as hot spots policing will have negative impacts on police legitimacy, the limited evidence available from such interventions tends to suggest that citizens living in targeted areas welcome the increased police presence (but see Hinkle & Weisburd, 2008). For example, a separate examination of the Kansas City gun project (Sherman & Rogan, 1995), a successful directed patrol intervention to reduce gun crime in a small geographic area, found that the community strongly supported the intensive patrols and perceived an improvement in the quality of life in the treatment neighborhood (Shaw, 1995). Recent research from three cities in San Bernardino County, California found that a broken

windows style (see more on broken windows below) intervention in street segments had no impact on resident perceptions of police legitimacy (Weisburd et al., forth.). Research to date, however, has not attempted to measure how the individuals who were stopped and searched by the police perceive such programs.

#### *Using DNA evidence in property crime cases*

Finally, we briefly note promising findings from a multi-site experimental study by Roman et al. (2009), which suggest that using DNA evidence in property crime cases (DNA is already frequently used in rape and homicide cases) leads to a greater number of identified suspects than traditional investigation methods and is a cost-effective approach to dealing with property crime (see also Wilson et al., 2010). Across all five sites, rapid DNA testing led to higher rates of suspect identification and suspect arrest. In three of the five sites, the rate of suspect arrest in the DNA group versus the control group was more than twice as high. Identifying suspects alone, of course, does not indicate that crime rates will be affected, so more research is needed on the long-term impact of the increased use of DNA, but this research is very promising for police efforts to address crimes they are aware of. Additionally since offenders identified by DNA had more than twice as many prior felony arrests as those identified by standard investigatory work, it is not unreasonable to argue that the increased use of DNA will help identify more high-rate offenders, which could have some beneficial impact on overall crime rates. In an era of low clearance rates for property crime (based on Uniform Crime Report data, just 12.5 percent of burglaries were cleared by arrest in 2009) and decreasing clearance rates for homicide (see Ousey & Lee, 2010), any changes that can improve the effectiveness of investigatory work (an issue we discuss more below) should be welcomed by police.

### What should police agencies do with this research?

The overall conclusion of the Roman et al. (2009) study that agencies should increase the use of DNA testing in property crime cases is fairly clear. We should note though all the sites had some issues with implementation, particularly because of limited resources for DNA analysis. While recognizing that agency budgets are currently stretched thin, efforts should be made to increase crime lab capabilities to reduce the outsourcing of DNA tests and backlogs in the analysis of evidence. Additionally, evidence technicians tended to be better than patrol officers at obtaining usable samples for analysis, so when possible, evidence technicians should be dispatched to the scene of property crimes.

### **What Should Police not be Doing?**

A question that is almost as important as “what should the police be doing?” is “what should the police not be doing? Below we review areas where the research evidence is persuasive that police should not be engaging in particular strategies or practices. We review a number of areas below, highlighting key studies that suggest the ineffectiveness of certain policing efforts.

#### *“Standard model” of policing*

We first focus on tactics referred to by Weisburd and Eck (2004) as the “standard model” of policing. These strategies are often seen as traditional police approaches to dealing with crime that developed largely during the reform or professional era beginning around the 1930s (Kelling & Moore, 1988). While these tactics are now 50 years or more old, they drive much of current police activity. They are seen as the “standard model” for a reason. We focus here on three of

the five strategies described by Weisburd and Eck (2004), and discuss the other two in the section below because we believe the evidence may be not be uniformly negative.

First, random preventive patrol (or random beat patrol) has shown little or no evidence of effectiveness as a crime fighting tool for police. The most influential and well-known study in this area was the Kansas City preventive patrol experiment conducted by Kelling and colleagues (1974). They found no evidence that changes in the amount of preventive patrol across beats had a significant impact on reported crime, reported victimization, response time, or levels of citizen satisfaction. The study presented no evidence that routine preventive patrol is an effective deterrent or way to improve police efficiency and effectiveness.

The finding that police randomly patrolling beats is not an effective crime deterrent makes sense based on the review of the hot spots literature above. Hot spots policing is an effective strategy in part because it takes advantage of the fact that crime is strongly concentrated in a small number of places across cities. Since crime is very concentrated across cities, it makes little sense from an effectiveness and efficiency standpoint to respond with a strategy relying on the random distribution of police resources across large geographic areas.

A second standard policing tactic that appears to have little impact on crime is rapid response to 911 calls. Rapid response can sometimes lead to the apprehension of suspects, particularly calls for a “hot” robbery or burglary. However, there is no evidence that rapid response to most calls increases apprehension rates or decreases crime (Spelman & Brown, 1984). The problem, as Spelman and Brown (1984) detail, is that citizens frequently wait too long after an incident occurs for rapid response to be of much assistance. We do not argue here that police should ignore 911 calls, but instead that they should not expect crime control gains to come simply by decreasing response times to the vast majority of calls. In a related way, police

should also not use the 911 system as an excuse for why officers cannot engage in more innovative practices. While responding to 911 calls does use a significant portion of patrol officer resources (see Sparrow et al., 1990), it is also the case that officers typically have a substantial proportion of time on duty that is uncommitted. Farnega and colleagues (2005), for example, found that over 75 percent of officer time in Baltimore was unassigned, providing more than enough time for police to supplement 911 response with more innovative tactics, such as hot spots policing and problem-oriented policing.

Finally, we point to the lack of strong evidence on the effectiveness of general intensive arrest policies. Unlike some of the intensive strategies described above, more across the board zero tolerance policies are not particularly effective in reducing crime. We should note it is difficult to come to any firm conclusions on the effectiveness of arrest as a policing strategy to address crime because of mixed evidence on interventions that rely primarily on arrest and the fact that many interventions that include increases in arrest also feature a number of other facets and disentangling the impacts of individual factors can be exceedingly difficult. Following Weisburd and Eck (2004) though, we see little reason to believe that more broad-based intensive arrest policies will be highly effective in reducing crime and instead we argue for greater focus, either on high risk offenders or high risk places or both, as we discussed above in our description of successful policing tactics.

Arrests for cases of misdemeanor domestic violence are a subset of general arrest policies, but one that has been more extensively studied than almost any other policing tactic. Unfortunately for police practitioners, the evidence base on the benefits of arresting offenders in domestic violence cases is decidedly mixed (Sherman, 1992b). The initial Minneapolis experiment showed beneficial results in terms of reduced recidivism when comparing arrest to

mediation or separation (Sherman & Berk, 1984), but results from the replication studies were more varied and depended in part on the employment status of offenders (Sherman, 1992b), a problematic criterion for officers to rely on in street-level decision making. Following the Minneapolis study, increased pressure from women's groups, court cases where departments were sued for negligence in responding to domestic violence, and a federal push in the Violence Against Women Act led to more than half of states adopting mandatory arrest laws, leaving officers little discretion in the decision to arrest in cases where there is probable cause to believe misdemeanor domestic violence has occurred (Hirschel et al., 2007). Because of the unclear implications of the research evidence in this area, we do not recommend such laws and we see no reason to believe that mandatory arrest laws or presumptive arrest laws will have a significant impact on crime rates.

#### *Drug Abuse Resistance Education (D.A.R.E.)*

Rosenbaum summarized the research evidence on D.A.R.E. by titling his 2007 *Criminology and Public Policy* article "Just say no to D.A.R.E." As Rosenbaum describes, the program receives over \$200 million in annual funding, despite little or no research evidence that D.A.R.E. has been successful in reducing adolescent drug or alcohol use (e.g. Rosenbaum et al., 1994; Ringwalt et al., 1991). As Rosenbaum (2007: 815) concludes "In light of consistent evidence of ineffectiveness from multiple studies with high validity, public funding of the core D.A.R.E. program should be eliminated or greatly reduced. These monies should be used to fund drug prevention programs that, based on rigorous evaluations, are shown to be effective in preventing drug use." Recent reformulations of the D.A.R.E. program have not shown successful results either. For example, the Take Charge of your Life program, delivered by



D.A.R.E. officers was associated with significant increases in alcohol and cigarette use by program participants compared to a control group (Sloboda et al., 2009).

### *Second responder programs for domestic violence*

Second responder programs for domestic and family violence victims involve follow-up efforts with domestic violence victims. Programs often include a home visit by teams of police officers and victim advocates and/or service providers to provide information on services and legal options. The goal of such programs is to reduce subsequent violence by better informing victims of their options and opportunities to leave abusive relationships and receive social services. A Campbell review of second responder programs by Davis and colleagues (2008), however, suggests these efforts are not effective in reducing violence. The programs do, on average, lead to a slight increase in reporting abuse to the police, but there is no evidence such programs reduce violent incidents and thus such programs do not seem to have any beneficial impact on crime and disorder. In fact, one study (Hovell et al., 2006) found significant backfire effects from a second responders program. Domestic violence victims that received a visit by the Family Violence Response Team were 1.7 times more likely to be re-abused than a comparison group that received no special services.

### **What do we not Know Enough About?**

Ideally, we could conclude our review after reviewing what police should be doing and what they should not be doing, but unfortunately, we know too little to reach firm conclusions about a number of areas important to police work. While the section this follows may prove frustrating to police practitioners looking for guidance from researchers on effective tactics, we hope it inspires researchers and funding agencies to devote greater attention to these areas where

police are engaging in strategies and tactics that are not well researched. We describe a sample of these areas below, highlighting those that have been a major concern for police leaders and the general public but have not yet received sufficient empirical research.

### *Broken windows policing*

The broken windows model of policing was first described in 1982 in a seminal article by Wilson and Kelling. Briefly, the model focuses on the importance of disorder (e.g. broken windows) in generating and sustaining more serious crime. Disorder is not directly linked to serious crime; instead, disorder leads to increased fear and withdrawal from residents, which then allows more serious crime to move in because of decreased levels of informal social control. The police can play a key role in disrupting this process. If they focus in on disorder and less serious crime in neighborhoods that have not yet been overtaken by serious crime, they can help reduce fear and resident withdrawal. Promoting higher levels of informal social control will help residents themselves take control of their neighborhood and prevent serious crime from infiltrating.

The broken windows model as applied to policing has been difficult to evaluate for a number of reasons. First, agencies have applied broken windows policing in a variety of ways, some more closely following the Wilson and Kelling (1982) model than others. Perhaps the most prominent adoption of a broken windows approach to crime and disorder has occurred in New York City, and we discuss the research on policing in New York more below. In other agencies though, broken windows policing has been synonymous with zero tolerance policing, in which disorder is aggressively policed and all violators are ticketed or arrested. The broken windows approach is far more nuanced than zero tolerance allows, at least according to Kelling and Coles (1996) and so it would seem unfair to evaluate its effectiveness based on the

effectiveness of aggressive arrest-based approaches that eliminate officer discretion. Thus, one problem may be that police departments are not really using broken windows policing when they claim to be.

A second concern is how to properly measure broken windows treatment. The most frequent indicator of broken windows policing has been misdemeanor arrests, in part because these data are readily available. These do not fully capture an approach, however, that Kelling and Coles (1996) describe as explicitly involving community outreach and officer discretion in deciding whether arrest is appropriate and involving police stops and encounters with citizens that do not end in arrest (see more below on police “stop-and-frisk” procedures in New York).

Third, the broken windows model suggests a long term indirect link between disorder enforcement and a reduction in serious crime and so existing evaluations may not be appropriately evaluating broken windows interventions. If there is a link between disorder enforcement and reduction in serious crime that is mediated by increased informal social control from residents, we would expect it would take some time for these levels of social control in the community to increase, and policing interventions, which typically use six month follow-up periods (or sometimes a year) may not be capturing changing neighborhood dynamics in such a short period of time. There is also much debate in the literature over the existence of a link between disorder and crime, and how to properly measure such a link if it does indeed exist. For example, Skogan’s (1990) research in six cities did suggest a relationship between disorder and later serious crime, although Harcourt (2001) suggested in a re-analysis of Skogan’s (1990) data that the relationship between disorder and serious crime was spurious. Sampson and Raudenbush (1999) also argue against the broken windows theory, finding that the relationship between disorder and crime is spurious and is instead mediated by collective efficacy. In

response, Xu and colleagues (2005) argue that Sampson and Raudenbush (1999) accidentally find evidence that could be supportive of the broken windows model. They note that broken windows theory does not assume a direct relationship between crime and disorder, but instead a link that is mediated by informal social control, a key component of collective efficacy. As they conclude “the studies of both Harcourt and Sampson and Raudenbush have not convincingly demonstrated that disorder and crime are not linked. On the contrary, there is a good chance to show that the two are at least indirectly related” (Xu et al., 2005: 158). Hence, there is no clear answer as to the link between crime and disorder and whether existing research supports or refutes broken windows theory. We review the specific empirical studies of broken windows policing below, because most of them have focused on New York City.

#### *Investigations by detectives*

As noted in the previous section, general follow-up investigations by detectives in non-homicide cases were seen as ineffective by Weisburd and Eck (2004), but we argue here that we have too little evidence on the work of detectives to provide a full assessment of their effectiveness. Much of what we know about detectives comes from research from the 1970s (e.g. Greenwood et al., 1977), which suggested detectives in most cases, especially property crimes, were not clearing most cases. Indeed, based on that research, if a suspect is not caught or identified at the scene (which in many instances does not occur because it takes so long for the police to be called), it is unlikely a suspect will be identified. As noted earlier, current data continues to suggest that the vast majority of property crimes and a significant proportion of violent crimes go unsolved. The impact this has on crime rates is unknown but as Ousey and Lee (2010: 152) suggest “(t)his downward trend raises questions about the effectiveness of

existing crime policy, potentially undermines criminal justice principles, and may increase the sense of insecurity among the general public.”

Braga and colleagues (2011) have recently called for a greater focus on the potential crime control benefits of detectives. Although the evidence they cite to support this call is largely anecdotal, the initial results are promising. As they conclude “investigators can generate tremendous value when involved in strategic crime-control efforts. Many investigators have rich insights on recurring crime problems and can be used much more creatively in dealing with the underlying conditions, situations and dynamics that cause crime problems to persist” (Braga et al., 2011: 19). Telep (2011) echoes these conclusions in his proposal for more rigorous research on police investigators and police informants, arguing that the work of detectives can be better integrated into patrol work. For example, police could combine hot spots enforcement with efforts to recruit and maintain informants in drug crime hot spots as a way to better incorporate patrol officers into investigatory work and detectives into hot spots policing. Further research is needed and fortunately the federal government will be investing on studies in this area. One of the five areas in the recent National Institute of Justice solicitation for “Research and Evaluation in Crime Control and Prevention” was “research on police investigations.”<sup>4</sup>

#### *Increasing department size*

Weisburd and Eck (2004) also argued that increasing the size of police departments generally has not proven to be an effective way of reducing crime. The problem here is that it is very difficult to accurately measure the impact of increasing department size on crime, in part because departments often increase in size as a result of increases in the crime rate. Policing research tends to suggest that what cops are doing on the street matters much more than

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<sup>4</sup> The full solicitation is available at: <https://www.ncjrs.gov/pdffiles1/nij/sl000963.pdf>.

department size per se (Sherman & Eck, 2002). While we do not advocate for departments decreasing their ranks (as we recognize many agencies are being forced to do because of the current economic climate), how police resources are being used is important. We do know from data on police strikes that not having police at all tends to lead to crime increases (e.g. Makinen & Takala, 1980), but it is less clear how to calculate the crime control value of hiring one additional police officer. Marvell and Moody (1996) note the many specification issues that arise when attempting to assess the relationship between police and crime, and they offer a number of solutions to improve the reliability of estimates. Their findings find a bidirectional relationship between police and crime, but a stronger impact of police levels on crime at the city level. Some research from economists, suggests a significant deterrent effect of police on crime, particularly work by Levitt (1997), although his research has been refuted somewhat by calculation errors discussed by McCrary (2002). The 1994 Crime Control Act provided millions in federal funding to local police agencies in an effort to add 100,000 police to the streets. Studies of the impact of grants from the Office of Community Oriented Policing Services (COPS) on crime are conflicting (e.g. see Worrall & Kovandzic, 2007 vs. Zhao et al., 2002). Thus, it is not clear what impact this large infusion of federal dollars had on crime or what contribution it made to the national drop in crime in the 1990s. Overall then we are hesitant to conclude that increasing department size is ineffective; instead we think the evidence in this area is too conflicting to reach firm conclusions.

### *Homeland security*

A Campbell review by Lum and colleagues (2005) suggested that was very little research on counterterrorism. Despite massive federal funding to the Department of Homeland Security in the past decade, there remains a dearth of rigorous research on the effectiveness of local and

federal law enforcement efforts to combat terrorism. One indicator of success, of course, is the lack of a major terrorist event on U.S. soil in the ten years since the attacks on September 11, 2001. The rarity of terrorist attacks makes rigorous evaluation difficult. It is also important, however, to evaluate how anti-terrorism programs may impact upon rates of crime and disorder. A small number of studies suggest that increased police presence due to the threat of terrorism can reduce crime. For example, Di Tella and Schargrotsky (2004) found that car theft declined on blocks where officers were assigned to guard synagogues following a terrorist attack on the Jewish Center in Buenos Aires. Similarly, Klick and Tabarrok (2005) found that crime was lower in Washington, DC on days with higher terrorist alerts, particularly on the National Mall where many of the monuments that could be potential terrorist targets are located. These two studies suggest that efforts to combat terrorism may have some spillover benefits on more general crime and disorder issues, but more rigorous studies in this area are needed.

#### *Some community policing programs*

As noted above, community policing appears in two categories because of the broad definition of community policing adopted by agencies. A systematic review by Weisburd and colleagues (in progress) on the crime and disorder benefits of community policing is underway now, but we do not have a strong overall assessment of whether community policing affects crime and disorder and if so, what particular types of programs are most effective. It is also important to note that while crime reduction is now a desired goal of many community policing programs, it was not a key reason for the adoption of community policing as an innovative policing approach (Skogan, 2006).

We describe here two types of community policing programs in which the research evidence has been quite mixed. For example, it had generally been thought that foot patrol

helped reduce fear of crime but not actual crime (e.g. Police Foundation, 1981), but a recent study in Philadelphia suggests foot patrol might also have the potential to reduce violent crime significantly when focused in on micro geographic areas or crime hot spots (Ratcliffe et al., 2011). Additionally, research on the effectiveness of neighborhood watch has been mixed and contradictory. Sherman and Eck (2002) concluded neighborhood watch does not work, but a Campbell systematic review by Bennett et al. (2008) concluded that neighborhood watch is associated with significant declines in crime (although the authors note it was not clear what the mechanism leading to this decline was). Both foot patrol and neighborhood watch are popular community policing strategies, but the evidence to date is too mixed to allow for strong recommendations.

Finally, we briefly describe recent research on the crime control effectiveness of business improvement districts (BIDs). Such districts allow businesses in a designated area to tax themselves to provide additional monetary resources for a variety of improvements including security. Such programs are not community policing per se, because they do not necessarily require extensive collaboration with the police and the business community. BIDs often spend the bulk of revenue on private security, which is seen as a supplement to, not a replacement for public policing services (Brooks, 2008). Two evaluations of BIDs in Los Angeles both show promising results for the effectiveness of such programs in reducing crime. Brooks (2008) finds crime reductions of 6 to 10 percent in BID areas compared to both neighboring areas and areas that considered adopting a BID but chose not to. Similarly, MacDonald and colleagues' (forth.) analysis of 30 Los Angeles BIDs found an average 8 percent reduction in total violent crime and a 12 percent reduction in robbery in BID areas. Additional studies of the impact of BIDs and private security more generally are needed, but this research from Los Angeles suggests that



community-oriented prevention efforts focused on supplementing public police services may have a small but significant impact on serious crime. These programs focus more on private security than public police services, but potentially present the opportunity for police-private security collaboration to address crime in these commercial districts.

### **What are the Implications for Policing?**

The evidence we have reviewed on “what works” and what police should be doing suggests certain common elements of effective programs. First, a specific (rather than general) focus seems to be more effective (see also Lum et al., 2011; Weisburd & Eck, 2004). When police narrow in on specific places, types of crime, types of offenders, or mechanisms and factors contributing to crime they can more efficiently use their resources to address crime problems. Random patrol across a beat, for example, spreads limited police resources too thinly across an area without a clear crime control benefit. Second, and in a related way, small geographic units of analysis are usually a better target than larger geographic areas. Police do not have to ignore neighborhood-based programs, but the success of hot spots policing suggests the importance of focusing in on micro geographic units. Third, and also related to the first two, police should focus more on proactive rather than reactive tactics (Weisburd & Eck, 2004). The police should view themselves not just as a crime response agency that waits for 911 calls before springing into action, but instead as a crime prevention agency that can address underlying conditions that allow crime to continue in certain areas. Fourth, police should, when possible, not rely exclusively on law enforcement and arrest to address crime and disorder (Weisburd and Eck, 2004). While arrest is an important tool of the police, as Goldstein (1990) argues, police can be more effective when they expand the toolbox to include other efforts to address crime

such as situational crime prevention and partnerships with other agencies. Although we did not describe it in detail here, this idea relates to third party policing strategies (Mazerolle & Ransley, 2005), that emphasize the police partnering with place managers, other city agencies, and other third parties who can help address chronic crime locations.

### **What are the Police Doing Nationally?**

We wanted to review, as well as we could with the limited data available, to what extent police agencies are actually engaging in tactics that work. We rely here primarily on the 2007 LEMAS data. The full data have not yet been released by the Bureau of Justice Statistics, but we reviewed the findings of “Local Police Departments 2007,” a Bureau of Justice Statistics publication discussing the data (Reaves, 2010). LEMAS includes several relevant questions on community policing, problem solving, and the use of technology.

As we noted above, community policing is the most challenging innovation to categorize in this review because it covers such a wide array of strategies and tactics. LEMAS suggests that nearly all large departments and 56 percent of all departments provide at least eight hours of training for new officers on community policing, although it is not clear from the LEMAS question what exactly this training entails. We would encourage departments that use community policing training to focus this training on problem solving skills (e.g. the SARA model) and the importance of procedural justice and police legitimacy. In terms of their level of commitment to problem solving, we do see a major difference between the largest agencies (those serving over one million residents) and all others. About two-thirds of the largest agencies actively encourage problem solving, but this drops to just 21 percent when examining all departments. These numbers, even for the largest departments, are disappointingly low, when

research suggests that problem-oriented policing can have a beneficial impact on crime and disorder problems.

While data on specific tactics are limited in the LEMAS survey, there are a number of questions related to police technology (see Table 1). Improvements in technology are an important step in implementing many of the successful innovations described above. Crime analysis and crime mapping in particular are very important for the successful implementation of hot spots policing and problem-oriented policing (Lum, 2009). The results overall are quite promising in large agencies, but rather disappointing in smaller departments. For example, while over 90 percent the largest agencies are using computers for hot spot identification, just 13 percent of departments overall are. Even in moderately sized cities (population 100,000-249,999), just 56 percent of departments use computers to identify hot spots. When it comes to using computers for crime analysis and crime mapping, results are similar. One hundred percent of the largest departments make use of computers for such tasks, but only 38 percent of agencies overall use computers for crime analysis, and 27 percent use computers for crime mapping. Optimistically, the use of computers for crime mapping and analysis has increased since 2003. Research by Weisburd and Lum (2005) suggests that the use of crime mapping diffused quickly across policing from the mid 1990s through 2001, and these latest LEMAS data suggest that the use of crime mapping continues to increase, but smaller agencies are lagging behind. In terms of patrol officer access to crime data, just 31 percent of the largest agencies and 11 percent of agencies overall provide offices access to crime maps in their patrol cars. Increasing these percentages would likely aid in making hot spots policing a more routinized part of policing practice.

\*\*\*Table 1 about here\*\*\*

The PERF (2008) survey of 176 policing agencies of various sizes shows close to two-thirds (63 percent) used hot spots policing to reduce violent crime. This was by far the most popular response to the question of how to address violence. When asked what sort of places the agency defines as a hot spot, the majority of respondents noted addresses or intersections (61 percent) or clusters of addresses (58 percent). However, a majority of respondents (57 percent) also identified neighborhoods as potential hot spots and a sizable minority pointed to patrol beats (41 percent) as the sort of place that would be defined as a hot spot. As we noted above, these larger geographic areas are less likely to lead to the same crime control benefits as narrowing in on small geographic units. When asked what tactics they used at hot spots of varying crime types, a majority of respondents mentioned tactics we have previously discussed as effective ones such as directed patrol and problem solving. These results are encouraging, but still suggest that nearly 40 percent of surveyed agencies are not making use of hot spots policing as a way to address violent crime.

### **What are the Implications for What the Police do in New York City?**

How do our findings on what police should be doing compare to the past and current tactics of the New York Police Department? This question is particularly relevant for trying to understand why crime dropped so dramatically in New York City during the 1990s and continues to remain at historically low levels today. Chauhan (2011) has assembled an extensive review of literature that examines how police may have contributed to the New York crime drop and so we only briefly summarize the research literature here. We also draw upon White's (2011) discussion of NYPD tactics from 1970-2009, focusing in particular on the effectiveness of strategies adopted in the first decade of the 2000s. We divide our discussion below just as we

did above, focusing on things the NYPD is doing that the agency should be doing and things the NYPD is doing that we do not know enough about. We note at the outset that we find little evidence of NYPD tactics that we think the police should not be engaging in. Instead, the NYPD has engaged in a number of effective strategies, but also a number of strategies where the evidence base remains more ambiguous.

*What the NYPD are doing that they should be doing*

As we noted in our section on what police should be doing, hot spots policing has perhaps the strongest supportive evidence base of any innovative policing strategy. Thus, we begin our discussion with NYPD efforts to intervene in the small geographic areas where crime is highly concentrated. As White (2011) details, hot spots policing is a relatively newer addition to the repertoire of tactics in the NYPD. Operation Impact began in 2003 and focuses police attention on high crime areas in “impact zones” within precincts. These zones vary in size, but many are very small geographic areas (Smith & Purtell, 2007). The majority of police academy graduates are assigned to impact zones upon graduation, providing the zones with the needed 1,800 officers a year to provide sufficient treatment in the hot spots areas.<sup>5</sup> The goal is to use saturation patrol in combination with resources from a variety of departmental divisions to target these high crime areas. The initial evaluation by Smith and Purtell (2007) suggested the program was responsible for accelerating the decline of crime in target precincts, although it should be noted that this evaluation focused not on crime in the impact zones themselves but on crime in the precincts that had impact zones (only 30 of the city’s 76 precincts had impact zones by 2006). Further evaluation of this program is needed, and ideally a controlled trial could be used to randomly allocate hot spots to Operation Impact or a less intensive police treatment.

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<sup>5</sup> See [http://home2.nyc.gov/html/unccp/gprb/downloads/pdf/NYC\\_Safety%20and%20Security\\_OperationImpact.pdf](http://home2.nyc.gov/html/unccp/gprb/downloads/pdf/NYC_Safety%20and%20Security_OperationImpact.pdf) to learn more about Operation Impact.

New York's Compstat program also makes use of effective policing tactics through its focus on problem solving. Compstat more generally can be seen as an organizational strategic problem-solving program. In some sense, Compstat is an ideal application of Goldstein's (1979, 1990) problem-oriented model, because Goldstein diagnosed police organizational maladies. He argued police organizations should be focused less on internal management (the means of policing) and more on addressing problems (the ends of policing), and Compstat explicitly calls for the entire police organization to prioritize addressing problems.

Based on the New York example, Weisburd and colleagues (2003) identify six key elements of Compstat programs: mission clarification, internal accountability, geographic organization of command, organizational flexibility, data-driven problem identification and assessment, and innovative problem-solving. We focus here on data-driven problem identification and innovative problem-solving, which both follow closely from Goldstein's (1990) model of problem-oriented policing. As Weisburd et al. (2003: 429) note in regards to innovative problem solving, "Middle managers are expected to select responses because they offer the best prospects of success, not because they are 'what we have always done.' Innovation and experimentation are encouraged; use of 'best available knowledge' about practices is expected." Using real-time data to diagnose and analyze problems and then developing innovative, tailored responses to those problems is in line with effective problem solving strategies we discussed earlier. Compstat is also highly compatible with hot spots approaches. Compstat meetings typically rely extensively on crime mapping and middle managers explaining crime concentrations in their precinct and how they plan to address them.

*What the NYPD are doing that we do not know enough about*

While we believe the evidence is very supportive of NYPD hot spots approaches and Compstat when used in a problem-oriented framework, other tactics used in New York have a less conclusive evidence base. As discussed earlier, perhaps the most prominent policing strategy of New York in the 1990s was broken windows policing. There is much debate over the impact of New York policing tactics on reductions on crime and disorder in the 1990s, in part because of the difficulty of isolating the impact of policing tactics from other simultaneous social phenomena. Broken windows policing alone did not bring down the crime rates (Eck & Maguire, 2000), but it also likely that the police played some role. Estimates of the size of this role have ranged from large (Bratton & Knobler, 1998, Kelling & Sousa, 2001) to significant but smaller (Messner et al., 2007; Rosenfeld et al., 2007) to non-existent (Harcourt & Ludwig, 2006). As we noted earlier, a major problem in most of these analyses is the focus almost exclusively on misdemeanor arrests as a proxy for New York's broken windows policing efforts. While following the broken windows model (Wilson & Kelling, 1982) did lead to substantial increases in misdemeanor arrests, as Kelling and Coles (1996) note, misdemeanor arrests alone oversimplify a much more nuanced approach to policing disorder. As opposed to a zero-tolerance policy focused only on arresting all minor offenders, Kelling and Coles (1996) describe a more community-oriented approach to partnering with residents and community groups to tackle disorder collectively in a way that still respects the civil liberties of offenders. Whether the NYPD was able to adopt this model successfully remains up for debate (e.g. see Greene, 1999), but it does suggest that the intervention is complex and difficult to evaluate, particularly because broken windows policing was adopted citywide simultaneously.

We should note that tackling disorder has frequently been a tactic chosen by police in crime hot spots. For example, in the Braga et al. (1999) problem-oriented policing hot spots study in Jersey City, NJ, officers used aggressive order maintenance as a strategy to try to reduce violent crime and results suggested significant positive results. Thus we suspect that the tactics common in broken windows policing will be most successful when combined with knowledge about the small geographic areas where crime is highly concentrated.

Finally, and related to broken windows policing, the NYPD has increased its use of “stop-and-frisk” tactics as an order maintenance strategy. As White (2011) notes, evaluations of these stops have been contradictory, but it is clear that their use has increased dramatically in the first decade of the 2000s and that they have disproportionately affected poor and minority residents of New York City. It is not clear, however, whether these stops have had a significant impact on crime rates. Fagan and colleagues (2010) suggest that these stops have become less efficient over time, as the number of stops continues to increase without concurrent increases in the number of guns seized. Additionally, despite the dramatic increase in stops in recent years, the crime rate in New York has remained fairly stable, making the use of “stop-and-frisk” tactics a poor candidate for producing significant crime benefits. Still, further research is needed in this area, and as we discussed above, it is particularly important to better understand how the distribution of these stops matches up with the distribution of crime. We might expect greater effectiveness of these approaches if police are concentrating their stops in the highest crime locations in the city. Initial analysis by Lawton and Weisburd (In progress) suggests stops are concentrated in hot spot areas although as noted earlier, the concentration of police resources in small geographic areas brings up important potential implications for police legitimacy as well. Any short-term crime control benefits of “stop-and-frisk” tactics could be negated by long-term



declines in cooperation with the police as a result of lowered levels of police legitimacy (e.g. see Kochel, forth.)

## **Conclusions**

There is an emerging evidence base on “what works” in policing and we now have a series of Campbell systematic reviews on policing topics as well as other comprehensive narrative reviews of the police evaluation literature. We examined these reviews to provide assessments of what police should be doing, what they should not be doing, and what we do not know enough and attempted to use the available research to provide some guidance to agencies on how to properly implement effective strategies and tactics. We conclude here by first noting some limitations in our currently available data. Of course, our entire section on “what we do not know enough about” suggests a number of limitations in our evidence base in what is effective in policing. We then conclude with some brief remarks on the future of police efforts to address crime and disorder.

### *Limitations in what is measured and studied*

Related to our “what do we not know enough about?” category, there are certain areas where we need more research to better understand the non-crime related outcomes of police interventions. While our focus in this review has been on efforts to reduce crime and disorder, a number of other related outcomes contribute to determining whether police actions are effective and efficient, but have received less attention in the policing evaluation literature. This includes cost-effectiveness, which has received little attention in U.S. policing research, but is an especially important issue in the current economic climate where many policing agencies are facing severe budget cuts. We hope to see more studies that conduct detailed cost-benefit

analyses like Roman and colleagues (2009) did in the DNA field experiment. We also continue to need additional data on how police can enhance perceptions of legitimacy, which based on Tyler's (1990, 2004) research has clear implications for crime control effectiveness. A recent systematic review by Mazerolle and colleagues (In progress) suggests that there are few rigorous interventions are police efforts to increase legitimacy, although generally when police increase levels of procedural justice in interactions with citizens, they enjoy higher levels of legitimacy. Finally, policing research should consider increasing efforts to measure changes in collective efficacy as a result of policing interventions. As noted earlier, research by Weisburd and colleagues (forth.) suggests the importance of collective efficacy in predicting crime, even at the street segment (i.e. hot spot) level of analysis.

Our current evidence base also limits to some extent the generalizations we can make about policing. While we believe our implications for policing hold broad relevance, we also recognize that the vast majority of policing evaluation research examines policing in highly populated urban areas. Limited research has examined smaller departments and more rural contexts, generally finding some differences in policing (e.g. see Payne et al., 2005). We recognize that smaller departments with only a few officers are unlikely to have a significant quantity of street-block size hot spots. Nonetheless, we still believe that even smaller departments can learn from the lessons of larger agencies, particularly the importance of using focused interventions in micro geographic areas. It is also the case that we know little about the differential impacts of policing interventions across varying community contexts. Does hot spots policing work better in certain kinds of urban environments or in certain parts of the country? Does the socioeconomic status or racial composition of a place affect the effectiveness of problem-oriented policing? These are important questions but ones we do not yet have sufficient

research to properly answer. Finally, we also recognize the need for longer term follow-ups in policing studies. We know very little about the long-term impacts of most policing innovations, in part because grant funding cycles usually preclude follow-up periods of longer than a year. D.A.R.E. may be the one policing intervention with long term follow-up studies (e.g. Rosenbaum et al., 1994), but future research should apply the individual-level longitudinal study framework to the many place-based policing interventions we have reviewed here.

We also need better data on what agencies are actually doing in the field. LEMAS, for example, suggests the largest agencies have many of the capabilities and technologies needed for properly addressing crime and disorder, but many smaller agencies still lag behind. LEMAS is limited though in providing data on what departments are actually engaged in day-to-day. Because it is a massive national survey, there are limits to the number of questions that can be asked about daily practices, and even with additional questions, the LEMAS data reflect the survey responses of only certain individuals in the department, who may not always have sufficient knowledge about daily practices to provide reliable data. Qualitative studies such as Willis and colleagues' (2007) assessment of Compstat in three departments can provide greater insight into what policing looks like at the street level, and we encourage further qualitative or mixed methods approaches to better assess to what extent departments are actually engaging in the strategies we recommend here.

### *The future of policing*

We review concluding remarks made by Braga and Weisburd (2007: 19) about the future of police innovations, because we believe their comments continue to be applicable to the future of police strategies and tactics:

What will the future bring? Will the police continue to innovate at a rapid pace? We don't anticipate a new wave of strategic police innovation in the near future. The current context of policing suggests that future innovation will be incremental in nature. The conditions in the 1980s and 1990s that created the pressure for innovation simply no longer exist. Indeed, the atmosphere is precisely the opposite of earlier decades. Overall crime is down and federal funds available for demonstration projects to spur innovation are very limited. While the available research evidence is not as strong as some police executives believe, there is a general sense that these police innovations work in preventing crime and satisfying community concerns.

Indeed, if anything federal funds have decreased even further in recent years while crime rates have continued to decline or remain stable. Additionally, our review here suggests a number of areas where the evidence base is currently sufficient to make recommendations to police practitioners on strategies that can effectively reduce crime and disorder. Since innovation and new ideas are always an important part of policing (Stone & Travis, 2011), police today should ensure that new strategies and approaches are grounded in the existing literature on what is effective. This means drawing upon approaches that have been proven to work. A major goal then for the future of policing is relying more on rigorous evidence to guide practice (see Lum, 2009; Weisburd & Neyroud, 2011). We strongly advocate for continued growth in the number of rigorous studies evaluating policing strategies, particularly in the areas above where we do not know enough to make strong recommendations, but we are also realistic in acknowledging that the current economic climate makes increases in funding (or even stable funding levels) for criminal justice research unlikely. Still, with the evidence base that currently exists we see a promising future in terms of effectively addressing and preventing crime and disorder for agencies that do what we believe police should be doing and avoid doing what we argue police should not be doing.

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*Table 1: Percentage of police agencies using computers for specific tasks by population served (adopted from Tables 22 and 25 of Reaves, 2010)*

<b>Population Served</b>	<b>Crime Analysis</b>	<b>Crime Mapping</b>	<b>Hotspot Identification</b>	<b>Providing Crime Maps to Officers In-Field</b>
1,000,000+	100	100	92	31
500,000-999,999	100	100	100	29
250,000-499,999	100	100	80	48
100,000-249,999	96	94	66	32
50,000-99,999	88	82	56	31
25,000-49,999	69	60	31	16
10,000-24,999	53	41	19	11
2,500-9,999	37	23	9	9
Less than 2,500	21	11	5	8
<b>All Sizes</b>	38	27	13	11