

Violence Prevention, General Deterrence, Community Policing, and Problem-Oriented Policing are all Components of Hot Spot Policing

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Abstract:- This article seeks to assess the effectiveness of all hot spot policing components in lowering crime. A critical first step in enhancing public safety is the identification of criminal hotspot locations. Law enforcement agencies can gain from accurate and effective location identification by receiving information that can be used to lessen criminal activity. It would be more logical to utilize these resources in places with much higher crime rates given the limited resources at law enforcement's disposal. Police strategies that concentrate resources on smaller locations with high crime densities are referred to as "hotspot policing" and "place-based policing." Both academics and police personnel strongly endorse and approve the strategy. This adoption is primarily due to the way researchers have presented the strategy as an evidence-based method.

In the current studies, the approach for determining the strategy's effectiveness is frequently constrained. According to Kochel (2011), these studies narrowly define success as a drop in crime in the targeted areas and largely concentrate on what works. The potential benefits of focusing efforts on crime hotspots have lately come to the attention of researchers and practitioners in the field of criminal justice. Numerous studies have shown that crime is disproportionately concentrated in tiny places, or "hot spots," where it makes up half of all criminal activity. Researchers contend that if police officers concentrated their efforts on these outlaw locations, many crime issues could be reduced more effectively. The appeal of concentrating scarce resources on a select group of high-crime locations is obvious. If crime can be stopped in certain high-crime areas, overall crime rates may go down. This program increased police presence in "hot spots" for crime in an effort to lower criminal activity. Hot areas that have been policed statistically significantly less frequently than control hot spots in terms of both observed disorder and citizen calls to the police.

An effective rating suggests that putting the plan into practice is probably going to provide the desired result(s). The primary objective of Hot Spots policing is to prevent and lower overall crime in high-crime areas. Police Departments should employ tactics to locate "hot spots" of crime and boost police presence there in order

to discourage criminal activity. In high-crime areas, the methods are meant to have a general deterrent effect. The concept behind the Hot Spots policing is that an increase in police presence can significantly lower criminal activity. This hypothesis was put into practice by concentrating law enforcement resources in "hot spots" of crime areas with high crime rates. The theory was that since the majority of crime occurred in a small number of geographical areas, boosting police presence there would result in significant decreases in crime. Instead of a reactive strategy that makes arrests after a crime has already been committed, the plan used proactive policing to stop crimes from happening. This overall policy was founded on the deterrence hypothesis, which holds that the mere presence of law enforcement will inhibit criminal activity in a certain area.

I. INTRODUCTION

"The appeal of concentrating scarce resources on a select group of hotspots for crime is obvious. We might be able to lower overall crime if we can stop crime at high-crime areas (Braga 2008:9)".

Crime researchers and practitioners have emphasized throughout the past 30 years the potential advantages of concentrating crime prevention efforts on crime hotspots. Numerous studies indicate that crime is not distributed uniformly throughout urban areas. Instead, crime is disproportionately concentrated in small areas, or "hot spots," which account for half of all criminal activities (Pierce, Spaar, & Briggs, 1988; Sherman, Gartin, & Buerger, 1989). Crime clusters at a few specific spots, even in the most criminalized neighborhoods, whereas other regions are comparatively crime-free (Weisburd, Groff, & Yang, 2012). This notion of crime concentrations has been supported by more recent research (Braga, Andresen, & Lawton, 2017), which prompted Weisburd (2015) to assert that there is a "law of crime concentration" at certain locations, demonstrating not only that crime is concentrated but that it is concentrated at comparable levels across cities and over time.

Researchers have proposed that police personnel should concentrate their efforts on these recurring hotspots of criminal activity if they want to reduce crime more effectively (Braga & Weisburd, 2010; Sherman & Weisburd, 1995; Weisburd, 1997). It is obvious why

concentrating scarce resources on a select few high-crime areas would be appealing. If we can reduce crime in these hotspots, we may be able to reduce crime overall in the city (Weisburd, Braga, Groff, & Wooditch, 2017). The role of geography in crime issues has long been understood by police officials. Police officers are often quite alert to signals of prospective crimes throughout the areas that make up their beats, and they are familiar with the areas within those areas that are trouble spots. In his groundbreaking study of police work, Bittner (1970: 90) speculates that some officers are familiar with "the shops, stores, warehouses, restaurants, hotels, schools, playgrounds, and other public places in such a way that they can recognize at a glance whether what is going on within them is within the range of normalcy."

In the past, these issue regions were often addressed with enhanced patrols, opportunistic arrests, and inquiries. It may be a tried and true strategy to station police officers in high-crime areas, but until very recently, police crime prevention tactics did not systematically target crime hotspots (Braga & Schnell, 2018). Police agencies may now more quickly identify and address problem areas than they were previously able to when pin maps were the only way to look at crime concentrations (Weisburd & Lum, 2005). This is due to the availability of robust crime mapping software packages. Law enforcement organizations can concentrate their limited resources in places where crime is most likely to occur by using hot spots policing methods. This method is rated effective at lowering crime in general and rated promising a decrease in crimes involving violence, property, public order, and drugs and alcohol. In response to the increase in place-based crime prevention measures, hot spots policing was created. Place-based crime prevention prioritizes efforts to reduce crime in areas with high crime rates (Eck & Weisburd, 1995). According to the hot spots perspective, criminal events are heavily concentrated in a limited geographic area known as a hot spot rather than being fairly distributed throughout urban surroundings (Braga et al., 2014).

This crime-reduction method employs a disorder-policing approach to enhance the physical and social order in high-crime locations. The rating for this program is effective. High-crime areas noticed statistically significant decreases in both distress calls and social and physical disorder as compared to control zones. Hot spot policing focused on specific clusters of high-crime sites rather than patrolling entire patrol beats or regions. Crime "hot spots" are identified based on the volume of regional requests for help for intensive patrol services to the high-crime zones. Hot spot policing enhanced police presence in criminal "hot spots" rather than focusing on the precise decisions that individual officers make while on patrol. The police force's entire cooperation was required for the strategy to be successful, thus briefings, pizza parties, and the distribution of t-shirts with the program's logo were utilized to secure it.

Hot spot policing focused on specific clusters of high-crime sites rather than patrolling entire patrol beats or regions. Numerous "hot spots" of crime were discovered in

the area based on the volume of calls for help. The cops provided intensive patrol services in the area with a high crime rate. The project centered on increasing police presence in "hot spots" of crime rather than on the specific duties performed by officers when on patrol. The approach needed the support of the whole police force, which was made achievable via briefings, pizza parties, and the distribution of t-shirts with the program's logo. Police departments use hot spots policing techniques to target particular, mostly urban, limited geographic areas or places with high crime rates (Braga et al. 2012).

Hot spots are often defined as "small places where crime occurs so frequently that it is highly predictable, at least over the course of a year" (1995:36; Sherman), despite the fact that there is no widely agreed-upon definition of what constitutes a hot spot. By utilizing hot spots policing strategies, law enforcement agencies can focus their meager resources in areas where crime is most likely to occur. The idea that if crime can be stopped in some high-crime areas, it could be possible to reduce crime overall in the city is what makes focusing limited resources on a small number of high-crime areas so appealing. The units of analysis that are employed in hot area policing range in size. Hot spot areas can contain both very small units of analysis, such as individual buildings, addresses, block faces, or street segments, as well as larger units, such as collections of addresses, block faces, or street segments.

There are several crime mapping techniques that may be utilized to find and look into crime hotspots using software like ArcGIS. Additionally, there are other techniques to display hot spots, including point mapping and spatial ellipses. The method of mapping and focusing on crime hotspots lacks a set standard; instead, it combines technology with the knowledge and expertise of police officers or crime analysts (Eck et al. 2005). Last but not least, the Police Department was created to improve the physical and social order in high-crime regions. By improving social order in high-crime areas, the method seeks to reduce crime connected with disorder. The ultimate goal of improving order in these specific regions is to reduce crime generally over the greater area.

II. THEORETICAL FRAMEWORK

A number of theories came into being in the 1980s to create environmental criminology. According to the National Institute of Justice (2009), these theories included the Broken Windows Theory, the Crime Opportunity Theory, the Social Disorganization Theory, and the Routine Activity Theory. Although each of these ideas has a place in environmental criminology, the Situational Crime Prevention Theory will be the main topic of this investigation because of its relevance to hot-spot policing. Situational crime prevention, according to Clarke (1997), aims to make criminal activity less alluring to offenders by implementing discrete managerial and environmental adjustments to lower the likelihood that crimes will occur. According to this view, it is possible to prevent crime and civil unrest by minimizing the environmental and situational

conditions that lead to criminal activity. As a result, rather than emphasizing the criminals themselves, it concentrates on the context of the crime, such as a crime hotspot (Clarke, 1997).

Two important theoretical mechanisms—deterrence and the decrease of criminal opportunities support the effectiveness of hot areas policing in preventing crime (Braga & Schnell, 2018). According to the deterrence hypothesis, crime can be stopped when the offender feels that the costs of committing the crime outweigh the rewards (Gibbs, 1975; Zimring & Hawkins, 1973). The research assessing deterrence (Apel & Nagin, 2011; Nagin, 2013; Paternoster, 1987) places a significant emphasis on the impact of increasing the certainty, promptness, and severity of punishment associated with specific acts on the frequency of such crimes.

As they considered the theoretical and policy lessons from hot spots policing evaluations, Nagin et al. (2015: 646) argued that increasing police visibility in crime hot spots will produce significant marginal deterrent effects by raising potential offenders' perceived risk of being apprehended and deterring them from taking advantage of concentrated crime opportunities in these small places. In fact, Sherman and Weisburd (1995) claimed that the well-known Minneapolis hot spots patrol experiment provided evidence of location-specific "micro-deterrence" connected to increased police presence in hot spot regions. The three complimentary crime opportunity theories of rational choice, routine activities, and environmental criminology have a significant impact on hot areas policing as well (Braga & Clarke, 2014; Eck & Weisburd, 1995). The rational choice perspective is predicated on the notion that "offenders seek to benefit themselves by their criminal behavior; that this involves the making of decisions and choices, however rudimentary on occasion these choices may be; and that these processes, constrained as they are by time, the offender's cognitive abilities, and by the availability of relevant information, exhibited limited rather than normative rationality" (Cornish & Clarke, 1987: 933).

To explain criminal conduct during the crime event, this viewpoint is frequently paired with routine activity theory (Clarke & Felson, 1993). According to the theory of routine activities, a crime is committed whenever a likely offender meets a suitable target (such as a victim or piece of property) in place and time without the presence of a responsible adult (Cohen & Felson, 1979). As individuals go about their regular lives, rational offenders encounter criminal opportunities and decide whether to commit crimes. The idea is that by skillfully manipulating the circumstances and environments that create criminal chances, authorities may lessen crime by preventing victims and offenders from converging in space and time.

Understanding place characteristics, such as the existence of crime attractors or crime generators, is crucial because these characteristics give rise to the opportunities that rational offenders will encounter during their daily activities (Brantingham & Brantingham, 1991).

Environmental criminology investigates the distribution and interaction of targets, offenders, and opportunities across time and space. Although practical crime prevention is the main focus of this perspective, Weisburd et al. (1992: 48) indicate that "environmental criminology's basic contribution lay in its call for a change in the unit of analysis from persons to places." Clusters of criminal incidents are thought to be best explained by the characteristics of a certain location. For instance, a drug store would be perfectly situated near a busy road on a dimly lighted street corner with an abandoned building. An inviting environment for drug sales is created by the absence of adequate lighting, the quantity of "stash" spots surrounding the abandoned property, the constant flow of possible clients on the roadway, and the absence of informal social control (also known as defensive ownership) at the location.

In many of these situations, the police expend a lot of time and energy arresting vendors without having a noticeable impact on the drug trade. The market is kept alive by merchants and purchasers drawn to the location by the alluring illicit opportunities. This implies that the police should concentrate on the characteristics of the area that make drug dealing concentrate there in order to more effectively disrupt the market (see, for example, Green, 1996). Practice Theory: The growth of theoretical approaches in criminology that highlight the significance of "place" in understanding crime and the changes and innovations in police that have taken place over the previous three decades have all contributed to the new interest in hot areas policing. It has long been known that the distribution of crime varies within neighborhoods and is not distributed equally across areas (Braga et al. 2012).

However, crime analysts in police agencies are now able to recognize and monitor spatial concentrations of crime because to the development of robust computer hardware and software capable of performing complex spatial analysis. Additionally, police innovations like Compstat have shown the close connections between police actions intended to disrupt crime patterns and spatial studies of such trends. In order to demonstrate that a significant portion of crime in a community is perpetrated in a relatively limited number of criminogenic locations, criminologists have also used spatial analytic tools. The study of place-based crime has been inspired by three interrelated theoretical perspectives: environmental criminology (Brantingham and Brantingham 1991), routine activity theory (Cohen and Felson 1979), and rational choice theory (Cornish and Clarke 1987). According to the rational choice theory, offenders assess the advantages and disadvantages of their actions before deciding to commit a crime.

According to the notion of routine activity, crime results from the simultaneous presence of an aggressor who is motivated, a victim who is a good fit, and a child who is not being properly watched over. According to Braga (2007), environmental criminology examines criminal acts and emphasizes the significance of the characteristics of the settings where crimes are committed. These criminological

theories helped shape hot areas policing, in part. Hot areas policing mostly makes use of traditional, highly targeted law enforcement techniques. Weisburd and Eck (2004: 45) provide a visual illustration of the relationship between the diversity of the hot spots policing strategy and its level of attention in comparison to other police techniques, such as community-oriented and problem-oriented policing. Hot spots policing can use a range of tactics to reduce crime in high-crime areas, such as increased firearms searches and seizures, zero-tolerance policing, order maintenance, and drug enforcement crackdowns. These tactics can be divided into two categories that are fundamentally different from one another (Braga, et al. 2012).

The first strategy, problem-oriented policing, entails police-led initiatives to alter the prevailing circumstances in crime hotspots. Police must consider alternative approaches in addition to more established ones in order to solve crime issues (Weisburd and Eck, 2004). The second strategy focuses mostly on classic enforcement techniques to reduce crime through broad deterrent and greater risk of capture, such as vehicle patrols, foot patrols, or crackdowns centered at particular hotspots. The Hot Spots Experiment was designed to test the hypothesis that enhanced police presence can significantly lower criminal activity. By concentrating law enforcement efforts in "hot spots" of crime, or places with high crime rates, this hypothesis was put into practice. It was believed that boosting police presence, particularly in certain locations, would result in significant decreases in crime because the majority of crimes were concentrated in a few specific geographic areas. The program employed a proactive policing approach as opposed to a reactive approach that makes arrests after a crime has already been committed in order to stop crimes from happening. In general, this policy was founded on the idea that the mere presence of law enforcement will dissuade people from committing crime.

III. HOT SPOT POLICING

Despite the fact that the word "crime hot-spot" currently lacks a uniform definition and frequently depends on the location and surroundings of the use, it is nonetheless widely understood. According to Eck, Chainey, Cameron, Leitner, and Wilson (2005: 2), "a hot spot is an area that has a greater than average number of criminal or disorder events, or an area where people have a higher than average risk of victimization." Police departments utilize hot spots policing as a proactive measure to cut down on crime (Weisburd, 2005). According to a large body of research (Braga et al., 2019; National Research Council, 2004; Telep & Weisburd, 2012), a targeted, visible police presence can lower crime. Hot areas policing is one well-liked evidence-based tactic. According to Braga et al. (2014), this can be described as strategically concentrating police resources towards high crime areas. According to Telep and Weisburd (2018), a hot spot can be a single location, a street, or a group of buildings. Researchers frequently use heat maps created by crime mapping software and police data analysis to pinpoint hotspots. In the end, these maps show locations with a high concentration of criminal activity (Weisburd &

Lum, 2005). Police are increasingly using this data strategically and deploying resources to these areas in the policing environment (Sherman & Weisburd, 1995). One common tactic is to simply boost police presence in the hotspot region, usually by patrolling the area (either with vehicles or on foot). According to several studies, increased police presence can discourage criminal activity and stop it from happening (Koper, 1995; Braga et al., 2019; National Research Council, 2004; Telep & Weisburd, 2012).

The appeal of concentrating the limited police resources on a select few high-activity crime locations is clear, claim (Braga et al. 2014). We might be able to successfully lower overall crime if we can stop crime at these hotspots. Even though police have never completely disregarded geographic locations, Weisburd and Telep (2014) argue that it is crucial to remember that the goal of hotspot policing is for locations to become an integral part of the databases that police use (Weisburd 2008). Police departments now use hot areas policing frequently to reduce crime. Many police departments claim to be able to manage and analyze crime data in-depth ways and hold officers responsible for using problem-solving techniques to control hotspot locations through management innovations like Compstat (Weisburd, Mastrofski, McNally, Greenspan, & Willis, 2003). Moving a crime to a different period of time or location is known as displacement (Johnson et al., 2012). In terms of hot areas policing, there is a prevalent worry that having more police in one area will only prompt motivated offenders to alter their strategies and move on (Sherman et al., 1995; Rosenbaum, 2006; Braga et al., 1999). Hot spot patrols may therefore lessen crime there, but they might not have a significant impact on overall crime levels in the larger district (Rosenbaum, 2006). In addition, according to Rosenbaum (2006), hot areas policing has the potential to harm relationships between the police and the community, especially in minority populations. A greater police presence raises the possibility of more arrests and traffic enforcement in a given area, which might potentially harm relations between the police and the community (Rosenbaum, 2006).

Numerous studies show the effectiveness of hot spots policing in reducing crime and disorder, which are highlighted in the current literature on this topic (Braga et al., 2019; National Research Council, 2004; Telep & Weisburd, 2012). However, a few research have pointed out potential drawbacks. Concerns have been raised in particular about the strategy's potential unintended implications, such as the displacement of criminal activity (Rosenbaum, 2006). Hot areas policing has been the subject of numerous studies, but little work has been done to examine police attitudes regarding the tactic. This is problematic since, in the end, the effectiveness of this method depends on the cooperation and dedication of the local police personnel (Lum, 2009).

This results in plans frequently being executed through a top-down form of management due to the authoritarian structure of police organizations (Chan, 1997). Accordingly, information is given to lower-ranking officers, and they are also expected to be committed to their deployment (Haberman, 2016). Some police officers may be hostile to

evidence-based techniques and researchers in the police setting, according to previous study on police officer receptivity to evidence-based policing (Kalyal, 2020; Taylor, Kowalyk, and Boba, 2007). The use of evidence-based policing techniques can also be resisted by police officers, who occasionally dismiss the research in favor of their own personal experiences (Palmer et al., 2011; Hunter et al., 2015; Lum & Koper, 2017). There aren't many attitudinal studies that specifically address the hot spots policing method, despite the fact that many attitudinal research have focused on openness to evidence-based police in general (Wain et al., 2017; Haberman & Stiver, 2019; Haberman 2016).

According to a growing body of research, targeted police interventions including proactive arrests, directed patrols, and problem-oriented policing (POP) can significantly reduce crime in high-crime "hot spots" (see, for example, Braga, 2008; Eck, 1997, 2002; Weisburd & Eck, 2004). According to Skogan & Frydl (2004), "...studies that focused police resources on crime hot spots provided the strongest collective evidence of police effectiveness that is now available" (SRC Committee to Review Research on Police Policy and Practices). More recently, the National Research Council's Committee on Proactive Policing came to the conclusion that hot areas policing techniques have statistically significant crime reduction impacts (Weisburd & Majmundar, 2018) based on the research evidence that is now available (Weisburd & Majmundar, 2018).

However, opponents of place-based interventions claim that such policing tactics lead to criminals being displaced, or going to areas where the police are not present (e.g., Blattman, Green, Ortega, & Tobón, 2017; Reppetto, 1976). The evidence that is currently available indicates that hot spots policing initiatives are more likely to be linked to the spread of advantages of crime control into neighboring areas than to the displacement of crime (e.g., Braga & Weisburd, 2010; Weisburd & Majmundar, 2018; Weisburd et al., 2006). In order to concentrate policing efforts and resources, hot spots policing targets areas where crime is most prevalent. In order to pinpoint crime hot areas, this calls for the employment of crime mapping technology. Predictive software may also be used to determine where and when crimes are most likely to occur. Others can employ sophisticated machine learning to forecast crime trends. Some prediction tools simply map the areas where crimes are most frequently reported to the police. Hot spots policing has been linked to modest but significant drops in crime in areas where it is most prevalent. Instead of deterring crime, concentrating police efforts in high-crime regions is more likely to diffuse the benefits of crime prevention throughout neighborhoods nearby the targeted hot spots. One of the most significant advancements in policing in recent decades has been "hot spot" policing, or policing concentrating on localized, concentrated regions of crime (Weisburd & Braga, 2019). The effectiveness of crime mapping and targeted hot spot strategies in reducing crime and disorder has been widely evaluated (Braga et al., 2019; Braga & Weisburd, 2022; Lum & Koper, 2017; National Academies of Sciences (Telep & Weisburd, 2012). Police

departments around the world frequently use these techniques to address a variety of crime issues.

Regarding the effects of hot spot policing methods on other facets of community wellbeing, particularly police-community relations, there is still a lot of concern and discussion. Although preventing crime remains the police's primary duty, recent public outrage against aggressive policing, the use of force, and racially disparate policing, particularly in the United States, highlights the need to evaluate police tactics for their effects on other community outcomes, such as perceptions of police legitimacy and procedural justice, police-community relations, and cooperative behavior. In addition to their inherent value in a democratic society, police tactics that strengthen police-community ties may also support efforts to prevent crime. This is because some research suggests that when people perceive the police as legitimate, they are more likely to follow the law, cooperate with them, and support them (e.g., NRC, 2004; Peyton et al., 2019; Sunshine & Tyler, 2003; Tyler, 1990; 2004; Tyler & Fagan, 2008). Although these challenges have long been a source of worry for law enforcement, the President's Task Force on 21st Century Policing (2015) and other police leaders and academics (e.g., Lum & Nagin, 2017; Rosenbaum, 2019; Tyler, 2004) have lately emphasized them again.

Scholars have noted the need for further research on community attitudes in hot spots to help police in the formulation of hot spot strategies that can prevent crime while also improving police-community relations (e.g., Haberman et al., 2016). The evidence on how hot spot policing affects community members' perceptions of police is very limited and inconclusive. In order to address these issues, our study looked at how community members' perceptions of police activity in high-crime areas related to their general attitudes toward the police, such as their judgments of the effectiveness, fairness, and legitimacy of the police. Officers must receive further training in order to implement contemporary police strategies like problem-based or community-focused policing (Weisburd, 2008). Hot spots policing claims that police can be more effective and cost-efficient by restructuring where resources are deployed (Gibson, Slothower, & Sherman, 2017) as opposed to fundamentally altering the approach to crime prevention. Targeting particular high-crime areas appears to be a straightforward, resource-efficient policing approach (Andresen & Weisburd, 2018).

Multiple reviews of hot areas policing experiments (Braga, 2005; Braga, Papachristos, & Hureau, 2014; Braga, Turchan, Papachristos, & Hureau, 2019) have led to the current consensus that hot spots policing can be beneficial. The outcomes, however, are not as straightforward as they are frequently depicted to be (for instance, on the NIJ website "crimesolutions.gov"). For instance, Braga et al.'s (2014) metaanalysis revealed that while hot areas policing initiatives generally reduced crime, the effect sizes were modest and varied greatly depending on the sorts of offenses that were targeted. In addition, the authors noted that, contrary to the initial promise of hot spots policing, it might

matter whether concrete policing tactics were employed, with problem-based hot spots policing strategies exhibiting the highest success rates (Braga et al., 2014).

IV. POLICING CRIME AND DISORDER HOTSPOTS

Although the research examined up to this point can be useful in identifying the locations to target, another body of research has examined exploring preventative measures to cool down such hotspots, primarily through formal social control interventions. Hotspot policing, a crude approach of putting "cops on the dots," has been put to the test repeatedly. In comparison to control conditions, the majority of hotspot policing tests were linked to a considerable decline in crime in the treatment hotspots, according to a recent Campbell Collaboration systematic review (Braga et al. 2012). The number of hotspots experiments is constantly expanding (Ariel et al. 2016; Ratcliffe et al. 2011; Rosenfeld et al. 2014), and taken as a whole, they reflect a "strong body of evidence [which] suggests that taking a focused geographic approach to crime problems can increase the effectiveness of policing" (Skogan and Frydl 2004: 247).

As a result of hotspot policing, there is evidence to imply that crime is typically not spatially moved to nearby areas, close to the targeted hotspots (Weisburd et al. 2006; Bowers et al. 2011; Johnson et al. 2014). Instead, "diffusion of benefits of these social control mechanism[s]" (Clarke and Weisburd 1994) or "radiation" of the treatment effect (Ariel 2014) may occur, not just "around the corner" from the targeted hotspots (Weisburd et al. 2006), but also to larger geographic areas (Telep et al. 2014a, b). Despite the fact that the evidence has been less conclusive than in previous hotspot studies, the deterrent effect of police presence is nevertheless apparent on mass transit networks. When officer numbers were raised during specific hours of the day, crime rates on the New York subway decreased with a lingering deterrent effect during other hours (Chaiken et al. 1974). A study conducted in Liverpool and London found that police patrols on buses reduced crime by up to 400 meters from bus routes (Newton et al. 2004).

Therefore, it is evident from the research that hotspot policing works: compared to control conditions, crime and disturbance are reduced when police officers concentrate on hotspots. By sending police to micro-locations where they can use social control techniques, we can stop crime. On a tactical level, the optimum method for dealing with hotspots is still up for debate (Koper 2014).

While some recent research have confirmed Sherman and Weisburd's (1995) original conclusion that the saturating police presence at hotspots reduces crime and unrest (Telep et al. 2014a, b), others have started to focus more intently on precisely what kind of police presence minimizes crime. For instance, some have examined problem-oriented policing (Weisburd and Green 1995; Braga et al. 1999; Braga and Bond 2008; Taylor et al. 2011); drug enforcement operations (Weisburd and Green 1994, 1995); increased gun searches and seizures (Sherman and

Rogan 1995); foot patrol (Ratcliffe et al. 2011); crackdowns (Sherman and Rogan 1995); "zero-tolerance" policing. There are nonetheless characteristics that all hotspots policing strategies share despite these treatment disparities. First, it would appear that these small-scale crime and disturbance hotspots should be the focus of police attention. Officers have deliberately concentrated resources and efforts on these locations in all studies of police initiatives that target hotspots with high spatial concentrations of incidents. Comparatively to hotspots not subject to these targeted treatments, crime often decreases if cops are charged with implementing any kind of intervention.

V. THE ROLE OF DETERRENCE IN HOTSPOTS POLICING

The existence of obvious, visible "sentinels" at the hotspots acts as a deterrent (Nagin 2013a, b). This is the second prevalent and important motif. Police personnel are primarily 'crime preventers' when they are visible to the general public, as opposed to working in this capacity as apprehension agents (incidentally, apprehension risk is probably not considerably raised by improved investigations; Braga et al., 2011). This idea of police officers as primarily guardians was in some ways raised in Cohen and Felson's situational crime prevention approach from 1979: The police, in their capacity as sentinels, act as guardians who decrease opportunities for crime to be committed (Nagin et al. 2015), as a drug store with a police officer standing outside is not an appealing target for criminals.

Officers are therefore uniform-wearing, frequently armed power bearers who exercise the authority of the state by their mere presence, regardless of whether they are called to solve problems, participate in community policing, or do anything else. This quale, which is universally represented by police insignia, conveys the clear warning. Whatever the strategy used, the police' presence heightens the cognitive perception of probable suspicion for any infraction of the law, particularly against risk-takers like offenders. At the very least when officers are physically positioned within the hotspots, even "softer" police techniques, such community policing, nonetheless have a component of deterrent (Ariel et al. 2016). This assumption of an actual threat, however, is not merely hypothetical; in fact, according to interviews with 589 arrestees in New York City after the police implemented quality of life initiatives, police presence was "the most important factor" behind behavioral change, or decreases in the likelihood of committing crime and causing disorder (Golub et al. 2003: 690). Similar findings were reported by Wright and Decker (1994) who found that when criminals choose their targets, they appear to be aware of the presence of police officers and steer clear of areas where there are more of them.

Consequently, there is a wealth of data showing that perceived certainty of punishment is directly related to lower crime rates (McCarthy 2002; Lochner 2007; Bushway and Reuter 2008; Tonry 2008; Berk and MacDonald 2010; Paternoster 2010; Loughran et al. 2012). According to

research by Von Hirsch et al. (1999; Nagin 2013a, b), the likelihood of committing a crime is negatively correlated with the likelihood of being detected, not the severity or speed of sanctions. The criminal justice system attempts deterrence in a variety of circumstances, and this "certainty effect" carries substantial probabilities in each of these contexts.

We present a theoretical and practical question: Can the police lessen crime and disorder in mass-transit systems? Given the research that shows how concentrated crime is in hot spots and the effectiveness of hot areas policing. The crime and place literature has thus far concentrated on street segments, blocks, or larger areas that are characterized by an excessive number of problems. However, the likelihood of lowering crime in hotspots with a disproportionately high population has mostly been untested. Beyond the possible effectiveness of policing mass transportation environments, how effective can hot spots policing be in such a "micro-micro-place" given the size of the bus stop and the degree to which occurrences may be traced to these locations? The deterrent effect should theoretically be increased since the perceived danger of punishment increases when the possibility of capture is very high: It seems to reason that because the geographical terrain is so small, it is unlikely that criminals will commit a crime exactly close to a police officer. There is, however, no proof of this effect at this time.

VI. EFFECTS OF HOT SPOT POLICING ON CRIME

Hot areas policing may affect crime, according to numerous research (Braga et al., 2019; Telep & Weisburd, 2012). Numerous criminological theories support hot areas policing and its potential role in reducing crime. First of all, environmental criminology's theoretical underpinnings gave rise to hot areas policing. According to this viewpoint, crime can be reduced by emphasizing the features of the setting where it occurs (Brantingham & Brantingham, 1995). The justification for hot zones policing can also be understood using theories of criminal opportunity. The traditional deterrence theory (Bentham, 1781), rational choice theory (Cornish & Clarke, 1987), and routine activity theory (Cohen & Felson, 1979) are a few examples.

The deterrence hypothesis, in particular, has a close connection to traditional criminology and hot areas policing. According to this idea, people make logical decisions, and in order to prevent them from committing crime, there must be some chance of punishment (Bentham, 1781). Similar to this, the rational choice theory postulates that criminals frequently exhibit rational behavior and will engage in criminal activity when the advantages outweigh the penalties (Cornish & Clarke, 1987). This theory is frequently applied in conjunction with the theory of routine activities. According to the idea of routine activities, a crime must have three components in order to succeed: a motivated criminal, a suitable target (which might be people, things, or places), and the lack of a capable guardian (typically a person who can help dissuade crime). Crime is

more likely to happen when these three factors come together at a specific time or location (Cohen & Felson, 1979). These ideas claim that crime can be avoided by changing specific factors, such as eliminating an easy target or increasing parental supervision. In the long run, hot spot patrols enhance police presence within a hot area while also raising the perceived danger of arrest, which can have a deterrent impact (Koper, 1995).

VII. APPLICATION OF HOT SPOT POLICING

Spatial hotspot patterns can have many patterns or dimensions (Kumar and Chandrasekar 2010, Hajela et al. 2020). Depending on the depth of investigation, there are numerous methods to express this. These dimensionalities could be, say (Hajela et al. 2020):

- Zero-dimensional analysis: Hot areas are another name for these kinds of hotspots. The unit of analysis in this case is a specific location, like a bank robbery scene. Dots could be used to represent these locations where each dot's size corresponds to the number of crimes reported there.
- These hotspots require a linear structure in a one-dimensional analysis. As an illustration, consider a city street where crime is more prevalent.
- Two-Dimensional analysis: This kind of unit could have several different hotspots. These hotspots might be circular, rectangular, or elliptical in shape. It could take the shape of a state, district, or city.

The fact that studies have rarely been detailed about what precisely cops should be doing in the hot areas is one weakness of the hot spots policing literature. Hot areas can be addressed using a variety of tactics, such as preemptive arrests, problem-focused enforcement, or simply increasing police presence there (Braga et al., 2019). The latter strategy, where officers simply spend more time in the hot spot site, is one of the most popular hot spot policing strategies (Braga et al., 2019). However, very few studies have looked at the precise duties that officers should be performing while stationed at a hot site.

The deployment and evaluation of hot areas policing have both suffered from the lack of specifics regarding the tactics officers should use there (Haberman, 2016). The employment of techniques at the hot spot is frequently left to the police officers' discretion, which has ultimately made it difficult to evaluate hot spot policing trials (Haberman, 2016; Telep & Weisburd, 2012). The components of an effective intervention were described by Hassall and Lovell (2015). A complete adherence to the experiment's design, a consistent dosage (amount of the intervention), and quality delivery are a few essential components. It is clear that several hot areas policing actions have fallen short of fulfilling these requirements, nevertheless. For instance, researchers found inconsistent tactics used at hot locations in the Minneapolis hot areas policing experiment (Sherman & Weisburd, 1995).

Some police officers simply parked their patrol car in the hot location and sat inside reading newspapers. On the other hand, some cops were doing foot patrols and actively interacting with the neighborhood (Sherman & Weisburd, 1995). Similar concerns were raised about other hot spot policing programs as researchers were unable to pinpoint the specific police tactics that led to a decline in local crime (Haberman, 2016; Telep & Weisburd, 2012). In addition, Haberman (2016: 460) referred to the ambiguity of hot areas policing as a "black box". This is due to the fact that various hot areas police initiatives use a variety of tactics and strategies. As a result, the literature is limited by the ambiguity that exists in both the definition of a hot zone and the actual application of hot spot policing.

The research by Koper (1995) is one study that has provided in-depth insight on certain police methods at hot spots. By analyzing observational data, Koper determined the best times for patrol stops within a hot area. This information was gathered when 17,000 police hot spot visits were tracked as part of an experiment in hot places policing. In order to determine if longer patrolling periods would result in greater crime reduction impacts, a survival analysis method was used. They discovered that police patrols should last at least 10 minutes, with 15 minutes being the ideal duration. Additionally, while deterrence peaked after 15 minutes, continuing the patrol past that point would render it useless and have declining benefits (Koper, 1995).

This theoretical knowledge can ultimately assist in informing and maximizing police resources, particularly through regular rotation of patrols on a repeating yet unpredictable basis and short patrols (Sherman, 1990). Koper's study has limitations, despite the fact that it offers some precise information into the dosage of patrols. In the first place, it is vague about the precise tactics that police should use in the hot locations. Additionally, the results of 15-minute police patrols were examined in a study by Telep et al. (2014). As the patrols did not always have a deterrent impact, they discovered that the effects of crime reduction could change depending on the area (Telep et al., 2014). Overall, even if Koper's conclusions might not be applicable to all interventions, they nonetheless offer a genuine and detailed perspective into prospective hotspot strategy implementation.

VIII. HOT SPOTS POLICING'S LIMITATIONS

The effectiveness of hot areas policing in lowering crime and disorder is supported by research, however some studies also point out its drawbacks. First, Rosenbaum (2006) criticizes police patrols as a crime-control method, claiming that the influence on crime is less significant than the impact on disorder and that the impacts may only be temporary. This idea is related to Sherman's (1990) crackdown hypothesis, which asserts that any crime decrease brought about by police enforcement is expected to be modest and to eventually deteriorate. To give one example, the authors emphasized this temporary effect by saying, "Like aspirin for arthritis, the painkiller does nothing to remedy the underlying condition" (Sherman et al., 1995:

777). This demonstrates that hot spot policing may have limits in that it may only have a transient impact on crime rates.

Therefore, it seems unlikely that relying solely on spatial and temporal crime prediction can help us enhance hot spots policing. Instead, it appears that we need to improve our understanding of what techniques work for what crime hot spots and adapt concrete policing strategies in light of the various contexts (Braga et al., 2019; Ratcliffe, Groff, Sorg, & Haberman, 2015; Telep, 2017; D. Weisburd, 2018; D. Weisburd & Telep, 2014). These experimental hot-spot investigations have an urban bias, which is another issue. For instance, the meta-analysis by Braga et al. (2014) is based on policing trials from significant US metropolises.

IX. DISPLACEMENT AND DIFFUSION OF BENEFITS

Hot spots policing also raises questions about unintended outcomes including the dispersal of criminal activity (Rosenbaum, 2006). According to Johnson et al. (2012), displacement is the simple act of moving crime to a different time (temporal displacement) or location (spatial displacement). When crime is transferred from the experimental region to another area, spatial displacement is the phenomenon most frequently mentioned (Johnson et al., 2012). On the subject of displacement in relation to hot areas policing, the present evidence is conflicting and ambiguous. According to a thorough study by Braga et al. (2014), there was little likelihood of temporal and spatial displacement in the majority of experiments.

They claimed that while relocation may be probable, it is ultimately offset by the benefits of reduced crime (Braga et al., 2014). Diffusion of crime control benefits, or impacts on crime reduction that spread to the areas immediately surrounding the hot spot location, is also more likely to happen than displacement, according to certain studies (Braga et al., 2012; Clarke & Weisburd, 1994). Despite the fact that these research revealed that the benefits of crime prevention outweighed the effect of relocation, there are a number of drawbacks with the studies. First off, according to Rosenbaum (2006), the majority of hot spot tests do not adequately describe or measure the degree of displacement. Police officers patrolling the surrounding neighborhoods and ambiguity over the precise target borders are just two implementation-related issues that could limit the evidence on diffusion of benefits (Rosenbaum, 2006). Furthermore, a growing corpus of research (Sherman et al., 1995; Rosenbaum, 2006; Braga et al., 1999) indicates that police crackdowns do have the unintended consequence of displacing people.

In conclusion, there are many different types of displacement that haven't been properly or efficiently measured, making the literature on displacement unclear. This emphasizes the necessity of future hot areas experiments having a credible approach for analyzing displacement in addition to measuring crime levels. The

current body of hot areas policing evidence would gain strength as a result.

X. LACK OF PROBLEM-SOLVING APPROACHES

The substantial dependence on data from calls for service or arrests, with hot spot maps primarily being developed to guide decision-making, is one constraint of hot spot policing interventions (Rosenbaum, 2006). However, using this information has some drawbacks because it is restricted to locally recorded crimes. According to research, a sizable share of crimes in society go unreported (Biderman & Reiss, 1967). As a result, some areas might be more prone to crime than others, but since few crimes are reported, the statistics are not captured in police data. A possible drawback of using police data to guide targeted police actions is that certain areas might not receive an adequate allocation of police resources.

Police departments frequently carry out a feeble problem analysis, which is another criticism of hot spot policing (Rosenbaum, 2006). According to Goldstein (1990), police agencies frequently do poor and shallow problem analyses, which is a major factor in the temporary decreases in crime. Police departments must invest time and energy into comprehending the underlying issues and circumstances that contribute to a region being a crime hotspot in order to have a long-lasting and sustainable impact on crime (Goldstein, 1990). Police agencies can improve their approach to hot spots by triangulating the police data with census, survey, interview, and observational data rather than focusing just on requests for service or arrest statistics. As a result, the analysis would be more successful and produce stronger, more individualized solutions to a problem (Rosenbaum, 2006). This confirms that police interventions like hot spot policing may be shallow and standardized without a thorough problem analysis phase, which can have little to no impact on crime (Rosenbaum, 2006).

The limited use of hot areas policing is another drawback. According to Rosenbaum (2006), police agencies frequently employ standardized responses, turning to tactics like patrols and traffic enforcement. Instead of using problem-solving concepts to create a customized, evidence-based strategy that focuses on the long-term reduction and elimination of the problem, these strategic responses have been regarded predictable and limited (Goldstein, 1990; Rosenbaum, 2006). Additionally, research on community policing and problem-oriented policing emphasizes the value of employing more problem-solving techniques to lower crime over the long run (Goldstein, 1990; Greene, 2000; Rosenbaum, 2006). The goal of problem-oriented policing is to create a variety of specialized remedies to the issues discovered during the analysis stage. Examples can include coordinating a police response with other agencies, making physical environment changes, or closely collaborating with the community to better understand the issue at hand (Braga, 2008). The broad array of criminological and problem-solving theory is not being put

into practice by police departments, according to Rosenbaum (2006), who claims that instead, police departments continue to use old and conventional police approaches. Therefore, it appears that the typical police approaches of patrols and traffic enforcement, which many officers are utilizing to handle hot areas, are at odds with the corpus of literature on problem-oriented policing (Goldstein, 1990; Rosenbaum, 2006).

XI. RISK OF AGGRESSIVE ENFORCEMENT

Another issue with hot spot policing, according to Rosenbaum (2006), is that some strategies, such as stepping up arrests and traffic enforcement, run the danger of harming ties between the police and the community. The use of aggressive policing techniques runs the danger of making the public feel that they are being singled out (Rosenbaum, 2006), which could lead to a rift between the police and the community. Furthermore, officers may experience heightened pressure to make arrests and confiscate contraband as a result of hot areas policing (Rosenbaum, 2006). This raises the possibility that hot spots policing will turn into abusive policing. As a result, perceptions toward police may be negatively impacted. Police complaints regarding unfair targeting may result if they are perceived as an occupying force in hot spot neighborhoods (Rosenbaum, 2006). A major repercussion for police departments is having their legitimacy as police officers questioned.

This is so because, according to Rosenbaum (2006) and Tyler (2001), legitimacy of the police, public faith in them, and citizen cooperation are all crucial to successful policing. Additionally, minority neighborhoods with low incomes are more likely to be the site of violent and drug-related hotspots (Rosenbaum, 2006). Due to the extensive dependence on crime data, hot spots policing may result in an excessive police presence in these regions (Rosenbaum, 2006). Given that minority populations are more likely to have lower levels of trust and confidence in the police than non-minority communities, this could have unexpected repercussions (Rosenbaum et al., 2005). As a result, having an overabundance of police in neighborhoods with vulnerable populations may reduce public confidence and trust and heighten emotions of being handled unfairly (Rosenbaum, 2006).

XII. POLICE OFFICER ATTITUDES TOWARDS HOT SPOTS POLICING

In general, the research on police officers' attitudes regarding the application of research and analysts in policing offers important insights into how officers view initiatives for evidence-based policing. One of the most widely adopted evidence-based policing tactics in police agencies around the world is hot spot policing (Weisburd, 2003). The literature on officers' attitudes on hot spot policing typically indicates that officers are aware of the strategy's advantages but also recognize its drawbacks. In one study, Haberman (2016) investigated the opinions of senior police commanders about hot area policing. They discovered that the commanders tended to rely heavily on

hot spot patrols in their operations and thought hot spot policing was a successful policing tactic. The commanders noted that boosting police presence in crime hot places is an efficient target hardening technique that can assist to disrupt offenders, produce deterrent, and educate victims. The commanders' viewpoints were closely aligned with mainstream policing and criminological theories.

Ratcliffe et al. (2011), Ratcliffe & Sorg (2017), Haberman & Stiver 2020, and Mugari & Thabana (2018) all focused on the topic of foot patrols, which entails raising the level of police presence on foot in a hot spot region. In Philadelphia, Ratcliffe et al. (2011) tested hot spot foot patrols. Their experiment provided insights into police officers' opinions of the technique based on observations and conversations with the officers. The officers had an especially poor opinion of the foot patrols. Vehicle patrols were the officer's preference because they allowed him to react to more calls and cover a bigger area. According to the findings, officers may have felt that foot patrols did not constitute "real police work" (Ratcliffe & Sorg, 2017: 43). According to the officers, police duties should involve responding to various calls, apprehending offenders, and conducting vehicle patrols (Ratcliffe & Sorg, 2017). In addition, officers considered that the organization did not have enough resources for them to spend time on foot, which was another important reason why they preferred vehicle patrols.

Additionally, the cops placed a high emphasis on reactive policing, which includes sporadic patrols and quick responses to emergency calls, over hot spot policing. They usually criticized hot spot policing for causing a displacement of crime in time and space because the officers thought that offenders had tailored their criminal behavior to their routines and timetables (Ratcliffe & Sorg, 2017). The opinions of police personnel about the Dayton hot spot foot patrol experiment were also examined by Haberman and Stiver (2020). They discovered that police usually approved of the foot patrols because they thought they may have advantages including preventing criminal activity, strengthening ties with the community, and enhancing intelligence. They discovered that short, frequent foot patrols were preferred by the cops over longer, more persistent ones. Hot spot foot patrols, in the officers' opinion, might have some restrictions.

Overall, the research suggests that police personnel do accept the advantages of hot spot policing, although the problem of relocation is a recurrent criticism (Ratcliffe & Sorg, 2017; Haberman & Stiver, 2020). Additionally, some police officers think that the particular technique of foot patrols is too labor-intensive for police departments with little resources. Similar to the literature on evidence-based policing, some officers preferred hot spot policing to more conventional strategies like fast response and random patrols (Ratcliffe & Sorg, 2017). The literature does, however, include a lot of holes. First off, there aren't many attitudinal research that have been done. It is challenging to reach any firm conclusions about police officer attitudes because there are so few attitudinal studies in the subject of hot spot

policing. The majority of studies have been carried out in the US (Ratcliffe & Sorg, 2017; Haberman & Stiver, 2016), the United Kingdom (Wain et al., 2016), and Zimbabwe (Mugari & Thabana, 2018), with no studies carried out in the New Zealand setting. Therefore, this study aims to fill these gaps. By examining the attitudes of police officers in New Zealand, this will add to the literature on hot spots in policing and provide new information in the area of attitudes.

XIII. POLICING AND COMMUNITY VIEWS IN HIGH-CRIME LOCATIONS

Police efforts are targeted on hot spots where crime is disproportionately concentrated, such as certain addresses, street blocks, intersections, and clusters of blocks, using hot spot policing techniques. Data showing that 5% or fewer of a city's street blocks frequently account for roughly half of all crime (for a study, see Weisburd, 2015) supports these tactics. This concentration has been stable over time, largely because of persistently troubled areas with social and environmental characteristics that promote, encourage, or cause criminal and disorderly behavior (Andresen et al., 2017; Brantingham & Brantingham, 1993; Curman et al., 2015; Eck & Weisburd, 1995; Groff & Lockwood, 2014; Groff et al., 2010; Koper et al., 2015; Sherman et al.

Hot spot policing has helped the police significantly reduce crime and unrest, but it is less obvious how this has affected how the community perceives the police and the communities themselves. Hot spot policing could, on the one hand, encourage favorable perceptions of the police. Many citizens, especially in high-crime areas, prefer having more police officers in their neighborhoods (e.g., Chermak et al., 2001; Hawdon et al., 2003; Saad, 2020; Shaw, 1995). Greater police presence may improve residents' emotions of safety and their perceptions of obtaining a necessary and equitable distribution of police resources, which will boost their perceptions of distributive justice (see NRC, 2004).

If they employ community-oriented policing strategies (Gill et al., 2014; NAS, 2018; Skogan, 2019; Weisburd, 2016) and interact with locals in a polite, sympathetic, and fair way (Mazerolle et al., 2013; Walters & Bolger, 2019; Weisburd et al., 2022) the police may also establish and maintain positive relationships with local residents in hot spots. Hot spot policing's ability to reduce crime and disruption may also improve the public's perception of the police (Haberman et al., 2016; Wheeler et al., 2020, for examples). On the other hand, some people are worried that hot spot policing strategies could have a "backfire effect," deteriorating police-community relations, heightening fear, and undermining group efficacy, particularly if police prioritize aggressive enforcement-oriented strategies (e.g., Kochel, 2011; Rosenbaum, 2019; also see Hinkle & Weisburd, 2008; Weisburd, 2016).

For instance, a strong police presence and enforcement in high-crime areas may increase unfavorable interactions between police and locals, raise public fear of crime and/or police confrontations, and influence locals' perceptions of

police as an occupying force. If individuals lose trust in the police as legitimate authorities and are less willing to work with them to report and prevent crimes, such backfire effects may also reduce the effectiveness of hot spot interventions in reducing crime over the long term. Research on the best tactics to use in hotspots for improving crime prevention and police-community relations would greatly benefit from learning more about how different hot spot policing approaches affect public perceptions and attitudes (Braga et al., 2019; Braga & Bond, 2008; Groff et al., 2015; Kochel et al., 2015; Koper, 2014; Taylor et al., 2011). Additionally, the current social climate makes the question of how the general public feels about hot zone policing very important. Since the 2014–2015 time period, when a number of high-profile police use of force cases, focusing on hot spots can potentially reduce over-policing of lower risk areas, there has been an increase in public concern regarding overly aggressive policing, particularly in high-crime and predominantly non-white communities (Weisburd, 2016).

XIV. APPROACHES IN HOT SPOT POLICING

- Problem-oriented policing (POP), which aims to understand the root causes of crime i Problem-oriented policing (POP), which seeks to identify the underlying factors behind crime in high-crime areas. It entails creating and putting into effect specific measures to lower crime.
- In high-traffic areas. It entails creating and putting into action specific actions to lower crime.
- Increased police presence, which entails either an increase in the frequency of visits or the length of time that officers spend in hot zones in an effort to prevent offenders from committing crimes there.
- Both strategies could involve similar actions, such as: high visibility police patrols, including increased uniformed police presence and patrols:
- More frequent stop-and-search operations.
- Actively watching CCTV.
- Pursuing known, persistent criminals.
- Utilizing the media to inform the public of heightened policing action.
- More police action against antisocial behavior.
- Interventions in hot zones policing are carried out for varied amounts of time, ranging from one week to three years.

XV. HOT SPOT POLICING ADVANTAGES

- *The plan calls for the application of a number of tactics designed to reduce social and physical unrest in high-crime areas. Based on a broad policing strategy for disorder, the program employs three strategies to lower crime related to disorder:*
- A rise in arrests for misdemeanors. This element comprises the deployment of forceful order maintenance tactics by law enforcement, including an increase in arrests for infractions of public order. Arrests for intoxication in public, those of drug traffickers, "stop and frisks" of suspicious people, and foot patrols in high-crime areas are a few examples. This element aims to

remove high-risk persons from the community and lessen disorder-related crime.

- Situation-specific preventative techniques. This part comprises a range of actions that are all generally intended to reduce social and physical disorder in places where police are focused. This include installing more effective street lighting, putting in place video surveillance, scattering loitering groups, conducting code inspections, cleaning up vacant lots, demolishing abandoned buildings, and evicting problematic tenants. Beyond merely apprehending offenders, these initiatives aim to foster a broad sense of order in problem regions. These strategies necessitate collaborations between local business owners, tenant associations, and police and city agencies.
- Activities in social service. In order to help the police increase social order, this component comprises aid from social service organizations. This includes giving young people recreational options, collaborating with neighborhood shelters to house the homeless, and linking problematic residents with mental health care. These initiatives are designed to give high-risk persons in specific areas the chance to support police efforts to uphold social order.

The technique is based on the broken windows hypothesis of crime, which holds that regions with high levels of physical and social disorder are likely to see an increase in crime. It involves the application of broken windows policing, commonly referred to as disorder policing, to have a deterrent effect on crime by bringing order to troubled regions. The program's premise is that conditions will improve and crime will decrease if overall chaos is minimized. The program combines a hot spots policing strategy to target particular high-crime areas with a problem-oriented police strategy to focus primarily on the reduction of nuisance crime.

XVI. IMPORTANCE OF REVIEWING HOT SPOT POLICING SUCCESS AND FAILURES

The broad application of hot areas policing to deter crime justifies ongoing, meticulous evaluations of the available empirical data on the strategy's advantages in deterring crime. The societal advantages could be significant if the hot areas policing initiative is successful in reducing crime. For instance, Durlauf and Nagin (2011) made a significant argument that shifting resources from prisons to policing will reduce crime and incarceration in the United States. They especially cite analyses of hot spots policing deployment tactics among other targeted police interventions as proof that the police can stop crime when they are directed in the right direction.

However, opinions regarding the crime control effectiveness of hot areas policing may alter when new program assessments are finished in response to the expanding body of scientific knowledge. For instance, a number of recent hot areas police studies have found either no effect (Gerell, 2016), a rise in crime (Phillips, Wheeler, & Kim, 2016), or a slight displacement of crime (Blattman

et al., 2017). A systematic analysis of the impact of hot areas policing on crime that was previously conducted by the Campbell Collaboration is updated in this publication

(Braga, 2001, 2005, 2007; Braga, Papachristos, & Hureau, 2012, 2014).

Table 1 Meta Analysis Outcome

Crime & Delinquency - Multiple crime/offense types	Braga and colleagues (2019) observed an overall statistically significant weighted mean impact size of 0.109 in favor of hot areas policing after combining the findings from 35 independent studies. This indicates that compared to control areas, the hot spots policing techniques were linked to decreases in total crime.	Following the launch of Operation Safe Streets, police patrols and Operation Safe Streets activity dropped in the intervention group regions. This variation was statistically noteworthy.
Crime & Delinquency - Violent offenses	Braga and colleagues (2019) observed an overall statistically significant weighted mean impact size of 0.102 in favor of hot areas policing after combining the findings of 44 independent tests. In comparison to control regions, this suggests that hot spots policing methods were linked to decreases in violent crime.	Following the implementation of Operation Safe Streets, violent crime dropped in the intervention group's neighborhoods. This variation was statistically noteworthy. After Operation Safe Streets was put into place, there were no statistically significant changes in violent crime across the entire city.
Crime & Delinquency - Property offenses	Braga and colleagues (2019) observed a weighted mean impact size of 0.124 in favor of hot areas policing after combining the findings of 26 independent studies. In comparison to control regions, property crime decreased as a result of hot spots policing techniques.	Following the installation of Operation Safe Streets, police patrol and Operation Safe Streets order dropped in the intervention group regions. This variation was statistically noteworthy. Hot spot policing has been shown to significantly reduce non-domestic violent crime in POP hot places when compared to control hot sites. It can also significantly reduce any violent or property crime in directed patrol hot locations.
Crime & Delinquency - Public order offenses	Braga and colleagues (2019) observed a weighted mean impact size of 0.161 overall in favor of hot areas policing after combining the findings of 15 independent tests. This indicates that, compared to control regions, hot spots policing methods were associated with statistically significant drops in public order violations.	Following the start of Operation Safe Streets, there was a decline in public order in the intervention group regions. This variation was statistically noteworthy.
Crime & Delinquency – street Drug and alcohol offenses	Braga and colleagues (2019) observed an overall statistically significant weighted mean impact size of 0.244 in favor of hot areas policing after combining the findings of 10 independent studies. This indicates that, compared to control regions, hot spots policing methods were linked to decreases in drug and alcohol offenses. Targeted policing techniques are used in this practice to lower drug- and drug-related crime rates. This method is rated. Lowering reported calls for assistance, crimes against people, and drug-related offenses. This method is rated. There are no differences in reported property offenses, calls for public order services, or overall offenses.	The launch of Operation Safe Streets had no statistically meaningful impact on drug criminality throughout the entire city. Following the installation of Operation Safe Streets, Lawton and colleagues (2005) discovered a decrease in drug crime rates in the intervention group neighborhoods of Philadelphia. This variation was statistically noteworthy.
Geographically Focused Policing Initiatives	Geographically targeted policing programs improve police officers' visibility and presence in high-crime areas to drastically lower crime and disruption. For lowering crime in treated regions compared to control areas, this strategy is graded as Promising.	Officers in pairs at the specified areas. Police officers should be visible in certain high-crime areas to drastically reduce crime and disturbance. This is a problem-oriented policing (POP) and saturation/directed patrols-based policing method to lower violent crime in high-crime areas.

To determine how well hot areas policing strategies work, Braga and colleagues (2019) performed a meta-analysis. The thorough search strategy used to find studies on hot spots policing included keyword searches of online abstract and literature databases, a review of the

bibliographies of literature reviews and systematic reviews finished by the Campbell Collaboration, and additional searches for hot spots policing studies from the field. This meta-analysis's reference material was current as of February 2017. The criteria for inclusion included both

conventional tactics like 1) directed patrol and increased traffic enforcement, 2) technological applications like actively monitored closed circuit televisions and license plate readers to enhance police presence in high-crime areas, and 3) alternative tactics like problem-oriented policing.

Studies that met the criteria contrasted hot spot policing intervention-exposed locations with traditional policing service-exposed locations; the units of analysis were crime hot spots or high-activity crime "places." Specific sites such as shops, apartment complexes, groups of addresses, street blocks, street segments, and street crossings were included in these minor units. Both randomized trials and skillfully executed quasi-experiments were used in the studies. Studies have examined the impacts of hot spots policing on areas' officially reported crime rates as well as the displacement of crime and the benefits of crime.

The final meta-analysis comprised 65 papers from theses/dissertations, unpublished reports, published reports, peer-reviewed journals, and unpublished reports. 38 of them employed quasi-experimental designs, and 37 of them made use of randomized experimental designs. The majority of studies (n = 51) were carried out in the US. The remaining studies were carried out in the following nations: Argentina, Australia, Colombia, Denmark, India, Trinidad & Tobago, four in the United Kingdom, four in Sweden, and one in each of Argentina, Australia, Colombia, Denmark, and Trinidad & Tobago.

There were 65 studies, of which 27 were carried out in medium-sized cities with populations between 200,000 and 500,000, 25 in large cities with populations over 500,000, 12 in small cities with populations under 200,000, and one study that was carried out in both a small and a large city. Eleven of the 65 qualifying papers investigated several hot spot policing interventions, and these analyses were conducted as separate tests. A total of nine studies looked at two different hot spot policing interventions, while two research looked at three different hot spot policing interventions.

The 78 unique experimental and quasi-experimental examinations of the impact of hot areas policing on crime were conducted as part of the 65 research. The remaining studies concentrated on increased foot or vehicle patrol (n = 31), drug enforcement operations (n = 6), offender-focused apprehension programs (n = 4), actively monitored CCTV with directed patrol (n = 3), and other types of increased enforcement activities (n = 7), with a third (n = 27) focusing on problem-oriented policing.

For 46 of the 78 evaluations of hot areas policing, the displacement of crime and the dissemination of the advantages of crime control were evaluated. The majority of the studies (62 of 65) were included in the meta-analysis; however, two studies failed to report the data required to determine effect sizes, and one study failed to employ the proper statistical techniques to assess program effects.

Effect sizes for 73 main effects tests and 40 displacement and diffusion tests across the 65 studies were determined. Based on the variance of the impact size and the study sample size, program effect sizes were weighted. For each program, the standard mean differential effect size was determined using a 95% confidence interval. To calculate the total mean effect size, the authors utilized a random effects model.

XVII. PROBLEM POLICING ORIENTATION

A more comprehensive community- and place-based approach to policing frequently includes problem-oriented policing (POP) tactics (Goldstein, 1990). There is now a substantial body of research demonstrating that POP-based interventions tend to result in greater decreases in crime at high-crime locations than those that are solely based on conventional patrol and enforcement methods (Braga et al., 2012, 2015; Braga & Bond, 2008; Hinkle et al., 2020; Taylor et al. 2011).

POP initiatives frequently fail to achieve their objectives, receive little agency support, and heavily rely on enforcement tactics (Cooley et al., 2018; Cordner & Biebel, 2005; Eck, 2006; Groff et al., 2015; Ratcliffe et al., 2015; Sherman et al., 1989; Weisburd & Braga, 2006), despite the emphasis on community involvement in Goldstein's definition of POP (Goldstein, 1979). In two medium-sized East Coast communities in the United States, the POP initiative that was the subject of this study sought to include community participation in the POP procedure (Weisburd & Braga, 2013).

It's a key point in time when it's unclear whether POP will be successful in such situations. Our research sheds some light on whether POP may have had positive or negative effects on lowering crime in this particular setting. By concentrating on underlying issues that fuel crime and disorder in the community and taking proactive, preventive action against the causes of crime, the POP model encourages police to go beyond incident-driven, reactive policing (Goldstein, 1979, 1990).

POP may be especially effective in the context of hot spots (Weisburd et al., 2010), in that focusing attention on these extremely specific locations can aid officers in identifying concrete conditions that contribute to crime/disorder at these places and in developing responses customized to these places and their problems. In addition to targeted enforcement, hot spots have seen success with situational crime prevention, nuisance abatement, clean-up initiatives, and social services (Braga & Bond, 2008; Braga et al., 1999; Eck, 2002; Eck & Wartell, 1998; Mazerolle et al., 2000; Sherman et al., 1989; Taylor et al., 2011).

By utilizing the Scan, Analyze, Respond, and Assessment (SARA) paradigm, POP experts have also developed tools to provide an organized approach to POP (Eck & Spelman, 1987). SARA is a methodical and analytical strategy to problem-solving that begins with the police continuously scanning the regions under their

jurisdiction and using a range of information sources, particularly local individuals, to identify the main issues facing the community (Cordner & Biebel, 2005). Police then meticulously examine such issues in order to confirm, define, and provide an explanation (Cordner & Biebel, 2005).

Police should only take action after conducting an analysis, and when they do, they should find and weigh a variety of options before concentrating on the most promising ones (Cordner & Biebel, 2005). The police should evaluate the results of an intervention after putting it into action to determine whether they should attempt anything else and to record lessons learned for future problem-solving efforts (Cordner & Biebel, 2005).

XVIII. COMMUNITY POLICING AND PROBLEM ORIENTATED POLICING IN ADDRESSING CRIME

Citizen interaction and input were important components of Goldstein's initial description of POP (Goldstein, 1979). Additionally, strong community participation is a key component of SARA-guided POP programs (Cordner & Biebel, 2005). The federal COPS Office's original definition of community-oriented policing (COP) included problem-solving (Office of Community Oriented Policing Services, 2021).

However, in reality, both POP and COP implementation have fallen short of these principles, and as a result, the two have begun to deviate from one another (Gill et al., 2014). Although the goal of POP is to solve problems, it frequently does not effectively include the community or place a focus on fostering wholesome community ties (Gill et al., 2014). Additionally, community policing alone frequently does not use in-depth problem analysis techniques like those found in the SARA model (Gill et al., 2014).

According to Weisburd et al. (2008), a combined POP and COP method is currently uncommon. With the exception of an RCT that focused on young people (Weisburd et al., 2008), the few studies examining a combined POP and COP approach (Telep & Weisburd, 2012; Tuffin et al., 2006; Weisburd et al., 2008) frequently utilized less rigorous techniques.

The post-Floyd era, in which there has reportedly been increased tension between communities and the police, places a premium on community participation in problem-solving (Ang et al., 2021; Buchanan et al., 2020; Kochel, 2019). This is probably of particular concern to African American communities that have long-standing histories of structural marginalization and discrimination, which can lead to suspicion of police intents and actions (Bylander, 2015; Radin, 2015).

XIX. SUMMARY

Problem-oriented policing aimed in high-crime regions to stop drug- and violence-related crime. The program has a promising rating. A localized examination of the intervention group regions (where the program was implemented) revealed statistically substantial drops in the incidence of violent and drug-related crime. However, the rates of homicide, violent crime, or drug crime in the entire city did not change in a statistically meaningful way. Small areas known as "hot spots" tend to be the focal points of crime and violence.

Hot spots policing is locating these areas and concentrating police attention and resources there. According to the research, hot zones policing can lessen violence. Additionally, it can lower general criminal activity, including drug and property offenses. In comparison to just raising police visibility, the application of problem-oriented policing (POP) inside the hot areas policing method may have a greater impact on crime. Interventions in hot zones policing are carried out for varied amounts of time, ranging from one week to three years. Additional research may reveal more information regarding the use and ideal duration of hot spot policing.

REFERENCES

- [1]. Ariel, B., & Partridge, H. (2017). Predictable policing: Measuring the crime control benefits of hotspots policing at bus stops. *Journal of Quantitative Criminology*, 33(4), 809–833.
- [2]. Ariel, B., Weinborn, C., & Sherman, L. W. (2016). "Soft" policing at hot spots—do police community support officers work? A randomized controlled trial. *Journal of Experimental Criminology*, 12(3), 277–317.
- [3]. Attermann, C. V. (2017). Investigating hot spots policing. Copenhagen, Denmark: Ministry of Justice Research Office.
- [4]. Banerjee, A.V., Duflo, E., Keniston, D., & Singh, N. (2014). The efficient deployment of police resources: Theory and new evidence from a randomized drunk driving crackdown in India. Unpublished manuscript.
- [5]. Beck, J. W. (2010). The effects of directed patrols in unincorporated areas: A case study of the data-driven approach to crime and traffic safety. Reno, NV: University of Nevada.
- [6]. Berk, R., & MacDonald, J. (2010). Policing the homeless: An evaluation of efforts to reduce homeless-related crime. *Criminology and Public Policy*, 9(4), 813–840.
- [7]. Blattman, C., Green, D., Ortega, D., & Tobón, S. (2017). Pushing crime around the corner? Estimating experimental impacts of large-scale security interventions.
- [8]. Bond, B.J., Hajjar, L., Ryan, A., & White, M.D. (2014, March). Lowell, Massachusetts, smart policing initiative: Reducing property crime in targeted hot spots. Washington, DC: Bureau of Justice Assistance.

- [9]. Braga, A., & Bond, B. (2008). Policing crime and disorder hot spots: A randomized controlled trial. *Criminology*, 46(3), 577–608.
- [10]. Braga, A., Hureau, D., & Papachristos, A. (2011). An ex-post-facto evaluation framework for place-based police interventions. *Evaluation Review*, 35(6), 592–626.
- [11]. Braga, A., Weisburd, D., Waring, E., Mazerolle, L. G., Spelman, W., & Gajewski, F. (1999). Problem-oriented policing in violent crime places: A randomized controlled experiment. *Criminology*, 37(3), 541–580.
- [12]. Braga, Anthony A. 2005. “Hot Spots Policing and Crime Prevention: A Systematic Review of Randomized Controlled Trials.” *Journal of Experimental Criminology*. 1:317–42.
- [13]. Braga, Anthony A. 2006. “The Crime Prevention Value of Hot Spots Policing.” *Psicothema* 18(3):630–37.
- [14]. Braga, Anthony A. 2007. “The Effects of Hot Spots Policing on Crime.” *Campbell Systematic Reviews* 1.<http://www.campbellcollaboration.org/lib/download/118/>
- [15]. Braga, Anthony A., Andrew V. Papachristos, and David M. Hureau. 2012. “The Effects of Hot Spots Policing on Crime: An Updated Systematic Review and Meta-Analysis.” *Campbell Systematic Reviews* 8(1):1–96.
- [16]. Braga, Anthony A., Brandon S. Turchan, Andrew V. Papachristos, and David M. Hureau. 2019. “Hot Spots Policing and Crime Reduction: An Update of an Ongoing Systematic Review and Meta-Analysis.” *Journal of Experimental Criminology* 15(3):289–311.
- [17]. Brantingham, Paul and Patricia Brantingham. (Eds). 1991. *Environmental Criminology*. 2nd ed. Prospect Heights, IL: Waveland Press.
- [18]. Cohen, L. and M. Felson, 1979. “Social Change and Crime Rate Trends: A Routine Activity Approach.” *American Sociological Review* 44:588–605.
- [19]. Bryant, K.M., Collins, G., & Villa, J. (2014). *Data driven approaches to crime and traffic safety: Shawnee, Kansas 2010 – 2013*. Washington, DC: Bureau of Justice Assistance.
- [20]. Caeti, T. (1999). *Houston's targeted beat program: A quasi-experimental test of police patrol strategies* (Ph.D. dissertation). Sam Houston State University, Ann Arbor, MI. University Microfilms International.
- [21]. Cohen, J., Gorr, W., & Singh, P. (2003). Estimating intervention effects in varying risk settings: Do police raids reduce illegal drug dealing at nuisance bars? *Criminology*, 41(2), 257–292.
- [22]. Cornish, D. and R. V. Clarke. 1987. “Understanding Crime Displacement: An Application of Rational Choice Theory.” *Criminology* 25:933–947.
- Criminal Justice Commission. (1998). *Beenleigh calls for service project: Evaluation report*. Brisbane, Queensland, AUS: Criminal Justice Commission.
- [23]. Dario, L. M. (2016). *Crime at convenience stores: Assessing an in-depth problem-oriented policing initiative* (Ph.D. dissertation). Arizona State University, Phoenix, AZ.
- [24]. Department of Justice, Office of Justice Programs, National Institute of Justice.<https://www.ojp.gov/pdffiles1/nij/209393.pdf>
- [25]. DiTella, R., & Schargrodsky, E. (2004). Do police reduce crime? Estimates using the allocation of police forces after a terrorist attack. *American Economic Review*, 94(1), 115–133.
- [26]. Eck, John, Spencer Chainey, James G. Cameron, Michael Leitner, and Ronald E. Wilson. 2005. *Mapping Crime: Understanding Hot Spots*. Washington, D.C.: U.S.
- [27]. Farrington, D. P., Gill, M., Waples, S. J., & Argomaniz, J. (2007). The effects of closed-circuit television on crime: Meta-analysis of an English national quasi experimental multi-site evaluation. *Journal of Experimental Criminology*, 3(1), 21–38.
- [28]. Fielding, M., & Jones, V. (2012). ‘Disrupting the optimal forager’: Predictive risk mapping and domestic burglary reduction in Trafford, Greater Manchester. *International Journal of Police Science and Management*, 14(1), 30–41.
- [29]. Gerell, M. (2016). Hot spot policing with actively monitored CCTV cameras: Does it reduce assaults in public places? *International Criminal Justice Review*, 26(2), 187–201.
- [30]. Groff, E. R., Ratcliffe, J. H., Haberman, C. P., Sorg, E. T., Joyce, N. M., & Taylor, R. B. (2015). Does what police do at hot spots matter? The Philadelphia Policing Tactics Experiment. *Criminology*, 53(1), 23–53.
- [31]. Hinkle, J., & Weisburd, D. (2008). The irony of broken windows policing: A micro-place study of the relationship between disorder, focused police crackdowns and fear of crime. *Journal of criminal justice*, 36(6), 503–512.
- [32]. Hope, T. (1994). Problem-oriented policing and drug market locations: Three case studies. *Crime Prevention Studies*, 2, 5–32.
- [33]. Kennedy, L., Caplan, J., & Piza, E. (2015). A multi-jurisdictional test of risk terrain modeling and a place-based evaluation of environmental risk-based patrol deployment strategies. Newark, NJ: Rutgers University.
- [34]. Kochel, T. R., Wilson, D. B., and Mastrofski, S. D. (2011). The effect of suspect race on police officers’ arrest decisions. *Criminology*, 49(2), 473–512.
- [35]. Kochel, T. R., Burruss, G., & Weisburd, D. (2015). *St. Louis county hot spots in residential areas (SCHIRA) Final Report: Assessing the effects of hot spots policing strategies on police legitimacy, crime, and collective efficacy*. Washington, DC: U.S. Department of Justice.
- [36]. Koper, C. S., Lum, C., & Hibdon, J. (2015). The uses and impacts of mobile computing technology in hot spots policing. *Evaluation Review*, 39(6), 587–624.

- [37]. Koper, C. S., Taylor, B. G., & Woods, D. J. (2013). A randomized test of initial and residual deterrence from directed patrols and use of license plate readers at crime hot spots. *Journal of Experimental Criminology*, 9(2), 213–244.
- [38]. Koper, Christopher. 1995. "Just Enough Police Presence: Reducing Crime and Disorderly Behavior by Optimizing Patrol Time in Police Hot Spots." *Justice Quarterly* 12(4):649–72.
- [39]. Lawton, B., Taylor, R., & Luongo, A. (2005). Police officers on drug corners in Philadelphia, drug crime, and violent crime: Intended, diffusion, and displacement impacts. *Justice Quarterly*, 22(4), 427–451.
- [40]. Lum, C., Hibdon, J., Cave, B., Koper, C. S., & Merola, L. (2011). License plate reader (LPR) police patrols in crime hot spots: An experimental evaluation in two adjacent jurisdictions. *Journal of Experimental Criminology*, 7(4), 321–345.
- [41]. MacDonald, J., Fagan, J., & Geller, A. (2016). The effects of local police surges on crime and arrests in New York City. *PLOS One*, 11(6).
- [42]. Marklund, F., & Holmberg, S. (2015). Camera monitoring in stureplan and civic square: Full Report. Stockholm, Sweden: Brå.
- [43]. Marklund, F., & Merenius, S. (2014). Policing crime "hot spots": Results and experiences from two projects against personal abuse and abuse. Stockholm, Sweden: Brå.
- [44]. Martinez, N. N. (2013). Team policing revisited: A quasi-experimental evaluation in Las Vegas. Nevada. Las Vegas, NV: University of Nevada.
- [45]. Mazeika, D. M. (2014). General and specific displacement effects of police crackdowns: Criminal events and "local" criminals (Ph.D. dissertation). University of Maryland, College Park, MD.
- [46]. Mazerolle, L., Price, J., & Roehl, J. (2000). Civil remedies and drug control: A randomized field trial in Oakland, California. *Evaluation Review*, 24(2), 212–241.
- [47]. Novak, K. J., Fox, A. M., Carr, C. M., & Spade, D. A. (2016). The efficacy of foot patrol in violent places. *Journal of Experimental Criminology*, 12(3), 465–475.
- [48]. Pierce, G. L., Spaar, S., and Briggs, L. R. (1988). *The Character of Police Work: Strategic and Tactical Implications*. Boston, MA: Center for Applied Social Research, Northeastern University.
- [49]. Phillips, S. W., Wheeler, A., & Kim, D. (2016). The effect of police paramilitary unit raids on crime at micro-places in Buffalo, New York. *International Journal of Police Science and Management*, 18(3), 206–219.
- [50]. Piza, E., & O'Hara, B. A. (2014). Saturation foot-patrol in a high-violence area: A quasi-experimental evaluation. *Justice Quarterly*, 31(4), 693–718.
- [51]. Piza, E., Caplan, J. M., Kennedy, L. W., & Gilchrist, A. M. (2015). The effects of merging proactive CCTV monitoring with directed police patrol: A randomized controlled trial. *Journal of Experimental Criminology*, 11(1), 43–69.
- [52]. Ratcliffe, J. H., & Breen, C. (2011). Crime diffusion and displacement: Measuring the side effects of police operations. *The Professional Geographer*, 63(2), 230–243.
- [53]. Ratcliffe, J., Taniguchi, T., Groff, E., & Wood, J. (2011). The Philadelphia foot patrol experiment: A randomized controlled trial of police patrol effectiveness in violent crime hot spots. *Criminology*, 49(3), 795–831.
- [54]. Ratcliffe, J., Taylor, R.B., Askey, A.P., Thomas, K., Grasso, J., & Bethel, K. (2017). The Philadelphia predictive policing experiment. Manuscript under review.
- [55]. Rosenfeld, R., Deckard, M. J., & Blackburn, E. (2014). The effects of directed patrol and self-initiated enforcement on firearm violence: A randomized controlled study of hot spot policing. *Criminology*, 52(3), 428–449.
- [56]. Rydberg, J., McGarrell, E.F., Norris, A., & Circo, G. (2017). Applying synthetic control to evaluate the impact of data driven approaches to crime and traffic safety on violent crime. Manuscript under review.
- [57]. Santos, R. B., & Santos, R. G. (2016). Offender-focused police intervention in residential burglary and theft from vehicle hot spots: A partially blocked randomized control trial. *Journal of Experimental Criminology*, 12(3), 373–402.
- [58]. Santos, R. G., & Santos, R. B. (2015a). An ex post facto evaluation of tactical police response in residential theft from vehicle micro-time hot spots. *Journal of Quantitative Criminology*, 31(4), 679–698.
- [59]. Santos, R. G., & Santos, R. B. (2015b). Practice-based research: Ex post facto evaluation of evidence-based police practices implemented in residential burglary micro-time hot spots. *Evaluation Review*, 39(5), 451–479.
- [60]. Schreiber, Sara. 2010. "Zone Defense: The Hopeful Case for 'Broken Windows' in Disordered Streets." *Law Enforcement Technology* 37(3):24–28.
- [61]. Sedelmaier, C.M., & Hipple, N.K. (2016). *New Haven, Connecticut Smart Policing Initiative: Employing evidence-based policing strategies to engage the community and reduce crime*. Washington, DC: Bureau of Justice Assistance.
- [62]. Sherman and Weisburd (1995) found a statistically significant reduction in citizen calls to police in experimental hot spots compared with control hot spots.
- [63]. Sherman, L., & Rogan, D. (1995a). Effects of gun seizures on gun violence: 'Hot spots' patrol in Kansas City. *Justice Quarterly*, 12(4), 673–694.
- [64]. Sherman, L., & Rogan, D. (1995b). Deterrent effects of police raids on crack houses: A randomized controlled experiment. *Justice Quarterly*, 12(4), 755–782.
- [65]. Sherman, L., & Weisburd, D. (1995). General deterrent effects of police patrol in crime hot spots: A randomized controlled trial. *Justice Quarterly*, 12(4), 625–648.

- [66]. Sherman, L., Buerger, M., & Gartin, P. (1989). *Beyond dial-a-cop: A randomized test of repeat call policing (RECAP)*. Washington, DC: Crime Control Institute.
- [67]. Sherman, L., Williams, S., Ariel, B., Strang, L.R., Wain, N., Slothower, M., & Norton, A. (2014). *TTPS hotspot experiment: Murder, wounding, shooting data graphs*. Unpublished manuscript.
- [68]. Sherman, Lawrence W. 1995. "Hot Spots of Crime and Criminal Careers of Places." In John E. Eck and David Weisburd, (Eds.). *Crime and Place*. Washington, DC: Police Executive Research Forum, pp. 35-52.
- [69]. Sorg, E. T. (2015). *An ex post facto evaluation of the Philadelphia GunStat model*. Philadelphia, PA: Temple University.
- [70]. Sviridoff, M., Sadd, S., Curtis, R., & Grinc, R. (1992). *The neighborhood effects of street-level drug enforcement: tactical narcotics teams in New York*. New York, NY: Vera Institute of Justice.
- [71]. Taylor, B., Koper, C., & Woods, D. (2011). A randomized controlled trial of different policing strategies at hot spots of violent crime. *Journal of Experimental Criminology*, 7(2), 149– 181.
- [72]. Taylor, Bruce, Christopher S. Koper, and Daniel J. Woods. 2011. "A Randomized Controlled Trial of Different Policing Strategies at Hot Spots of Violent Crime." *Journal of Experimental Criminology* 7:149–81.
- [73]. Telep, C. W., Mitchell, R. J., & Weisburd, D. (2014). How much time should the police spend at crime hot spots? Answers from a police agency directed randomized field trial in Sacramento, California. *Justice Quarterly*, 31(5), 905– 933.
- [74]. Uchida, C. D., & Swatt, M. L. (2013). Operation LASER and the effectiveness of hotspot patrol: A panel analysis. *Police Quarterly*, 16(3), 287– 304.
- [75]. Weisburd, D., & Green, L. (1995a). Policing drug hot Spots: The Jersey City DMA experiment. *Justice Quarterly*, 12(4), 711– 736.
- [76]. Weisburd, D., Groff, E. R., Jones, G., Cave, B., Amendola, K. L., Yang, S., & Emison, R. F. (2015). The Dallas patrol management experiment: Can AVL technologies be used to harness unallocated patrol time for crime prevention? *Journal of Experimental Criminology*, 11(3), 367– 391.
- [77]. Weisburd, D. L., Elizabeth R. Groff, E. R. Sue-Ming Yang, S. 2012. *Understanding and Controlling Hot Spots of Crime: The Importance of Formal and Informal Social Controls*. February 2013 *Prevention Science* 15(1) DOI: 10.1007/s11121-012-0351-9. Source.PubMed.
- [78]. Weisburd, D., Hinkle, J. C., Famega, C., & Ready, J. (2012). *Legitimacy, fear and collective efficacy in crime hot spots: Assessing the impacts of broken windows policing strategies on citizen attitudes*. Washington, DC: National Institute of Justice.
- [79]. Weisburd, D., Wyckoff, L., Ready, J., Eck, J., Hinkle, J., & Gajewski, F. (2006). Does crime just move around the corner? A controlled study of spatial displacement and diffusion of crime control benefits. *Criminology*, 44(3), 549– 592.
- [80]. Weisburd, David and John E. Eck. 2004. "What Can Police Do to Reduce Crime, Disorder, and Fear?" *The Annals of the American Academy of Political and Social Science* 593:42–65.
- [81]. Wheeler, A. P., & Phillips, S. W. (2018). A quasi-experimental evaluation using roadblocks and automatic license plate readers to reduce crime in Buffalo, NY. *Security Journal*, 31(1), 190– 207.
- [82]. Williams, S.A. (2015). *Do visits or time spent in hot spots patrol matter most? A randomized control trial in the West Midlands Police*. Fitzwilliam College, Cambridge, England.