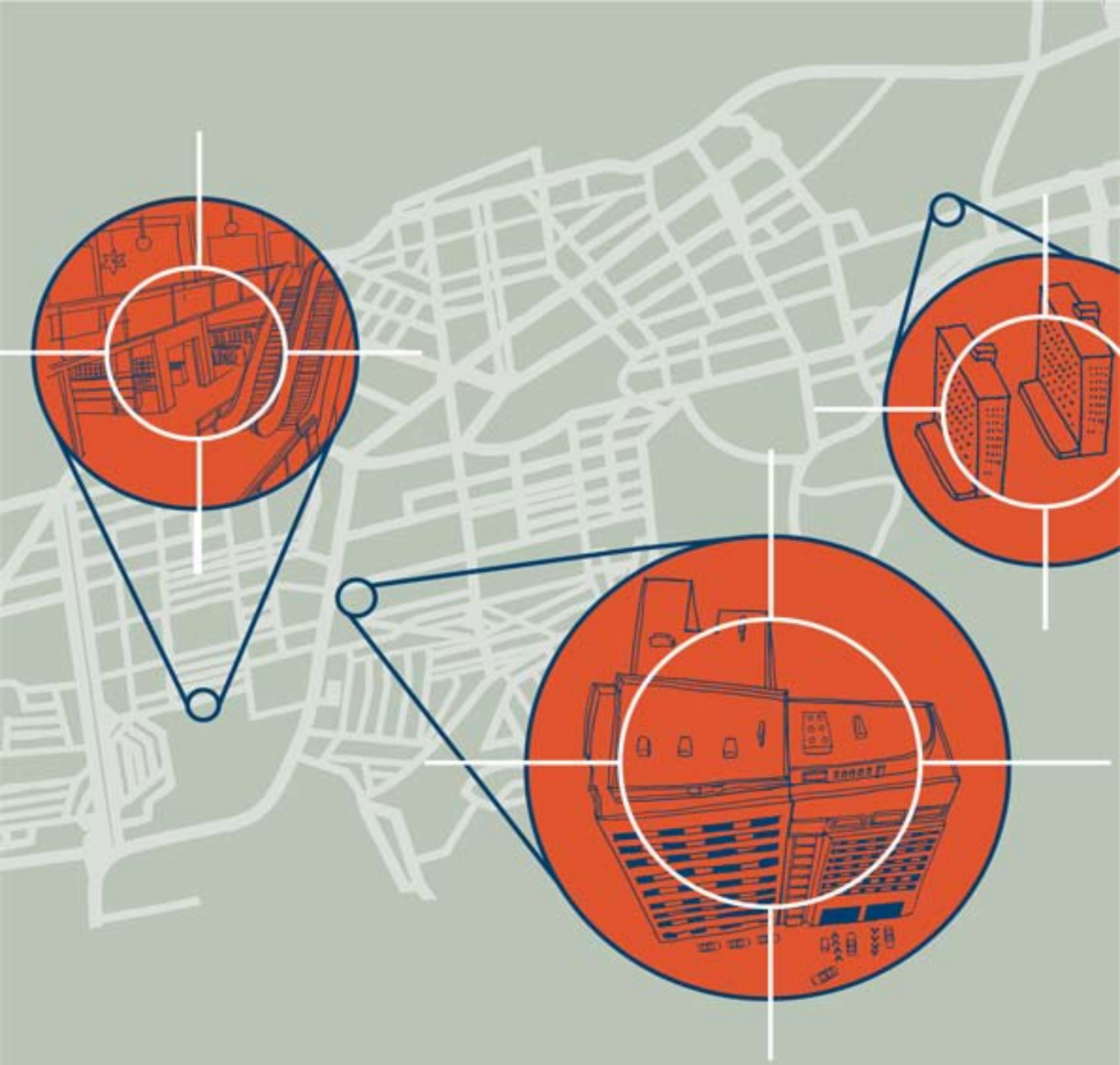

# The Importance of Place in Policing

*Empirical Evidence and Policy Recommendations*

David Weisburd, Cody W. Telep, Anthony A. Braga

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## Empirical Evidence and Policy Recommendations

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**Brå – a centre of knowledge on crime and measures to combat crime**
The Swedish National Council for Crime Prevention (Brottsförebyggande rådet – Brå) works to reduce crime and improve levels of safety in siciety by producing data and disseminating knowledge on crime and crime prevention work and the justice system's responses to crime.

ISBN 978-91-86027-54-4

© Brottsförebyggande rådet 2010
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Cover Illustration: Lotta Sjöberg
Printing: Edita Norstedts Västerås 2010

Production: Swedish National Council for Crime Prevention, Information and Publications,
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+46 (0)8–401 87 00, fax +46 (0)8–411 90 75, e-mail info@bra.se, www.bra.se

This report can be ordered from booksellers or Fritzes Kundservice, SE-106 47 Stockholm, Sweden
+46 (0)8–598 191 90, fax +46 (0)8–598 191 91, e-mail order.fritzes@nj.se

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# Foreword

The role of the police in today's society involves a range of different tasks. These include maintaining public order and public safety, providing citizens with protection and assistance, investigating crimes and arresting offenders. The police also have a central role to play in the field of crime prevention.

This latter aspect of the police's role, i.e. the work of crime prevention, is sometimes neglected, not least because it leads neither to larger numbers of offenders being prosecuted and convicted, nor to any visible improvements in the clearance rate. However, the police's crime prevention role is important from the perspective of both crime victims and the cost of crime to society. More effective crime prevention work on the part of the police would mean fewer crime victims and would also greatly reduce the social costs of crime.

Research that can provide new knowledge about how the police can improve their effectiveness in the field of crime prevention is therefore very important. It is also important that the results of this research are disseminated to relevant groups both within and outside the police service.

In this report, which has been commissioned by the Swedish National Council for Crime Prevention (Brå), Professor David Weisburd and his colleagues summarise the results from an exciting and still relatively new field of research with great potential to improve the effectiveness of the police's crime prevention work. The authors present research which describes from both empirical and theoretical perspectives how the police can produce substantial crime prevention effects by directing their focus at small, well-defined locations with high levels of crime. The research findings presented in this report also strongly indicate that place-based policing of this kind can prevent crime using considerably less resources than more traditional policing methods.

It can sometimes be difficult however to get large organisations such as the police to adopt new ways of thinking. The authors of the

report note for example that this new approach to policing may require relatively extensive changes to how the police view the central goals of police work. Amongst other things, it would mean measuring success not only in terms of how many people are arrested by the police but also in terms of whether places become safer for the people who visit, live or work in them.

The report can thus be viewed not only as a description of a strategy for more effective crime prevention work within the police service, but also as a challenge to the police to open up to the opportunities that may result from adopting new ways of thinking about and structuring their role as a central actor in the field of crime prevention.

Stockholm in May 2010

*Jan Andersson*
Director General

# I. Introduction

Crime prevention research and policy have traditionally been focused on offenders or potential offenders (Weisburd, 1997, 2002). Researchers have looked to define strategies that would deter individuals from involvement in crime or rehabilitate them so they would no longer want to commit criminal acts. In recent years crime prevention efforts have often focused on the incapacitation of high-rate or dangerous offenders so they are not free to victimize law-abiding citizens. In the public debate over crime prevention policies, these strategies are usually defined as competing approaches. However, they have in common a central assumption about crime prevention research and policy: that efforts to understand and control crime must begin with the offender. In all of these approaches, the focus of crime prevention is on people and their involvement in criminality.

Police practices are also focused primarily on people. They often begin with a response to citizens who call the police. They are focused on identifying offenders who commit crimes, and end with the arrests of those offenders and their processing through the criminal justice system. Police attention is also directed at times to broader community problems and "community caretaking" (Kahan & Meares, 1998; Mastrofski, 1999), and the police are expected to play a role in securing communities in emergencies and more recently in response to homeland security threats (Waddington & Neyroud, 2007). But despite the broader mandate of the police, the core practices of policing assume that people, whether victims or offenders, are the key units of police work.

In this monograph we will argue that the police can be more effective if they shift the primary concerns of policing from people to places. Such a shift is already underway in American policing where place has begun to be seen as an important focus of police crime prevention efforts (Koper, 2008; Weisburd & Lum, 2005). But even in the U.S., people and not places remain the central concern of po-

licing. By place, we do not mean large geographic units such as neighborhoods or communities that have commonly been the focus of criminologists concerned with crime prevention (see Bursik & Webb, 1982; Sampson, Raudenbush, & Earls, 1997; Shaw & McKay, 1942 [1969]), or the beats and precincts that have been key to the organization of policing. Places in this context are specific locations within the larger social environments of communities and neighborhoods (Eck & Weisburd, 1995). They may be defined as buildings or addresses (see Green, 1996; Sherman, Gartin, & Buerger, 1989), as block faces or street segments (see Sherman & Weisburd, 1995; Taylor, 1997), or as clusters of addresses, block faces or street segments that have common crime problems (see Block, Dabdoub, & Fregly, 1995; Weisburd & Green, 1995a).

The strategies of place-based policing can be as simple as hot spots patrol, as was the case in the Minneapolis Hot Spots Policing Experiment (Sherman & Weisburd, 1995), where the police intervention involved placing more patrol resources at places where crime was concentrated. But place-based policing can also take a much more complex approach to the amelioration of crime problems. In the Jersey City Drug Market Analysis Project (Weisburd & Green, 1995a), for example, a three-step program (including identifying and analyzing problems, developing tailored responses, and maintaining crime control gains) was used to reduce problems at drug hot spots. In the Jersey City Problem-Oriented Policing Project (Braga, Weisburd, Waring, Mazerolle, Spelman, & Gajewski, 1999), a problem-oriented policing approach was taken in developing a specific strategy for each of the small areas defined as violent crime hot spots.

Why should police reorient the strategies and organization of policing to be more concerned with place? Why should place-based policing become a core approach in police efforts to control crime and disorder? In this monograph we present the case for place-based policing drawing from an emerging body of basic and applied evidence that suggests that policing places is efficient and effective. We begin in the next section by tracing the emergence of crime places in crime prevention in the 1980s, and then in the third section, we present basic research on crime and place that shows that crime is concentrated in cities in crime hot spots. This is a key finding in the justification of place-based policing, because it provides a logic for focusing police resources on small areas, rather than spreading them widely across the city. But even if crime is concentrated at place, if it simply shifts from place to place in a city it would not present a stable focus for police crime prevention efforts. The fourth section of our monograph describes the strong stability of crime at place, as contrasted with the instability of criminal offending. We then show in the fifth section how basic research on the geographic distribution of crime places supports strongly the need to focus in on hot spots of

crime, rather than larger geographic units such as neighborhoods or communities. Finally, in section six we present emerging research on the correlates of crime at place that suggests the salience of place-based interventions.

Importantly, the case for policing places is not simply derived from basic research, but also includes strong applied evidence of the effectiveness of place-based policing. The seventh section of our monograph reviews the empirical literature on place-based or hot spots policing and shows that police interventions targeted at micro places can reduce crime and disorder at places. But doesn't the reduction of crime at one place simply lead to the shifting of crime to other places in a city? While this idea of displacement of crime has in the past been a strong barrier to the development of place-based policing (see Reppetto, 1976), recent empirical evidence described in section eight shows that it is not a major threat to the crime prevention benefits of place-based programs. Indeed, the research suggests just the opposite--that place-based policing is more likely to lead to a "diffusion of crime prevention benefits" (Clark & Weisburd, 1994) than displacement of crime. In the following two sections we argue that there are strong potential legal and societal benefits of focusing on places as opposed to offenders, but that police must begin to pay greater attention to the "legitimacy" of police interventions at places. Finally, recognizing that it is not enough to simply argue in favor of place-based policing, we conclude by suggesting practical ways in which the police must change to effectively implement place-based approaches. Of course, in advancing new approaches, the police in the field will adopt and innovate as they identify new problems and opportunities. Police over the last two decades have shown a remarkable degree of interest in innovation to advance police practices (National Research Council [NRC], 2004; Weisburd & Braga, 2006a). Place-based policing represents a natural progression in such efforts to improve policing.

# II. The Emergence of Crime Places in Crime Prevention

While the traditional focus of research and theory in criminology has been on individuals and communities (Nettler, 1978; Sherman, 1995), criminologists recognized from the outset that the situational opportunities provided by specific places or contexts can impact upon the occurrence of crime. Edwin Sutherland, for example, whose main focus was upon the learning processes that bring offenders to participate in criminal behavior, noted in his classic criminology textbook that the immediate situation influences crime in many ways. For example, "a thief may steal from a fruit stand when the owner is not in sight but refrain when the owner is in sight; a bank burglar may attack a bank which is poorly protected but refrain from attacking a bank protected by watchmen and burglar alarms" (Sutherland, 1947:5). Nonetheless, Sutherland, much like other criminologists, did not see crime places as a relevant focus of criminological study. This was the case, in part, because crime opportunities provided by places were assumed to be so numerous as to make concentration on specific places of little utility for theory or policy. In turn, criminologists traditionally assumed that situational factors played a relatively minor role in explaining crime as compared with the "driving force of criminal dispositions" (Clarke & Felson, 1993:4; Trasler, 1993). Combining an assumption of a wide array of criminal opportunities, and a view of offenders that saw them as highly motivated to commit crime, it is understandable that criminologists paid little attention to crime at places.

Interest in the potential of places as a focus of crime prevention can be traced to a growing frustration both among scholars and practitioners with the development of effective offender-based crime prevention policies. This frustration was due in part to basic research, which suggested the difficulty of explaining the causes and

development of criminality. A series of studies in the 1980s concluded that it is difficult to identify who is likely to become a serious offender, or to predict the timing and types of offenses that repeat offenders are likely to commit in the future (e.g. Albrecht & Moitra, 1988; Barnett & Lofaso, 1985; Blumstein & Cohen, 1979; Elliot, Dunford, & Huizinga, 1987; Estrich, Moore, McGillis, & Spelman, 1983; Gottfredson & Gottfredson, 1990).[1] This led to a conclusion that basic research did not offer a clear program either for selecting individuals who would be amenable to crime prevention interventions or for development of effective crime prevention strategies that would alter the patterns of criminality among offenders (Earls, 1991; Earls & Carlson, 1995). Even where there was stronger evidence of prediction, for example in the case of specialization for some types of adult offenders (e.g. Blumstein, Cohen, Das, & Moitra, 1988; Kempf, 1986), legal and ethical dilemmas were seen as preventing the development of practical crime prevention policies (Moore, 1986). Later in this monograph we will argue that place-based prevention avoids many of these legal and ethical dilemmas.

Given the difficulty of predicting criminality, it is not surprising that applied research in offender-centered crime prevention in the 1970s and 1980s more often than not illustrated the significant barriers that are faced in the development of successful interventions. Beginning with Robert Martinson's critique of rehabilitation programs in 1974 (see also Lipton, Martinson, & Wilks, 1975), a series of studies documented the failures of traditional crime prevention initiatives (e.g. Sechrest, White, & Brown 1979; Whitehead & Lab, 1989). A number of scholars argued that many such failures were due to inadequacies in program development and research design (e.g. Farrington, Ohlin & Wilson, 1986; Goldstein, 1990). Moreover, some reviews stressed that there were examples of successful offender-focused crime prevention efforts, which could provide guidance for the development of more effective prevention policies (Farrington, 1983; Lipsey, 1992). Nonetheless, even those scholars that looked to improve such policies came to recognize the difficulties inherent in trying to do something about criminality (Visher & Weisburd, 1997). Summarizing the overall standing of what they defined as traditional "offender-centred" crime prevention, Patricia and Paul Brantingham wrote in 1990: "If traditional approaches worked well, of course, there would be little pressure to find new forms of crime prevention. If traditional approaches worked well, few people would possess criminal motivation and fewer still would actually commit crimes" (1990:19).

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[1] A more recent study examining the explanatory power of quantitative tests of criminological theories suggests that the situation has improved little in the last two decades (see Weisburd & Piquero, 2008).

For many scholars and policymakers, the crisis in person-centered crime prevention meant having to rethink assumptions about criminality and how offenders might be prevented from participating in crime. And indeed the last two decades have seen a resurgence of interest in rehabilitation programs for offenders (e.g. see Andrews, Zinger, Hoge, Bonta, Gendreau, & Cullen, 1990; Cullen, 2005; Lipsey & Cullen, 2007), many achieving much more positive results than the earlier studies noted above.[2] But others suggested that a more radical reorientation of crime prevention efforts was warranted. They argued that the shift must come not in terms of the specific strategies or theories that were used but in terms of the unit of analysis that formed the basis of crime prevention efforts. This new approach called for a focus not on people who commit crime but on the context in which crime occurs.

One influential critique of traditional criminological approaches to understanding crime that was to have strong influence on the development of interest in crime places was brought by Cohen and Felson (1979). They argued that the emphasis placed on individual motivation in criminological theory failed to recognize the importance of other elements of the crime equation. They argued that for criminal events to occur there is a need for not only a criminal, but also a suitable target and the absence of a capable guardian. They showed that crime rates could be affected by changing the nature of targets or of guardianship, irrespective of the nature of criminal motivations. That Cohen and Felson suggested that crime could be affected without reference to the motivations of individual offenders was a truly radical idea in criminological circles in 1979. The routine activities perspective they presented established the context of crime as an important focus of study.

Drawing upon similar themes, British scholars led by Ronald Clarke began to explore the theoretical and practical possibilities of situational crime prevention (Brantingham & Brantingham, 1990; Clarke, 1980, 1983, 1992, 1995; Cornish & Clarke, 1986). This approach looks to develop greater understanding of crime and more effective crime prevention strategies through concern with the physical, organizational, and social environments that make crime possible. The situational approach does not ignore offenders; it merely places them as one part of a broader crime prevention equation that is centered on the context of crime. It demands a shift in the approach to crime prevention, from one that is concerned primarily with why people commit crime to one that looks primarily at why crime occurs in specific settings. It moves the context of crime into

[2] Nonetheless, in the area of policing, the evidence for offender-based programs continues to be weak or at best inconclusive (Weisburd & Eck, 2004).

central focus and places the traditional focus of crime – the offender – as just one of a number of factors that affect it.

Situational prevention advocates argue that the context of crime provides a promising alternative to traditional offender-based crime prevention policies. They assume for the most part that situations are a more stable and predictable focus for crime prevention efforts than are persons. In part this assumption develops from common-sense notions of the relationship between opportunities and crime. For example, shoplifting is by definition clustered in stores and not residences, and family disputes are unlikely to be a problem in industrial areas. High-crime places, in contrast to high-crime people, cannot flee to avoid criminal justice intervention. Crime that develops from the specific characteristics of certain marketplaces or organizations cannot be easily transferred to other organizational contexts (Goldstock, 1991).

This emphasis on the context of crime has clear implications for the police and place-based policing in particular. What is meant by place-based policing? At its core is a concern with focusing in on places where crimes are concentrated, and it begins with an assumption that there is something about a place that leads to crimes occurring there. In this sense, place-based policing is theoretically based on routine activities theory (Cohen & Felson, 1979; Felson, 1994), which identifies crime as a matter of the convergence of suitable targets (e.g., victims), an absence of capable guardians (e.g., police), and the presence of motivated or potential offenders. Of course, this all must occur in the context of a place or situation, and accordingly place-based policing recognizes that there is something about specific places that leads to the convergence of these elements (Brantingham & Brantingham, 1981 [1991], 1984).

# III. The Concentration of Crime at Place

A key requirement for the adoption of place-based policing is that crime is heavily concentrated in what some have termed "crime hot spots" (Sherman et al., 1989; Sherman & Weisburd, 1995; Weisburd & Green, 1995a). Absent a concentration of crime at place there seems little reason to refocus crime prevention efforts. Indeed, if crime were spread randomly across a city place-based policing would provide little benefit.

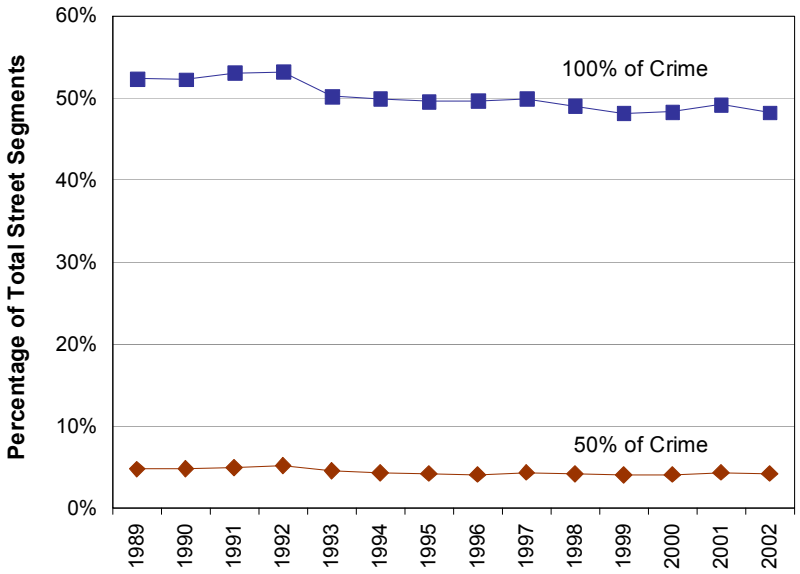
A number of studies, beginning in the late 1980s suggest that significant clustering of crime at place exists, regardless of the specific unit of analysis defined (see Brantingham & Brantingham, 1999; Crow & Bull, 1975; Pierce, Spaar, & Briggs, 1986; Roncek, 2000; Sherman et al., 1989; Weisburd & Green, 1994; Weisburd, Maher, & Sherman, 1992, Weisburd, Bushway, Lum, & Yang, 2004; Weisburd, Morris, & Groff, 2009). Perhaps the most influential of these was Sherman, Gartin and Buerger's (1989) analysis of emergency calls to street addresses over a single year. Sherman et al. found that only 3 ½ percent of the addresses in Minneapolis, Minnesota produced 50 percent of all calls to the police. They regarded these results as so startling that they called for a new area of study which they termed the "criminology of place."

Other studies produced similar evidence of the concentration of crime in crime hot spots. Weisburd and Mazerolle (2000), for example, found that approximately 20 percent of all disorder crimes and 14 percent of crimes against persons were concentrated in just 56 drug crime hot spots in Jersey City, New Jersey, an area that comprised only 4.4 percent of street segments and intersections in the city. Similarly, Eck, Gersh, and Taylor (2000) found that the most active 10 percent of places (in terms of crime) in the Bronx and

Baltimore accounted for approximately 32 percent of a combination of robberies, assaults, burglaries, grand larcenies and auto thefts.

A study conducted by Weisburd, Bushway, Lum and Yang (2004) not only confirms the concentration of crime, but also the stability of such concentrations across a long time span. Weisburd et al. examined street segments in the city of Seattle from 1989 through 2002. They found that 50 percent of crime incidents over the 14 year period occurred at only 4 ½ percent of the street segments. As illustrated by Figure 1, this concentration is very stable year to year. These data overall illustrate a kind of "law of concentration" for crime, suggesting that crime is heavily clustered in urban areas.

**Figure 1: Percentage of Street Segments with 50% and 100% of Incident Reports from 1989 to 2002.**




Source: Weisburd et al. (2004).

The crime prevention opportunities of this law of concentration are even clearer when focusing on specific types of crime. In another study in Seattle, Weisburd, Morris and Groff (2009) examine the concentration of crime incidents in which a juvenile is arrested. They found that only 86 street segments out of more than 25,000 account for 1/3 of all official juvenile arrest incidents over a 14 year period. While more research will have to be done to establish how much of such crime concentrations are due to concentrations of police patrol, this study suggests the extent to which police efforts should be focused on hot spots in a city.

Lawrence Sherman (1995) argues that such clustering of crime at places is even greater than the concentration of crime among indi-

viduals. Using his Minneapolis data and comparing these to the concentration of offending in the Philadelphia cohort study (see Wolfgang, Figlio, & Sellin, 1972), he notes that future crime is "six times more predictable by the address of the occurrence than by the identity of the offender" (1995:36 37). Sherman asks, “why aren’t we doing more about it? Why aren’t we thinking more about wheredunit, rather than just whodunit?”

Weisburd (2008:5) argues similarly regarding longitudinal data in Seattle. When using “targets” as a criterion, places were indeed found to be a more efficient focus than offenders. On average about 1,500 street segments accounted for 50 percent of the crime each year during this period. During the same period about 6,108 offenders were responsible for 50 percent of the crime each year. Simply stated, the police would have to approach four times as many targets to identify the same level of overall crime when they focus on people as opposed to places.

# IV. The Stability of Hot Spots as Crime Prevention Targets

The concentration of crime at place suggests significant crime prevention potential for such strategies as hot spots patrol (Sherman & Weisburd, 1995; Weisburd & Braga, 2006b), which focus crime prevention resources at specific locations with large numbers of crimes. However, concentration itself does not provide a solid empirical basis for either refocusing crime prevention resources or calling for significant theorizing about why crime is concentrated at places. For example, if "hot spots of crime" shift rapidly from place to place it makes little sense to focus crime control resources at such locations, because they would naturally become free of crime without any criminal justice intervention (Spelman, 1995). Similarly, if crime concentrations can move rapidly across the city landscape, it may not make much sense to focus our understanding of crime on the characteristics of places.

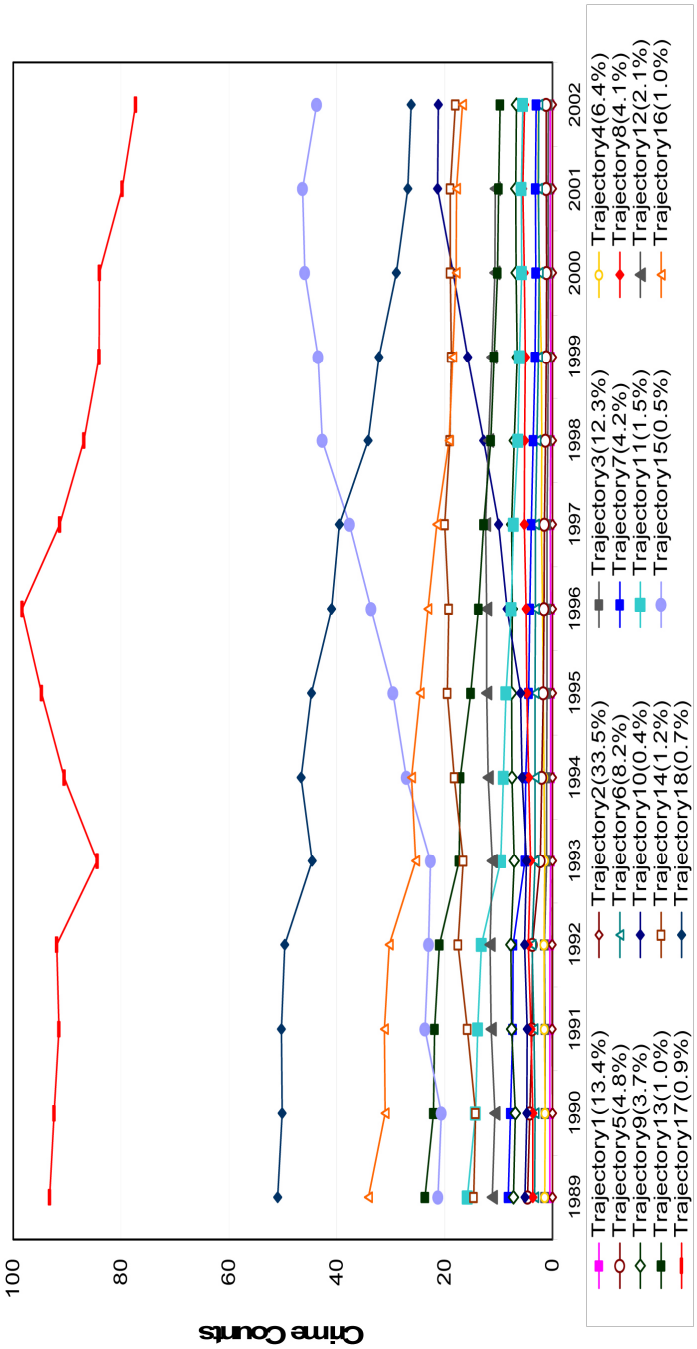
The data we have suggests that these possible objections to place-based policing have little empirical basis. Spelman (1995) for example, examined calls for service at schools, public housing projects, subway stations, and parks and playgrounds in Boston. He found evidence of a very high degree of stability of crime at the "worst" of these places over a three year period. Spelman concluded that it "makes sense for the people who live and work in high-risk locations, and the police officers and other government officials who serve them, to spend the time they need to identify, analyze and solve their recurring problems" (1995:131). Taylor (1999) also reported evidence of a high degree of stability of crime at place over time, examining crime and fear of crime at 90 street blocks in Balti-

more, Maryland using a panel design with data collected in 1981 and 1994 (see also Taylor, 2001).

The most comprehensive examination of the stability of crime at place over time was conducted by Weisburd et al. (2004) in their study of crime incidents at street segments in the city of Seattle. Using group-based trajectory analysis (Nagin, 1999, 2005; Nagin & Land, 1993) they identified clusters of similar developmental trajectories, adopting an approach that has been used extensively to study patterns of change in offending and aggression as people age (see Nagin, 1999; Nagin & Tremblay, 1999).

Weisburd and colleagues (2004) identified 18 specific trajectory patterns in their data (see Figure 2). The most important finding in their study was that crime remained fairly stable at places over time. This can be contrasted with developmental studies of individual offending where there is often tremendous change across relatively short periods, especially for high rate offenders (Horney, Osgood, & Marshall, 1995; Nagin, 1999; Nagin & Tremblay, 1999). A comparison of a typical trajectory analysis of developmental patterns of crime among young people (see Figure 3) with the results of the Seattle study emphasizes this point. Note the relative stability of the most chronic offending group in the Seattle data (trajectory group 17), as contrasted with the chronic offenders identified by Nagin (1999) in Figure 3.

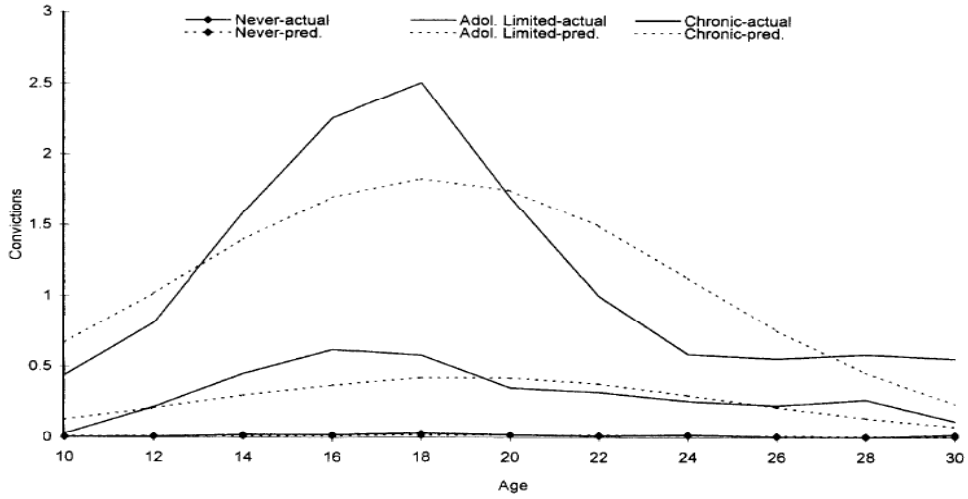
**Figure 2: 18 Trajectories of Crime Incidents in Seattle.**




Note: The percentages in parentheses represent the proportion of street segments that each trajectory accounts for in the city of Seattle.

Source: Weisburd et al. (2004)

**Figure 3: Trajectories of Individual Offending. Adol. = adolescent, pred. = predicted.**




Total N=411. Chronic: 7%, Adolescent Limited: 22% and Never Offend: 71%.

Source: Nagin (1999)

What is clear is that hot spots of crime evidence tremendous stability across the period examined. In contrast, there is perhaps no more established fact in criminology than the variability and instability of offending across the life course. A primary factor in this variability is the fact that most offenders age out of crime, often at a relatively young age (Blumstein, Cohen, Roth, & Visher, 1986; Gottfredson & Hirschi, 1990; Laub & Sampson, 2003; Tracy & Kempf-Leonard, 1996; Wolfgang, Thornberry, & Figlio, 1987). But there is also evidence of strong instability in criminal behavior for most offenders even when short time periods are observed (Bushway, Thornberry, & Krohn, 2003; Horney et al., 1995; Nagin, 1999).

What these data suggest is that crime prevention at places has the potential for long term impacts on crime and public safety more generally in cities. A model of "regression to the mean" at places would suggest that places get very "hot" and then naturally cool off. In this model there would be little benefit in focusing on the "hottest spots" because they would become cooler even if the police did not bring any crime prevention to those places. In some sense, this is the predominant model of individual offending, since we know that most people will age out of crime relatively quickly. In contrast hot spots of crime appear to remain hot over longer periods of time.

Returning to the theoretical roots of interest in crime at place, we can speculate that there is something about the specific context of these crime hot spots that makes them places of crime concentrations. That would explain why crime is so concentrated at such

places over long periods of time. It would also provide an explanation for the very strong stability of very low crime places. In Seattle, about two-thirds of the street segments had little or no crime across the entire 14 years examined (Weisburd et al., 2004). Why are these street segments generally free of crime? Again we might speculate that characteristics of these places or the people whose routine activities bring them there affect the opportunities for crime at place. In section 6 we will examine these questions in more detail basing our conclusions on recent empirical data.

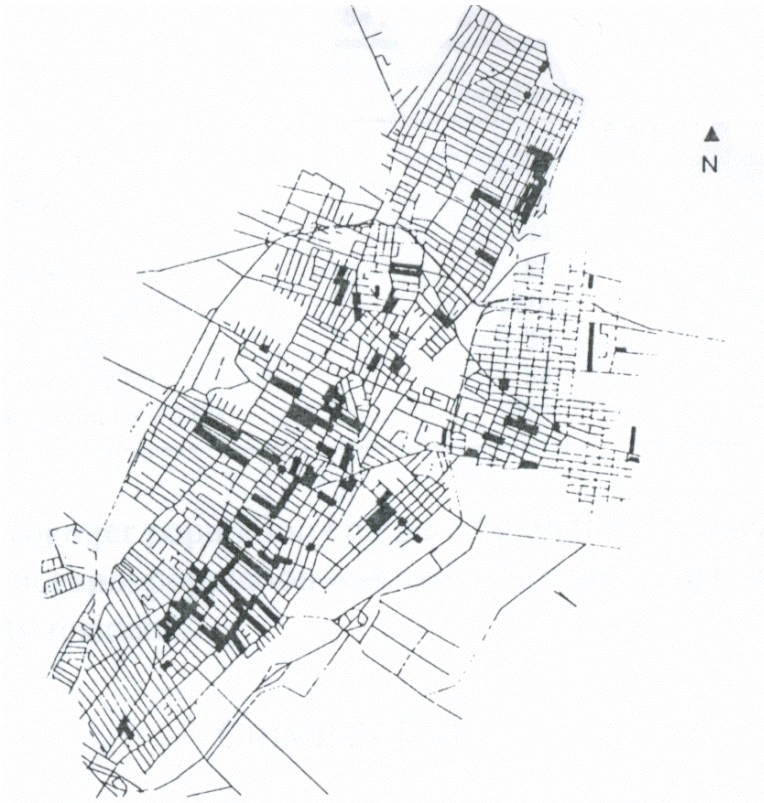
In our discussion so far we have emphasized the stability of crime across place over time. But the Seattle study also identifies interesting developmental trends in the data examined. For example, the city of Seattle experienced an overall crime drop of more than 20 percent during the period of study, following trends in many other American cities (Blumstein & Wallman, 2000). But only 14 percent of the street segments in the Weisburd et al. (2004) study showed evidence of such decreasing trends. This means that the crime drop in Seattle was restricted to only a small part of the city. Perhaps even more interesting is the fact that more than 500 street segments in the city evidenced a crime wave during this period, with an average of more than a 40 percent increase across the affected street segments. This suggests the importance of focusing in on policing places rather than larger geographic units such as cities. An overall review of crime trends would have led the police to mistakenly assume that crime was declining uniformly across Seattle. In fact, most street segments changed hardly at all, and many experienced a crime wave during this period.

# V. The Importance of Place-Based Rather than Community-Based Crime Prevention

While the evidence discussed above establishes the concentration and stability of crime at place, we have so far not examined how hot spots of crime are distributed geographically. This question is important to explore, because it gets at the issue of whether using micro places as the unit of analysis as opposed to larger areas of geography affects our understanding of crime and our approach to crime prevention (see Weisburd, Bruinsma, & Bernasco, 2009). Is it important to focus on crime places, or would we have about the same impact on crime if we focused on beats, communities or neighborhoods? Are crime hot spots concentrated in only one or two neighborhoods in a city, suggesting that despite the concentration of crime in hot spots we would be better off focusing crime prevention on communities?

Evidence to date suggests that crime hot spots can be found throughout a city. Weisburd and Mazerolle (2000) for example, identified 56 drug markets in Jersey City, New Jersey. As Figure 4 illustrates the drug markets were spread across Jersey City. To the surprise of police involved in the study, though the drug markets were more concentrated in socially disadvantaged areas, they could even be found in areas that were generally seen as more established and better off. Weisburd and Mazerolle argued that even good neighborhoods can have bad places. Importantly, most places even in very disadvantaged neighborhoods were relatively free of serious drug problems. Echoing this finding nearly sixty years ago, Henry McKay noted the lack of offenders on some blocks within high crime neighborhoods (Albert J. Reiss, Jr., personal communication as cited in Sherman & Weisburd, 1995).

**Figure 4: Jersey City Drug Market Locations.**




Source: Weisburd and Mazerolle (2000).

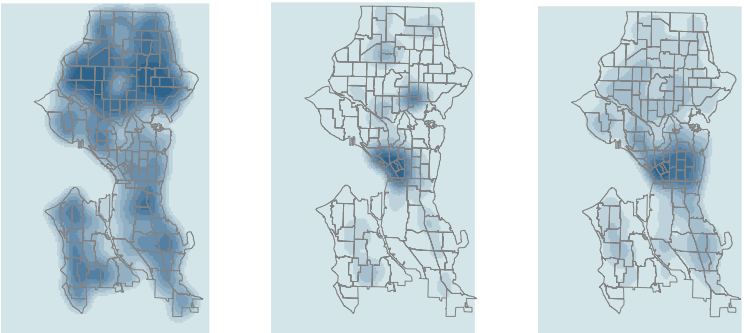
Using more sophisticated geographic analyses, Weisburd and colleagues (2004) created kernel density maps to examine the distribution of developmental trajectories of crime at place (see Figure 5). These maps reinforced findings from prior studies showing a spread of hot spots of crime across the city. They also presented some intriguing preliminary findings which led them to conclude that street segments with a fairly stable crime rate tended to be diffused throughout the city but concentrated in areas with less residential density and higher income (see Figure 5). They noted that the areas with the highest concentrations of increasing crime and decreasing crime overlapped in the downtown area. This was a particularly interesting finding since it suggests either that similar processes underlie both crime waves and crime declines, or that street segment level characteristics (and not large area characteristics) are the primary influence in understanding crime trends at places.

**Figure 5: Kernel Density Estimations of Segments Classified as Exhibiting Stable, Increasing or Decreasing Crime Trajectories**

a. Stable Trajectory Groups

b. Increasing Trajectory Groups

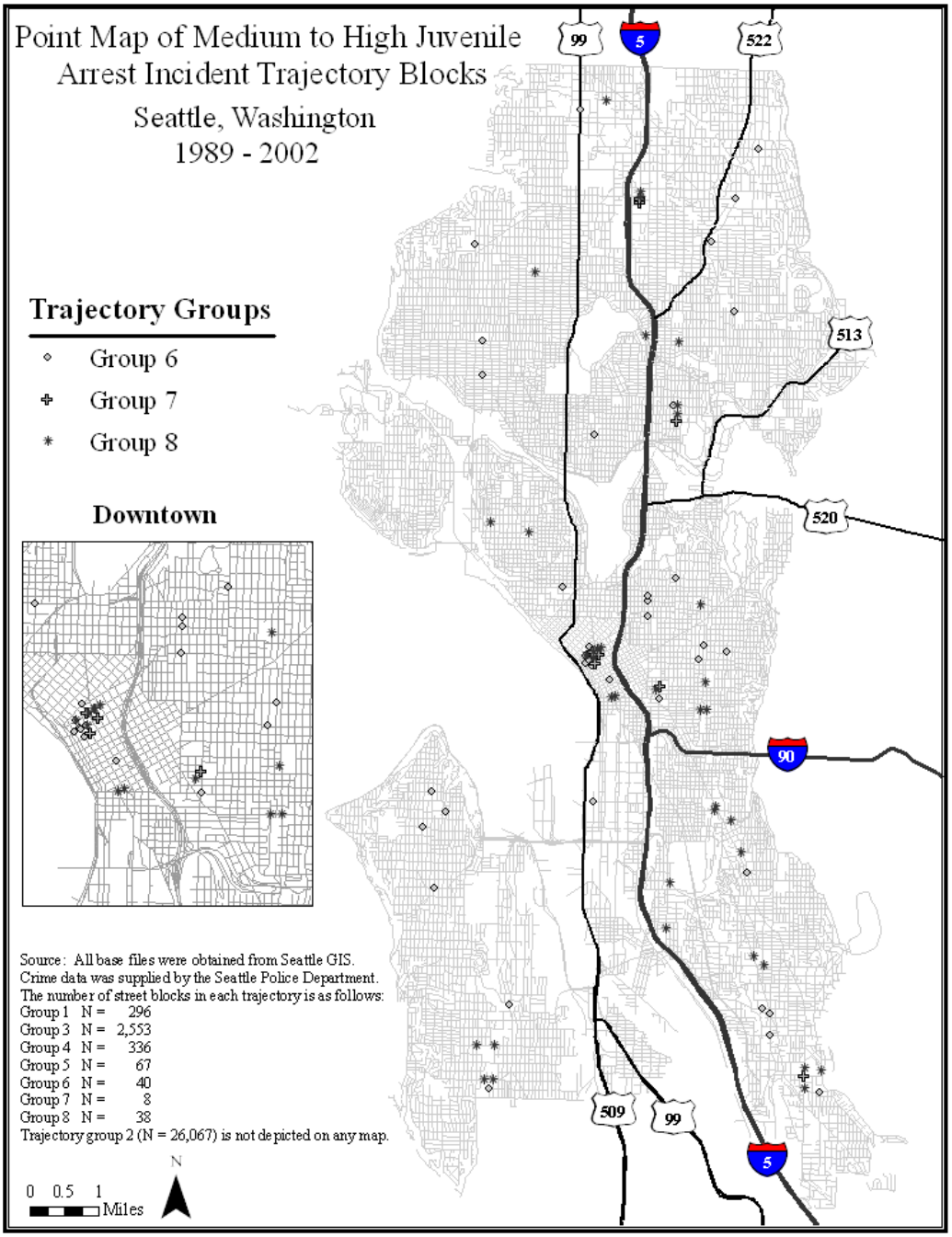
c. Decreasing Trajectory Groups



Source: Weisburd et al. (2004).

Mapping the 86 hottest street segments in their longitudinal study of juvenile arrest incidents, Weisburd, Morris and Groff (2009) show again that hot spots of crime are spread throughout the city (see Figure 6). But as in the Weisburd et al. (2004) study, there is a relatively large clustering of such hot spots in the central business area. Groff, Weisburd, and Morris (2009) further examined the clustering of juvenile arrest hot spots by asking whether that clustering suggests that there are important area trends that are influencing juvenile crime at place, and to what extent large area trends versus trends at the street segment level appear to be influencing crime patterns. Examining spatial dependence of street segments, they found tremendous street by street variability in the trajectory patterns of street segments. They conclude that "a great deal of the 'action' is indeed at micro places such as street blocks" (Groff et al., 2009:84) indicating that much information about crime would be missed by focusing on larger units such as neighborhoods or census tracts.

**Figure 6: Location of Medium to High Juvenile Arrest Incident Trajectory Blocks**

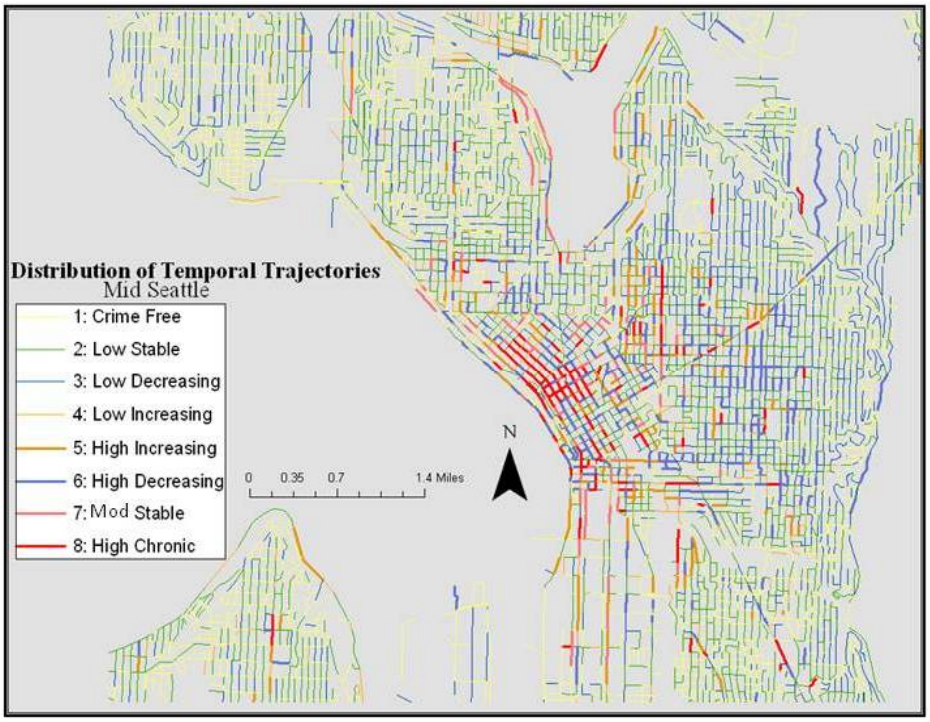



Source: Weisburd, Morris, and Groff (2009).

Perhaps the most comprehensive geographic study of the distribution of hot spots of crime was conducted by Groff, Weisburd, and Yang (2010; see also Weisburd, Groff and Yang, in progress) using 16 years of crime incident data in Seattle (1989-2004). A major question that has not been answered in prior research concerns the form and the degree of street to street variability at micro levels of geography. To answer this question, they explored both temporal and spatial variation in crime across Seattle streets. Groff et al. drew upon trajectory group patterns identified by Weisburd et al. (In progress). They then applied a variety of quantitative spatial statistics to the spatial arrangement of each pattern's members to establish whether streets having the same temporal trajectory pattern are collocated spatially or whether there is street to street variation in the temporal patterns of crime.

While there were large areas consisting of predominantly crime free and low stable crime patterns (not surprising given their overwhelming numbers, 12,033 and 7,696 street segments respectively), street segments from higher rate trajectory groups were interspersed within those areas. A closer examination of the pattern of temporal trajectories reveals differences by section of Seattle. In Figure 7, a map of street by street trajectory group assignment in central Seattle is presented. While this map does not provide quantitative substantiation for the significance of the spatial associations revealed, it does offer a strong indication of heterogeneity as well as homogeneity in crime patterns at the street segment level and provides striking evidence of street segment to street segment variation in crime rates. Groff et al. (2010) point out the influence of the downtown area of Seattle on the western portion of the city. It is here they observed the greatest magnitude of variation of the temporal trajectory patterns from street to street and the greatest concentration of streets with high crime. A high level of variability was also present in the older residential sections east of downtown. Thus, they point out that one cannot understand the action of crime by simply extrapolating from large area trends.

**Figure 7: Spatial Distribution of Temporal Trajectories in Central Seattle.**




Source: Groff, Weisburd, and Yang (Forthcoming).

Groff and colleagues supplemented this descriptive analysis with a statistical analysis that revealed a surprisingly high degree of heterogeneity in the temporal crime trajectory patterns of street segments. In other words, the temporal crime trajectory pattern often changes from street segment to street segment. This was apparent in both the descriptive map and in their finding that low stable street segments were "weakly attracted" to moderate stable, high increasing, and high decreasing street segments, suggesting proximal places can have very divergent temporal crime trajectories. What varied from place to place was not the phenomenon of heterogeneity but rather the specific temporal trajectory pattern involved. In certain areas of the city, the tendency was to see changes from crime free to low stable. Sometimes the change was from low stable to another higher rate trajectory pattern. In other areas, the pattern of change was extremely chaotic varying not only from street to street but also by both level and pattern of temporal crime trajectory pattern. These findings demonstrate that the place level of analysis is capturing important variability in trends, and that this variability would be

masked if we focused our interest on the larger geographic units that criminologists and the police have traditionally directed attention.[3]

[3] Groff et al. (2010; see also Groff et al., 2009) not surprisingly also find evidence of possible larger area influences on crime at place. They found, for example, significant spatial dependence among street segments within the same temporal trajectory pattern at moderate distances. They also found street segments representing certain temporal crime trajectory patterns tended to dominate in certain areas. This occurred more frequently among low rate trajectory patterns but even these areas had other trajectories interspersed within them. However, they also saw this phenomenon in the vicinity of high chronic street segments: a dominant trend of higher rate places with low rate places intermingled.

# VI. Can We Explain Why Crime is Concentrated at Place?

Having established the concentration of crime at hot spots and its stability across time, and the fact that much of the action for crime occurs at the local level of crime places, we are led to the question of whether we can explain crime at place. Such explanation is important because it can form the basis for police crime prevention efforts. If we know why some places become hot spots it is easier to develop specific crime prevention strategies to reduce crime and other problems at those places.

As we noted earlier, most study of crime hot spots has relied on routine activities theory (see Cohen & Felson, 1979) as an explanation for why crime trends vary at places and as a basis for constructing practical crime prevention approaches (see Eck & Weisburd, 1995; Sherman et al., 1989). The main assumptions of this perspective are that specific characteristics of places such as the nature of guardianship, the presence of motivated offenders, and the availability of suitable targets will strongly influence the likelihood of criminal events (see also Felson, 1994). Studies examining the factors that predict crime at micro places generally confirm this relationship (see Roncek & Bell, 1981; Roncek & Maier, 1991; Smith, Frazee, & Davison, 2000; Weisburd et al., 2009; Weisburd et al., In progress).

For example, juveniles are assumed to be attracted to very specific types of activities which in turn influence their "activity spaces" (Felson, 2006). Malls and movie theatres are well known "hang outs" for youth, and indeed such businesses seek to draw young people as customers. Moreover, because such activity spaces will attract large numbers of not only potential offenders, but also potential targets, we might expect large concentrations of juvenile crime in

such places. For example, several researchers have found that juvenile delinquency is strongly associated with time spent socializing in unstructured activities with peers in the absence of authority figures (Agnew & Peterson, 1989; Osgood, Wilson, O'Malley, Bachman, & Johnston, 1996; Wallace & Bachman, 1991). The fact that juveniles are most likely to victimize other juveniles (Snyder, 2003) reinforces the importance of such activity spaces in the development of juvenile crime.

Data from Weisburd et al.'s (2009) study of juvenile crime in Seattle provide strong confirmation of the relevance of juvenile activity spaces and routine activity theory for understanding the very high concentration of juvenile arrest incidents at places. Weisburd et al. were able to identify where crime events occurred and thus they were able to describe the activity spaces most associated with hot spots of juvenile crime (see Table 1). The highest rate trajectories of juvenile crime hot spots (see trajectories 6–8) were much more likely to have arrest incidents committed at schools and/or youth centers, and shops/malls and restaurants, as compared to low rate trajectory groups. In each of the low rate trajectory groups (1–4) fewer than four percent of the arrest incidents occurred at schools or youth centers. However, more than 30 percent of the arrest incidents in trajectory group 8 occurred at a school or youth center. 12.7 percent of the incidents in trajectory group 7 and 17.1 percent of the incidents in trajectory group 6 occurred at a school or youth center. The differences between the high rate and low rate groups were even more pronounced when examining the proportion of arrest incidents found at shops, malls and restaurants. While fewer than 15 percent of incidents in each low rate trajectory group (1–4) occurred at these types of locations, between 34.3 percent and 75.4 percent of arrest incidents in trajectories 6 through 8 occurred at shops, malls and restaurants.

**Table 1: Juvenile Trajectory Group Membership by Location of Incident (N = 30,004).**

| | Location of Incident | | | | | | |
|---|---|---|---|---|---|---|---|
| | School, Youth Center | Shops, Malls, Restau-rants | Street, Alley, Public Spaces | Private Dwelling | Bars, Clubs, Taverns | Other | Total |
| Group | | | | | | | |
| 1 | 1.9% | 10.2% | 32.1% | 47.3% | .2% | 8.3% | 100.0% |
| 2 | 1.8% | 2.1% | 53.7% | 34.3% | .1% | 8.0% | 100.0% |
| 3 | 2.9% | 4.8% | 43.3% | 40.1% | .3% | 8.6% | 100.0% |
| 4 | 3.9% | 14.3% | 42.5% | 29.8% | .2% | 9.3% | 100.0% |
| 5 | 6.5% | 26.0% | 40.7% | 14.3% | .4% | 12.2% | 100.0% |
| 6 | 17.1% | 34.3% | 32.5% | 5.2% | 2.5% | 8.4% | 100.0% |
| 7 | 12.7% | 75.4% | 8.8% | .2% | .1% | 2.9% | 100.0% |
| 8 | 30.7% | 38.9% | 21.5% | .7% | .0% | 8.0% | 100.0% |

Source: Weisburd, Morris, and Groff (2009).

These data provide important support for the assumption that juvenile crime is concentrated because of the concentration of juveniles in juvenile activity spaces. Incidents in the highest rate trajectories were most likely to be found at and around schools and youth centers, or shops, malls and restaurants. This means that hot spots of juvenile crime, as evidenced by arrest incidents, are likely to be located in places where juvenile congregate. Not surprisingly, given Weisburd et al.'s (2009) focus on juvenile crime, very few arrest incidents are found at bars, clubs and taverns. While prominent activity places for adults, and often crime hot spots (Roncek & Bell, 1981; Roncek & Maier, 1991), they are not part of the activity spaces of juveniles.

While routine activities theory has been a central feature of recent interest in crime hot spots, it is important to note that other theoretical approaches might also be important in understanding crime at place and developing effective crime prevention approaches. Ecological theories of social disorganization used to explain crime patterns in communities (see Schmid, 1960a, 1960b; Shaw & McKay, 1942 [1969]), for example, might also be applied to crime hot spots (see Smith et al., 2000). Recent research by Weisburd, Groff and Yang (In progress) suggests that social disorganization theories may have strong relevance for crime prevention at place.

For example, scholars have recently emphasized the importance of "collective efficacy" in communities as an indicator of a community's ability to realize common values and regulate behavior (see

Sampson et al., 1997; Sampson, 2004). Using voting behavior at the street segment level as an indicator of collective efficacy, Weisburd et al. find a direct relationship between collective efficacy and crime patterns. As expected, the crime free and low activity segments have the highest rates of collective efficacy as reflected by active voting patterns. The chronic crime trajectory segments have the lowest evidence of voting participation (see Table 2). These findings are particularly important, because they suggest that in targeting hot spots of crime the police should also consider the social features of life at places. While many hot spots policing programs have relied largely upon intensive enforcement to ameliorate crime problems (e.g. Braga et al., 1999; Sherman & Rogan, 1995a, 1995b), these data emphasize the importance of applying community policing and other strategies that might reinforce the ability of residents of places to bring to force informal social controls.

**Table 2: Relationship Between Collective Efficacy (Active Voters) and Trajectory Patterns.**

| Classification of Trajectories | % Active Voters Initial Value (1999) | Pairwise Comparison To Crime Free Pattern |
|---|---|---|
| Crime Free (n=12,033) | 0.3534 | N/A |
| Low Stable (n=7,696) | 0.4238 | ↑ |
| Low Decreasing (n=2,212) | 0.4164 | ↑ |
| Low Increasing (n=903) | 0.3151 | ↓ |
| Moderate Stable (n=292) | 0.2472 | ↓ |
| High Decreasing (n=574) | 0.2388 | ↓ |
| High Increasing (n=221) | 0.2089 | ↓ |
| Chronic (n=247) | 0.1741 | ↓ |

↑ Pattern has Significantly Higher Level of Collective Efficacy than Crime Free Pattern.
↓ Pattern has Significantly Lower Level of Collective Efficacy than Crime Free Pattern.
Source: Weisburd, Groff, and Yang (in progress).

Weisburd et al. find even stronger relationships between direct measures of social disorganization and crime at the street segment level. Using illegal dumping as an immediate and visceral indication of the social order of street segments they find a strong relationship with the trajectory patterns (see Table 3). The number of illegal dumping incidents increase as the levels of crime in trajectory patterns increase in the first year of observations. This relationship is significant and strong across the trajectory groupings. By far the lowest number of illegal dumping incidents is found in the crime free trajectory pattern. In the low rate trajectory groupings there are about four times as many illegal dumping incidents, and in the high

rate trajectory patterns this increase is more than tenfold as compared with the crime free trajectory pattern. For the chronic hot spots group the increase is higher still.

Looking at change over time, the relationships are also strong. For the high increasing and moderate stable trajectory patterns the number of illegal dumping incidents increases, though the change is statistically significant only for the stable grouping. In contrast, in the high decreasing trajectory pattern there is a statistically significant decline in the number of illegal dumping incidents in the final observation period. The same pattern emerges looking at the low rate trajectory patterns. In the low increasing pattern there is about a one third increase in the number of illegal dumping incidents, and the change is highly significant. There is a statistically significant though much smaller decline in the low decreasing pattern. The low stable pattern shows almost no change during the period. These data suggest a direct relationship between changes over time in social disorder and changes in crime at the street segment level.

**Table 3: Relationship Between Number of Illegal Dumping Incidents and Trajectory Patterns.**

| Trajectories | Illegal Dumping Initial Value (93-95) | Pairwise Comparison To Crime Free Pattern | Illegal Dumping Ending Value (02-04) | Block Change Over Time | Sig. of Paired Sample test for Blocks | Group Mean Change |
|---|---|---|---|---|---|---|
| Crime Free (n=12,033) | 0.0373 | N/A | 0.0425 | .0052 | .012* | 13.94% |
| Low Stable (n=7,696) | 0.1455 | ↑ | 0.1507 | .0052 | .307 | 3.57% |
| Low Decreasing (n=2,212) | 0.1534 | ↑ | 0.1308 | -.0226 | .013* | -14.73% |
| Low Increasing (n=903) | 0.1694 | ↑ | 0.2410 | .0716 | .000*** | 42.27% |
| Moderate Stable (n=292) | 0.3870 | ↑ | 0.4840 | .0970 | .032* | 25.06% |
| High Decreasing (n=574) | 0.4344 | ↑ | 0.3333 | -.1011 | .008** | -23.27% |
| High Increasing (n=221) | 0.4736 | ↑ | 0.5279 | .0543 | .383 | 11.47% |
| Chronic (n=247) | 0.6221 | ↑ | 0.6923 | .0702 | .366 | 11.28% |

↑ Pattern has Significantly Higher Number of Illegal Dumping Incidents Than Crime Free Pattern.
↓ Pattern has Significantly Lower Number of Illegal Dumping Incidents Than Crime Free Pattern.
*** p<.001, ** p<.01, * p<.05 for paired sample t-test for blocks.
Source: Weisburd, Groff, and Yang (in rogress).

Our discussion so far illustrates that criminologists and the police can identify characteristics of places that are associated with crime. But is our ability to explain and thus identify causes of crime at place greater than our ability to explain crime among people? There is no hard and fast way to answer this question, and much additional research will be needed on crime places before we can compare our knowledge to the large number of studies that have been conducted with individuals. Nonetheless, recent work by Weisburd, Groff and Yang (In progress) suggests that even in this early stage of development of this research agenda, efforts can yield very high levels of explanation. In predicting trajectory pattern membership of street segments they find that the models developed explain about two thirds of variability in crime trends. This may be contrasted with models of individual criminality which have average variance explained levels of about 30 percent (Weisburd & Piquero, 2008).

# VII. The Empirical Evidence for Hot Spots Policing

The basic research we have examined so far establishes a strong basis for the development of place-based policing. Crime is concentrated at a relatively small number of places in the city suggesting that place-based or hot spots policing provides an opportunity for the police to be efficient in tackling crime problems. Those places moreover represent long term chronic crime locations, and do not simply shift from year to year. If the police can be successful at ameliorating crime problems at places this suggests that there will be long term crime benefits. Additionally, crime at place is not simply a proxy for crime in communities. The basic research on crime at place suggests that much of the action of crime is occurring at these small geographic units we have termed crime places, and that focus on larger areas such as beats, precincts or communities would lead to a loss of efficiency and effectiveness in crime prevention efforts. Finally, we have already a strong body of knowledge suggesting the factors that influence crime and place, and thus a basis for identifying crime prevention practices for police at crime hot spots.

Importantly, this basic research is reinforced by strong scientific evidence of the ability of the police to effectively respond to crime at place. A series of randomized field trials show that policing that is focused on hot spots can result in meaningful reductions in crime and disorder (see Braga, 2001, 2005, 2007). 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. In another randomized experiment, the Kan-

sas City Crack House Raids Experiment (Sherman & Rogan, 1995a), crackdowns on drug locations were also found to lead to significant relative improvements in the experimental sites, although the effects (measured by citizen calls and offense reports) were modest and decayed in a short period. In yet another randomized trial, however, Eck and Wartell (1996) found that if the raids were immediately followed by police contacts with landlords, crime prevention benefits could be reinforced and would be sustained for longer periods.

More general crime and disorder effects are also reported in three other randomized controlled experiments that tested a more tailored, problem-oriented approach to dealing with crime hot spots. 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. Importantly, all crime categories experienced reductions and observational data revealed statistically significant declines in social and physical disorder as well. In the Jersey City Drug Market Analysis Program experiment (Weisburd & Green, 1995a), hot spots policing tactics were found to be more effective at reducing disorder at drug hot spots than generalized enforcement. In the Oakland Beat Health study, Mazerolle and Roehl (1998) also reported strong reductions in crime and disorder in an experimental evaluation of civil remedy interventions at specific drug-involved locations.

Nonexperimental studies provide similar findings. For instance, the Kansas City Gun Project evaluation (Sherman & Rogan, 1995b) found strong crime control gains for hot spots policing approaches. Using intensive enforcement in an eight by ten block area, including traffic stops and searches, Sherman and Rogan (1995b) reported a 65 percent increase in guns seized by the police and a 49 percent decrease in gun crimes in the treatment area relative to a matched control area. Hope (1994) examined the effects of a problem-oriented policing strategy, which relied primarily on traditional law enforcement tactics, on total calls for service in three drug hot spot locations in St. Louis, Missouri. The evaluation compared total calls in the targeted drug hot spots to addresses proximate to the treatment locations and blocks in the surrounding areas. Hope (1994) reported significant crime reductions in the treatment locations when compared to the control locations.

This strong body of rigorous evaluations led the National Research Council Committee to Review Research on Police Policy and Practices to conclude in 2004:

> *There has been increasing interest over the past two decades in police practices that target very specific types of crimes, crimi-*

*nals, and crime places. In particular, policing crime hot spots has become a common police strategy for reducing crime and disorder problems. While there is only preliminary evidence suggesting the effectiveness of targeting specific types of offenders, a strong body of evidence suggests that taking a focused geographic approach to crime problems can increase the effectiveness of policing (2004:35).*

Further evidence of the effectiveness of hot spots comes from a Campbell Collaboration systematic review conducted by Anthony Braga (2001, 2005, 2007). A Campbell review involves a more systematic review of the literature than a narrative review and, when appropriate, uses meta-analysis to provide a statistical summary of the literature (Lipsey & Wilson, 2001). In keeping with Campbell standards, eligible studies included only those that examined crime places that received the hot spots policing intervention compared to places that experienced routine levels of traditional police service.
Nine eligible studies were identified and included in the Campbell review, several of which were described above:

1. Minneapolis Repeat Call Address Policing (RECAP) Program (Sherman, Buerger, & Gartin, 1989)*
2. Minneapolis Hot Spots Patrol Program (Sherman & Weisburd, 1995)*
3. Jersey City Drug Markets Analysis Program (DMAP) (Weisburd & Green, 1995a)*
4. Jersey City Problem-Oriented Policing at Violent Places Project (Braga et al., 1999)*
5. St. Louis Problem-Oriented Policing in Three Drug Market Locations Study (Hope, 1994)
6. Kansas City Gun Project (Sherman & Rogan, 1995b)
7. Kansas City Crack House Police Raids Program (Sherman & Rogan, 1995a)*
8. Houston Targeted Beat Program (Caeti, 1999)
9. Beenleigh, Australia Calls for Service Project (Criminal Justice Commission, 1998)

These nine evaluations were conducted in five large cities in the United States and one suburb in Australia. Five of the selected studies used randomized experimental designs (indicated with an asterisk in the list above) and four used non-equivalent control group quasi-experimental designs. The treatments used to prevent crime at hot spots fell into three broad categories: enforcement problem-oriented policing interventions, directed and aggressive patrol programs, and police crackdowns and raids (see Braga, 2001, 2005, 2007 for more information on each study).

The Campbell review reported noteworthy crime and disorder reductions in seven of the nine selected studies. Due to inconsistent reporting of program effects in the quasi-experimental studies, only randomized trials were included in the Campbell review meta-analysis (Braga, 2005, 2007). Since all hot spots policing experiments used citizen calls for service as an outcome measure, the main effect size for each study was calculated based on the statistics reported for key calls for service findings. These effect sizes are reported in Table 4.

The effect size of the hot spots policing intervention on the treatment places relative to control places was very large (2.05) and statistically significant in the Jersey City Problem-Oriented Policing at Violent Places experiment. While the study reported a very large effect size, its influence on the overall meta-analysis was moderated by its small sample size and correspondingly small inverse variance weight. The Jersey City DMAP experiment intervention also had a large statistically significant effect size (.689) and the Minneapolis Hot Spots Patrol experiment intervention had a moderate statistically significant effect size (.322). The Kansas City Crack House Raid experiment and the Minneapolis RECAP experiment at commercial addresses had smaller non-statistically significant effect sizes that favored the treatment places relative to the controls (.219 and .089, respectively). The Minneapolis RECAP experiment at residential addresses had a very small, non-statistically significant effect size that slightly favored the control places relative to the treatment places.

Since the distribution of effect sizes was found to be heterogeneous, the Campbell review used a random-effects meta-analytic model to calculate the mean effect size for all studies. Overall, the Campbell review found that hot spots policing interventions reduced citizen calls for service in the treatment places relative to the control places (Braga, 2005, 2007). The mean effect size for the hot spots policing intervention for the six studies was moderate (.345) and statistically significant. When the RECAP study was not included in the meta-analysis due to methodological concerns, the mean effect size was large (.632) and statistically significant.

**Table 4: Meta-Analysis of Hot Spots Experiment Effect Sizes for Main Outcomes.**

| Experiment | Effect Size | Standard Error | Inv. Var. Weight (% Total Weight) | 95% C.I. |
|---|---|---|---|---|
| Jersey City POP | 2.05* | .504 | 3.93 (1.8%) | Upper 3.04 Lower 1.06 |
| Jersey City DMAP | .689* | .275 | 13.21 (6.0%) | Upper 1.23 Lower .15 |
| Minneapolis Patrol | .322* | .142 | 27.15 (12.3%) | Upper .60 Lower .044 |
| Kansas City Crack | .219 | .139 | 51.32 (23.3%) | Upper .492 Lower -.054 |
| Minneapolis RECAP Commercial | .089 | .127 | 62.49 (28.3%) | Upper .337 Lower -.159 |
| Minneapolis RECAP Residential | -.009 | .127 | 62.49 (28.3%) | Upper .238 Lower -.256 |
| **Meta-Analysis All Studies** | **.345*** | **.150** | **Total Weight = 220.59** | **Upper .640 Lower .058** |
| **Meta-Analysis w/o RECAP** | **.632*** | **.253** | **Total Weight w/o RECAP =95.61** | **Upper 1.13 Lower .138** |

* $p < .05$

Since the publication of the most recent iteration of the Campbell review, an additional randomized controlled experiment evaluating the crime prevention benefits of hot spots policing has been completed. In Lowell, Massachusetts, a randomized controlled experiment evaluated the effects of policing disorder, within a problem-oriented policing framework, at crime and disorder hot spots (Braga & Bond, 2008). Thirty-four hot spots were matched into 17 pairs and one member of each pair was allocated to treatment conditions in a randomized block field experiment. The impact evaluation revealed a statistically significant 20 percent reduction in crime and disorder calls for service at the treatment places relative to the control places. Analyses of systematic observation data also revealed significant reductions in social and physical disorder at the treatment places relative to the control places.

In sum, the empirical research is highly supportive of hot spots policing. Several experimental and quasi-experimental studies have demonstrated that a focus on small high crime geographic areas can have a positive and statistically significant impact on crime and disorder. While empirical support for hot spots policing is strong, such approaches would be much less useful if they simply displaced crime to other nearby places. The issue of displacement effects is reviewed in the next section.

# VIII. Does Crime Just Move Around the Corner?

Crime displacement is the notion that efforts to eliminate specific crimes at a place will simply cause criminal activity to move elsewhere, be committed in another way, or even be manifested as another type of crime, thus negating any crime control gains (Reppetto, 1976). This perspective on the crime prevention effectiveness of police efforts to control problem places developed from dispositional theories of criminal motivations, and the views of these skeptics were supported by early studies of opportunity-reducing measures (Clarke, 1980; Gabor, 1990). For instance, although exact fare systems reduced the number of robberies on New York City buses, a corresponding increase in robberies occurred in the subways (Chaiken, Lawless, & Stevenson, 1974). In addition, traditional police efforts to control street level drug markets have been assumed to be quite susceptible to spatial, temporal, and tactical displacement (see Caulkins, 1992; Eck, 1993; Sherman, 1990).

Since 1990 there have been four main reviews of empirical studies that report on displacement: Barr and Pease (1990); Eck (1993); Hesseling (1994); and Guerette and Bowers (2009). The four reviews vary in their comprehensiveness. Barr and Pease restricted their review to studies from the United Kingdom. Eck reviewed 33 studies from the United States, Canada, the United Kingdom, and other countries printed in English. Hesseling examined 55 studies from North America, Europe and other areas printed in English or Dutch. Guerette and Bowers's systematic review examined 102 studies of situational crime prevention. All four reviews arrived at three basic conclusions. First, there is little evidence of crime prevention strategies that displaced as much crime as was prevented. Second, displacement, when it occurs, is usually less than the amount of crime prevented. And third, for crime prevention evaluations that

reported on displacement, the most common finding was that there was no evidence of displacement. In sum, most studies found no, or negligible, displacement of crime.

These results must be taken with three important caveats. First, the amount of displacement depends, in part, on the type of intervention being used. For example, Hesseling (1994) suggests that target hardening may displace more crime than access control. Second, the amount of displacement also depends, in part, on the crime or disorder being prevented. Eck (1993) suggests that drug dealing may be more likely to displace than other forms of crime (though see Weisburd and Green, 1995b for the opposite view) and that certain forms of drug markets are particularly susceptible to displacement. Third, and most importantly, because the studies did not set out to examine displacement, it was rare that evaluators were able to use a methodologically sound research design for detecting it (see Weisburd and Green, 1995b). This is the case in part because researchers must make decisions about the allocation of scarce research funds and resources. If, for example, a researcher is unsure about the direct crime control benefits of a program, it makes sense to invest in assessing the direct target effects rather than outcomes that are important only if a target effect is found.

Spatial displacement represents a direct and significant threat to place-based policing. If crime will simply move around the corner as a response to targeted police programs at hot spots, there is little point in carrying out hot spots policing programs. The research evidence regarding displacement in hot spots policing is particularly strong and consistent. There is little evidence of displacement of crime to areas nearby targeted hot spots. Indeed, a series of studies suggest that there is likely to be what Clarke and Weisburd (1994) have termed a "diffusion of crime prevention benefits" to areas near to hot spots policing targets. In this sense, the crime prevention gains for hot spots policing seem to spread out from targeted locations.

In the Jersey City Drug Market Analysis Experiment (Weisburd & Green 1995a), for example, displacement within two block areas around each hot spot was measured. No significant displacement of crime or disorder calls was found. Importantly, however, the investigators found that drug-related and public-morals calls actually declined in the displacement areas. This "diffusion of crime control benefits" was also reported in the Jersey City Violent Crime Places experiment (Braga et al., 1999), the Beat Health study (Mazerolle & Roehl, 1998), and the Kansas City Gun Project (Sherman & Rogan, 1995b). In each of these studies, no displacement of crime was reported, and some improvement in the surrounding areas was found. Only Hope (1994) reports direct displacement of crime, although this occurred only in the area immediate to the treated locations and the displacement effect was much smaller overall than the crime

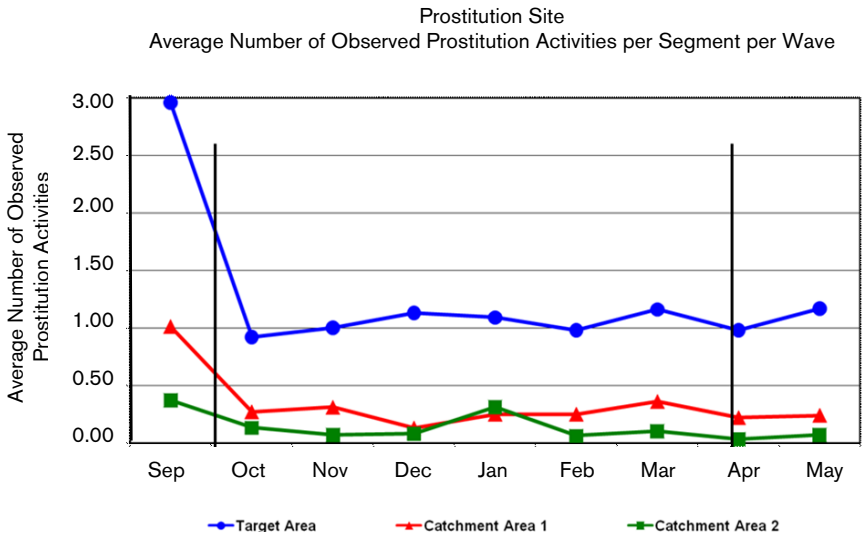
prevention effect. The Campbell systematic review described above examined displacement data for five of the nine studies, finding that none reported substantial immediate spatial displacement of crime into areas surrounding the targeted locations (Braga, 2001, 2005, 2007).

While much attention has been paid to the idea of displacement, methodological problems associated with its measurement have often been overlooked (Weisburd & Green, 1995b; for exceptions see Barr & Pease, 1990 and Pease, 1991). This is not to say that displacement has not been studied; only that empirical examinations of displacement or diffusion have been a byproduct of the study of something else. Typically, knowledge of displacement or diffusion has been gained from a study that was primarily about the effects of an innovative crime prevention program. The problem is that a study that is designed to measure direct program effects will likely face significant methodological problems in measuring displacement or diffusion (Weisburd & Green, 1995b).

A recent study by Weisburd and colleagues (2006) of hot spots policing interventions at drug and prostitution markets explicitly examined spatial displacement and diffusion as a primary outcome and presents important insights about why crime does not simply move around the corner as a response to targeted policing efforts at crime hot spots. To examine displacement and diffusion effects, a wealth of data was collected in the intervention target areas and surrounding catchment areas, approximately two blocks surrounding each target area. The study employed analyses of more than 6,000 20-minute social observations at the research sites, supplemented by interviews with arrestees from the target areas and ethnographic field observations.

Quantitative findings indicated that for the crime hot spots examined, crime did not simply move around the corner in response to intensive police crime prevention efforts at places. Indeed, the study supported the position that the most likely outcome of such focused crime prevention efforts is a diffusion of crime control benefits to nearby areas. This is illustrated in Figure 8, which documents observed prostitution events in the target and displacement catchment areas during the period of the study. Here, as in other analyses conducted by Weisburd et al. (2006), crime did not go up in the catchment areas after there were strong crime prevention gains at the target site. Indeed, the catchment areas followed a similar pattern to the target site, suggesting a diffusion of crime control benefits.

**Figure 8: Observed Prostitution Events in the Target and Displacement Catchment Areas.**




Note: Black vertical lines indicate the beginning and end of the police intervention period.
Source: Weisburd et al. (2006).

An examination of the ethnographic field work and arrestee interviews reinforce routine activities and rational choice perspectives as a means to help understand why there was little evidence of spatial displacement. Rational choice theories emphasize the importance of the balancing of effort, risks and opportunities with the benefits that will be gained from criminal activities (Clarke & Cornish, 1985, 2001). The qualitative data collected by Weisburd et al. (2006), in turn, suggest that spatial movement from crime sites involves substantial effort and risk by offenders.

A number of the offenders they spoke to complained about the time and effort it would take to reestablish their activities in other areas as a reaction to the police intervention. One respondent arrested at the drug crime site, for example, explained that it is difficult to move because the "money won't be the same," that he "would have to start from scratch," and that it "takes time to build up customers." Fear of victimization was also an important factor in preventing spatial displacement. One prostitute provided a keen sense of why, for safety reasons, it is important to have "regulars".

> *"If they aren't regulars, I try to feel them out. I use precautions. I never will get into a car with two men. I always check the doors to make sure I can get out if I need to, like if an emergency arises, like a guy trying to hurt me. I will always go into an area I*

*know. This way, if I need help, I know that somehow I can find someone or get someone's attention. But, in the same way, I don't go into an area that would give away what I am doing and get me arrested. I basically don't let the guys take me where they want to go. If they insist on this, then I make them pay me up front, before the zipper goes down."* (Brisgone, 2004:129)

Another respondent explained that going to a different area of town was difficult because other prostitutes got angry and told her "this is our turf, stay away". Similar resistance to displacement was evident in interviews with offenders arrested in the drug crime site. The drug dealers' intimacy with the area in which they worked was one of the primary mechanisms preventing spatial displacement. A number of dealers explained that you work near where you live because that is your "turf." One arrestee elaborates, "you really can't deal in areas you aren't living in, it ain't your turf. That's how people get themselves killed" (Weisburd et al., 2006:578)

Another emphasis of rational choice theorists is that the factors influencing offender choices are often very similar to those of non-offenders (Cornish & Clarke, 1986). This insight has been part of a number of important criminological perspectives (e.g. see Akers, 1973; Sutherland, 1947), but it is sometimes lost in the identification of individuals as criminals and the criminological focus on what distinguishes them from non-criminals (Weisburd & Waring, 2001). One important explanation for the resistance to spatial displacement is simply that offenders, like non-offenders, come to feel comfortable with their home turf and the people that they encounter. As with non-offenders, moving jobs or homes can be seen as an important and difficult change in life circumstances. One prostitute explained, for example:

*"I walked over (to the graveyard cemetery) and I didn't think I'd make money. It was unfamiliar to me. It was like, It was like . . . unfamiliar to me. I didn't know the guys (clients).On Cornelison you recognize the guys. I know from being out there every day (on Cornelison), the cars, the faces. It's different. In my area, I know the people. Up on 'the hill' -- I don't really know the people at that end of town." (Brisgone, 2004:199)*

While these data reinforce routine activities and rational choice perspectives, and help us understand why Weisburd et al. observe little evidence of spatial displacement in their data, they do not explain why there is a significant diffusion of crime control benefits both in the prostitution and drug crime sites. Even if there is good reason not to move to other sites either because they do not offer similar

opportunities, or increase the risks for offenders, why should observed crime and disorder go down in those areas?

Weisburd et al. argue that deterrence played a central role in the diffusion processes they observed (see Clarke & Weisburd, 1994).[4] In interviews with offenders arrested in the target areas, they found that they often did not have a clearly defined understanding of the geographic scope of police activities. Such understanding often improved in what might be termed a "learning curve" over time (Brisgone, 2004). Nonetheless, the qualitative data suggest that offenders acted in a context of what rational choice theorists call "bounded rationality" (Johnson & Payne, 1986) in which they made assumptions about police behavior that were based on limited or incorrect information. In this context, they often assumed that the crackdowns were not limited to the target areas but were part of a more general increase in police enforcement.

Support for this argument is found in a review of situational crime prevention studies conducted by Smith, Clarke and Pease (2002). Examining a phenomenon they describe as "anticipatory crime prevention benefits," they find that in about 40 percent of studies reviewed, crime declined before the intervention had begun. Smith and her colleagues argue that the crime prevention benefit in such cases can be traced primarily to "publicity" or "disinformation." They speculate that such factors as pre-program media reports about interventions, the visibility of preparations for interventions (e.g. the installation of CCTV), or "hearsay" regarding impending police actions, lead potential offenders to assume that the risks or efforts associated with offending have increased. It may be that a similar process of "disinformation" occurred in the Weisburd et al. (2006) study, based on offender observations of police activities in the target areas, information from offenders who had been the subject of police actions, or from other members of the community.

The evidence to date challenges strongly the assumption that targeted crime prevention at places will have little overall benefit because of displacement of crime. Indeed, the evidence regarding spatial displacement, which is most relevant to place-based policing, strongly supports the conclusion that hot spots policing will lead to a diffusion of crime prevention benefits to nearby areas.

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[4] Another possible explanation for diffusion of crime control benefits in the catchment areas is "incapacitation." Many offenders were arrested in the target areas, and if these individuals were also responsible for crime in the catchment areas, we might expect observed crime and disorder to have declined in the catchment areas. However, despite the intensive enforcement activities at the target sites, many offenders remained active in these areas throughout the study period. Few prostitutes studied were imprisoned for extended periods, and most arrests led to just one or a few days off the street. Though a Violent Offender Removal Program in the drug site was intended to remove offenders from the drug site for longer periods, only a small proportion of active offenders were actually prosecuted in the program.

# IX. Reducing Legal Constraints while Decreasing Arrests and Incarceration of Offenders

Police often complain that their hands are tied in doing something about criminals. While the extent of legal constraints on policing are the source of much debate (Bittner, 1967; Ohlin & Remington, 1993; NRC, 2004; Vollmer, 1933; Wickersham Commission, 1931; Wilson, 1950), it is clear that place-based policing offers a target for police interventions that is less protected by traditional legal guarantees. The common law and our legal traditions have placed less concern over the rights of places than the rights of individuals. It is not that police can do what they like at places. Rather, the extent of constitutional and procedural guarantees has at times been relaxed where places are targeted.

When it is established that places are crime targets or deserve special protection, it becomes easier to legally justify enforcement in regard to individual offenders. For example, Dan Kahan and Tracey Meares (1998:1172) note that law enforcement officials "needn't obtain a warrant or even have probable cause... to stop motorists at sobriety checkpoints or to search all individuals entering airports or government buildings." This means that at certain places, where issues of public safety are a central concern, it is possible to justify policing activities that would be unacceptable if carried out against individuals in other places. Places where crime is concentrated are often seen to meet this criterion, as is the case in many cities that have designated drug market areas for special attention. Safe school zones are another example of the identification of places that allow special activities by the police, in this case because of the vulnerabil-

ity of potential victims. The constitutional issues here are complex and do not simply justify intrusion in every case. Nonetheless, politicians, judges, and, indeed, ordinary citizens have an intuition that police should be allowed appropriate discretion to police certain places that exhibit specific problems, such as concentrated crime, when there is the support of residents.

Place-based policing, accordingly, provides a target for police that may lead to fewer constraints in terms of the development of crime prevention strategies (Weisburd, 2008). But, importantly, it also suggests an approach to policing that may lead to less coercive and, in the long term, more humane crime prevention practices. To be successful in place-based policing, it is often necessary for police to expand their toolbox to take into account the fact that their targets are places and not people. The civil law rather than law enforcement is often the most successful method for interrupting crime at place (Mazerolle & Roehl, 1998). As Cheh has observed (1991:1329), "Police and prosecutors have embraced civil strategies not only because they expand the arsenal of weapons available to reach antisocial behavior, but also because officials believe that civil remedies offer speedy solutions that are unencumbered by the rigorous constitutional protections associated with criminal trials." Whatever the reason for the shift in tactics from ones that rely on the criminal law to ones that rely on civil or administrative law, the end result is crime prevention strategies that are less reliant on traditional law enforcement practices that often lead to the arrest and imprisonment of offenders.

Over the last three decades in the U.S., rates of imprisonment have dramatically expanded, and there is evidence that imprisonment rates are also rising in other Western countries (Walmsley, 2009). Spending on prisons in the U.S. has increased at more than double the rate of spending on education and health care (Hughes, 2006). The moral cost is that fully 2.3 million Americans everyday are in prisons or jails (West & Sabol, 2008), institutions that are often dehumanizing and degrading. Policing places puts emphasis on reducing opportunities for crime at places, not on waiting for crimes to occur and then arresting offenders. Successful crime prevention programs at places need not lead to high numbers of arrests, especially if methods are developed that discourage offenders, for example through "third party policing" (Mazerolle & Ransley, 2005). In this sense, place-based policing offers an approach to crime prevention that can increase public safety while decreasing the human and financial costs of imprisonment. If place-based policing was to become the central focus of police, rather than the arrest and apprehension of offenders, we would likely see at the same time a reduction of prison populations and an increase in the crime prevention effectiveness of the police.

# X. Recognizing the Importance of Police Legitimacy in Policing Places

Basic and applied research supports the potential and actual crime prevention opportunities of place-based policing. Place-based policing moreover offers opportunities for police to carry out crime prevention with fewer legal constraints. However, the effectiveness of policing is also dependent on public perceptions of the legitimacy of police actions (NRC, 2004; Tyler, 1990, 2004). Even if the police can lower crime, if they alienate the community in carrying out their efforts it is difficult to identify place-based policing as successful.

There is a noteworthy lack of research assessing the effects of place-based policing on police-community relations. This gap in knowledge is significant for hot spots policing initiatives as many observers suggest a tension between the crime prevention effectiveness of focused police efforts and their potential harmful effects on police-community relations (Meares, 2006; Rosenbaum, 2006; Taylor, 2006; Weisburd & Braga, 2006b). If the public's trust and confidence in the police is undermined, the ability of the police to prevent crime will be weakened by lawsuits, declining willingness to obey the law, and withdrawal from existing partnerships (Tyler, 1990, 2004). The political fallout from illegitimate police actions can seriously impede the ability of police departments to engage in innovative crime control tactics.

There is some evidence that residents of areas that are subject to focused police attention welcome the concentration of police efforts in problem places (McGarrell, Chermak, Weiss, & Wilson, 2001; Shaw, 1995). A separate examination of the Kansas City Gun Pro-

ject (Sherman & Rogan, 1995b) found that the community strongly supported the intensive patrols and perceived an improvement in the quality of life in the treatment neighborhood (Shaw, 1995). The study did not, however, attempt to measure how the individuals who were stopped and searched by the police felt about the program.

Dennis Rosenbaum (2006) suggests that hot spots policing, because it has often been operationally defined as aggressive enforcement in specific areas, runs the risk of weakening police-community relations. Rosenbaum (2006) argues that hot spots policing can easily become "zero tolerance" policing because this approach is easy for the police to adopt. Indiscriminate aggressive tactics can drive a wedge between the police and communities, as the latter can begin to feel like targets rather than partners:

> *Because the police have chosen to focus on removing the "bad element" and serving as the "thin blue line" between "good" and "bad" residents, these strategies can pit one segment of the community against another, as the "good" residents are asked to serve as the informants and the "eyes and ears" of the police. Parents, siblings, and friends of gang members can feel a divided loyalty and be caught in the crossfire (Rosenbaum, 2006:253).*

Rosenbaum (2006) also raises the question of whether sustained enforcement efforts in minority communities will contribute to disproportionate minority confinement. Regardless of the specific approach employed or tactics engaged, hot spots policing will generate an increased amount of police-citizen contacts in very small areas. Police behavior in these areas will greatly influence the amount of support and involvement from community members residing in crime hot spot areas. To maximize their ability to manage crime problems in these places, police managers should strive to ensure fair police-citizen interactions and the development of strong partnerships with community members, an approach used successfully in pulling-levers policing (Braga & Winship, 2006; Kennedy, 2006). While the work is difficult, long-term community engagement efforts can pay large dividends in improving the quality of police-community relationships and collaborative crime prevention efforts.

The concentration of crime at specific hot spot locations within neighborhoods provides an important opportunity for police to make connections with community members who are most vulnerable to victimization and experience fear and diminished quality of life as a result of ongoing and intense crime and disorder problems. Regrettably, these community members are often the same people who view the police with suspicion and question the legitimacy of police efforts to control crime in their neighborhoods. In this sense,

residents and business owners in high-activity crime places represent "hot spots" of community dissatisfaction with and mistrust of the police. If police departments are concerned with improving their relationships with community members, the residents and business owners in hot spot locations seem like a logical place to start. Like crime, poor police-community relationships are not evenly spread throughout city environments. If the police can win the hearts and minds of long suffering community members in hot spot areas, it seems likely to produce larger impacts on the overall legitimacy of police departments in the city than developing stronger relationships with community members in more stable neighborhoods, who are more likely to already have generally positive perceptions of police services.

As in the case of understanding the effectiveness of police strategies, the potential impact of police crime prevention efforts in problem places on citizen perceptions of legitimacy may depend in good part on the types of strategies used and the context of the hot spots affected. Unfocused and indiscriminate enforcement actions seem likely to produce poor relationships between the police and community members residing in hot spot areas. We believe that the police should adopt alternative approaches to controlling hot spots that do not rely solely on one-dimensional intensive enforcement. Of course, arresting criminal offenders is a central part of the police function and should remain an important tool in an array of responses to crime hot spots. But place-based policing programs infused with community and problem-oriented policing principles hold great promise in improving police legitimacy in the eyes of community members living in places suffering from crime and disorder problems (Braga & Weisburd, 2010; Mastrofski, Braga, & Weisburd, 2010; Taylor, 2006).

# XI. An Agenda for Place-Based Policing

What must change to implement a broad program of place-based policing? It is important to start out by recognizing that places have indeed always been a concern for the police. As Carolyn Block (1998:28) has noted in discussing interest in crime mapping among police, "Crime maps are nothing new. Pin maps have graced walls behind police chiefs' desks since pins were invented." Moreover, over the last decade, hot spots policing approaches have become a common staple of American policing. In a recent study, Weisburd and Lum (2005) found that 62 percent of a sample of 125 departments with 100 or more sworn officers claimed to have adopted computerized crime mapping. Of these, 80 percent claimed to conduct hot spots analysis and two thirds used hot spots policing as a patrol strategy. A 2007 Police Executive Research Forum (PERF, 2008) study found that 74 percent of police departments surveyed in 192 jurisdictions used "hot spots enforcement" as a strategy to address violent crime. Compstat has also been adopted widely by larger American police agencies over the last decade (Weisburd, Mastrofski, McNally, & Greenspan, 2001; Weisburd, Mastrofski, McNally, Greenspan, & Willis, 2003). And though Compstat is an innovation that seeks to concentrate police efforts on specific goals and increase organizational control and accountability, it has encouraged geographic analysis of crime as one of its innovations.

Place-based policing, however, requires something more radical than simply advocating that police add a new strategy to the basket of police interventions. For place-based policing to succeed, police must change their unit of analysis for understanding and doing something about crime. Policing today continues to place people at the center of police practices. This is reflected in how data are collected, as well as how the police are organized. Place-based policing

demands a fundamental change in the structure of police efforts to do something about crime and other community problems.

Police data, for example, has developed historically out of a system that was focused on offenders and their characteristics. Indeed, the addition of a place-based identifier was not initially a source of much concern in incident, arrest, or police call databases. In the late 1980s, researchers who tried to analyze the locations of crime using police databases were often frustrated by an inability to identify where a crime occurred. There were often multiple names given to similar addresses, some based on the actual address and some on the names given to stores or other institutions at that address. Such name identifiers often included scores of possible permutations, and address identifiers often failed to identify whether the address was in the south, north, east, or west of cities with such designations. Over the last decade, police have become much better at identifying where the crime is located, in part because of significant advances in records management systems and in part because of advances in geographic information systems. But it is striking how police in most jurisdictions have failed to go very much beyond the simple identification of an address in their data systems.

In the case of arrest databases, it is common to collect data on age, gender, and often education and other demographic characteristics of offenders. But it is rare for such databases to tell us much about the nature of the places that are the context of police activities. A successful program of place-based policing would require that the police routinely capture rich data about places. We should know as much about the places that are hot spots of crime as we do about offenders who commit crimes. Such data should be regularly available to police when they decide to focus interventions on specific places. The failure to collect such data routinely, or to gain such data from other agencies, limits the ability of police to develop effective place-based policing strategies. Block and Green (1994) have already suggested the importance of such databases in what they have called a GeoArchive. The Illinois Criminal Justice Information Authority developed the GeoArchive as an extensive geographic database of community and law enforcement data. A variety of data are collected including: street map data, official crime data (calls for service, arrests, offender characteristics, victim characteristics), corrections data (the addresses of persons released on probation or parole), landmark data (parks, schools, public transportation, liquor stores, abandoned buildings), and population information (Block, 1998).

The failures of traditional person-centered policing to develop data sources relevant for place-based policing is also evidenced in the lack of interest of police executives in knowing where the police are. While technologies for tracking the whereabouts of police, often

termed automated vehicle locator technologies, have been available for decades, very few U.S. police agencies have used these technologies to improve the effectiveness of policing. For example, knowledge about where crime is and where police patrol could provide important insights into the benefits of specific police strategies. Ability to track police presence could also be used to make sure that scarce patrol resources are actually being sent to where they are needed. The Police Foundation is currently working on an innovative program in collaboration with the Dallas, Texas Police Department with these aims in mind. But it is in some sense indicative of the failure of police to take a place-based approach that this technology has only now begun to be applied to practical crime prevention.

The geographic organization of policing today also fails to recognize the importance of places in developing police strategies. By arranging police in large precincts and beats, the police have assumed that the common denominator of crime is found at large geographic levels.

While it might be argued that precincts and beats are seldom fit for even larger geographic units such as communities, they are particularly ill fit for place-based policing. Perhaps police should consider dividing patrol according to micro places that have similar crime levels and developmental trends over time. Such a reorganization of police around places would focus strategic thinking and resources on solving common problems. The reorganization of police for place-based policing might also take other forms, but it is clear that today's precincts or beats do not take into account what we know about the geographic distribution of crime and its concentration at relatively small crime places.

In policing places, there must also be a shift from arresting and prosecuting offenders to reducing the opportunities for crime at place. The idea that police were too focused on law enforcement is not a new one, and indeed was a central concern of Herman Goldstein when he introduced the idea of problem-oriented policing in 1979. For three decades Goldstein and others have tried to influence the police to be less focused on arrest and prosecution of individual offenders and more focused on solving crime problems. But these calls have at best been only partially heeded by the police, and there is much evidence that law enforcement and arrest of offenders remains the primary tool of policing even in innovative programs (Braga & Weisburd, 2006). In a police culture in which person-based policing is predominant, it is natural for police officers to continue to focus on offenders and their arrest.

Place-based policing provides an opportunity to finally shift this emphasis, because it places the crime place rather than the offender at the center of the crime prevention equation. It changes the central

concern of police to improving places rather than simply processing offenders. Success in this context must be measured not in terms of how many arrests the police make but in terms of whether places become safer for the people who live, visit, or work in such places. Policing places requires the expansion of the toolbox of policing far beyond traditional law enforcement. In this context, place-based policing requires that police be concerned not only about places, offenders, and victims but also about potential non-police guardians. If the goal of the police is to improve safety at places, then it is natural in policing places to be concerned with what Eck and others have termed "place managers" (Eck, 1994; Eck & Wartell, 1996). "Third party policing" (Mazerolle & Ransley, 2005) is also a natural part of place-based policing. But, more generally, place-based policing brings the attention of the police to the full range of people and contexts that are part of the crime problem.

In advocating place-based policing, it is important to note that police should not abandon concern with people involved in crimes. People should not be ignored, but rather they should be seen in the context of where crime occurs. Saying that people should not be at the center of the crime equation does not mean that they are not an integral part of that equation. The difference is in good part how the police should organize information and crime prevention efforts. Moreover, there may be some crimes that are better understood by focusing on people rather than places, and this should also be a central component of our understanding of place-based policing. Though there is as yet little solid scientific evidence that repeat offender or victim crime prevention programs are effective (Weisburd & Eck, 2004), it is clear that very high-rate criminals or victims should be the subjects of special police attention.

# XII. Conclusions

Basic research suggests that the action of crime is at very small geographic units of analysis, such as street segments or small groups of street segments. Such places also offer a stable target for police interventions, as contrasted with the constantly moving targets of criminal offenders. Crime at place is not simply a proxy for larger area or community effects; indeed the basic research evidence suggests that much of the action of crime occurs at very small geographic units of place. Basic research also reinforces the idea that characteristics of places that can be affected by policing are strongly related to crime at place. But the case for place-based policing does not come only from basic research. There is a strong body of experimental evidence for the effectiveness of place-based policing. Moreover, studies today suggest that place-based policing will not simply move "crime around the corner." Indeed, the evidence available suggests that such interventions are much more likely to lead to a diffusion of crime control benefits to areas nearby.

Research accordingly suggests that it is time for police to shift from person-based policing to place-based policing. While such a shift is largely an evolution in trends that have begun over the last few decades, it will nonetheless demand radical changes in data collection in policing, in the organization of police activities, and particularly in the overall world view of the police. It remains true today that police officers see the key work of policing as catching criminals. It is time to change that world view so that police understand that the key to crime prevention is in ameliorating crime at place.

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