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Implementing Hotspot Policing

Fall 2013

A Review of the Literature

Portland State University

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Introduction

Crime has the power to disrupt our communities in many ways. It unearths feelings of anger and fear, promotes vulnerability, and often results in effects that remain long after the crime has been committed. Those enlisted to protect society attempt to target criminal acts before they occur, and often employ tactics that predict future criminal behavior. It often seems that officers have solved a particular issue and extinguished crime in a problem area, but discover it was only pushed into another community. This compilation of research analyzes the nature of crime and attempts to provide solutions for the ongoing study and implementation of new policies. This review focuses on the importance of crime mapping and hotspot policing, while better defining circumstances in which crime plagues a community, city, or country. Detailed examples highlight the varying factors that have weighed upon the community's perception of crime and displacement of crime. More importantly, this review delves deeper in defining hotspot policing, and crime mapping; it aims to establish a relationship between the distinguishing factors of crime and where law enforcement officials can intervene.

Crime prevention requires that agencies understand the underlying issues of crime and act upon educated assumptions of those criminal characteristics. Further examination reveals certain characteristics regarding offenders, including the locations where they choose to commit crimes, and the victims affected by their crimes. Patterns of victimization within crime hotspots should be noted with the same regard as location patterns. Continuing research and knowledge of offenders, victims, locations, better practices, and policy implementation can be developed to make hotspot policing and crime mapping an even more effective policing tool for the future.

Definition and Prevalence

Hotspot mapping is a tool utilized by law enforcement to monitor, predict, and prevent future crime by zoning areas and pinpointing crime hotspots. Results have varied, depending on the area and type of crime, allowing agencies to have an in-depth look at key changes. Continuation of hotspot monitoring allows for advancement and improvement in data collection, ultimately providing safety and security (Chainey, Tompson, & Uhlig, 2008, pp.4-5). According to Kochel, (2011) hotspot policing was conceived during a time of need, due to high crime rates and alleged police misbehavior, and research has supported it as an effective crime tool. Although research supports hotspot patrols, it does not take into consideration non-crime consequences (pp.350-374). An outcome of foot patrol is displacement of crime to areas other than the targeted area. When crime relocates to other areas the police-community relations can be effected. The authors examine whether the community notices displaced crime if it is short-term (Sorg, Haberman, Ratcliffe, & Groff, 2013, pp.72, 76-77).

Law enforcement can often map crime in the community, based on the nature of local business. Sexually oriented businesses (SOB) bring crime and other deviance to the community. There is often a reduction in business traffic in areas surrounding the SOB, and the values of residential properties as well as commercial property can be reduced. These negative effects on the community are crucial to investigate to examine the impact for zoning and implementing legislative initiatives (McCord & Tewksbury, 2012, pp.1108-1125). There has also been an increase in crime in the areas where new gambling businesses have set up. The crime issues range from alcohol related incidents, drugs, and burglary. When compared to other crime in the

city, more incidents have occurred solely in the area of the gambling businesses (Barthe & Stitt, 2007, pp.120-125).

One thing that must be avoided in hotspot policing is the tendency to target areas that have been given sensationalized labels by crime media. Wallace (2008) examines the relationship between the media's reporting of crime and how it affects societal perception of crime and locations of crime. "Dangerous places are marked through their constant invocation in crime stories. Buffalo, the Bronx, Detroit, Camden, and Newark... crime news serve to reinforce rather than impede presuppositions about these places" (pp.395-409).

To avoid this shortfall, crime maps should be guided by crime theories. The U.S. Department of Justice stresses the importance of consistency in the relationship between crime theory, mapping and police actions (2005, pp.1-2). The Police Executive Research Forum (PERF) focuses on the current violence throughout the United States. The responses from PERF's surveys determined that crime was increasing. Two years later PERF's surveys showed that through hotspot policing crime had decreased 4-8% (Police Executive Research Forum, 2008, pp.iii-3).

Ultimately, police reform typically begins with a department attempting a new strategy to combat crime. It is through development of a strategy that solutions to rising crime rates become apparent (Kochel, 2011, pp.352-353). Better understanding of a criminal situation, and implementation of hot-spot strategies, help reduce the impact of future crime and lessens the probability of future victims.

Victims

This review addressed a series of peer-reviewed articles containing information on victim characteristics in the United States, United Kingdom, and Germany. The majority of information centers on the geographical characteristics leading to victimization.

The U.S. Department of Justice (USDOD) published a report on crime mapping in 2005 which found hotspots are often along routes where there may be "elevated risks of victimization" (p.7). These routes may be specific to an offender's everyday routine, including convenience stores, gas stations, and other retail outlets. A person's chance of victimization increases when he or she intersects the offender along these modes of routine. Crime mapping refers to these routes as "hot lines" because they usually occur along major thoroughfares (p.7).

Sexually oriented businesses (SOB) are one type of business found to increase a person's risk for victimization. A study conducted by McCord and Tewksbury (2012) demonstrated the closer a person lives to an SOB, the higher their chances of becoming a victim of a violent, property, or disorder crime. These victims become targets as a result of potential criminals walking through the area on their way to the SOB. "SOBs located in or near residential neighborhoods are likely to draw crime (as well as criminally motivated offenders) to the neighborhood, perhaps facilitating criminal offenses by such offenders as they travel to the SOB" (p.1121). Another type of business along these hot line routes known for victimization is a check-cashing store. While these types of businesses are common throughout the U.S., robbers are known to target illegal immigrants because they carry cash due to fear of exposure if they were to utilize bank services (PERF, 2008, p.15).

Casinos are often thought to be hotspots for criminal activity and increased victimization due to the large tourist population they attract. In their study of casinos and crime, Barthe and Stitt (2007) stress the importance of assessing the entire “population at risk” when determining levels of criminal activity. The number of crimes in relation to the total number of people in the tourist setting should be used to acquire an accurate depiction of crime in tourist locations. This will allow police to determine the true crime rate and see if the tourist area is truly a hotspot (pp.126-128, 130).

Multiple studies have shown certain demographic groups having higher rates of victimization and/or fear of victimization. A study conducted in the United Kingdom found individuals living in public housing had higher levels of fear of crime than those who lived elsewhere (Gill, Bryan, & Allen, 2007, p.313). Research also indicates young people are at high risk for victimization. In his study of crime in Germany, Frevel (2013) found young males, aged 16-21, to be the most abundant victims of robberies and assaults (p.356). Gang activity also contributes to victimization rates. London gang violence resulted in 47 murders from 2007-2008, with the victims being mostly “young African Caribbean males in their teens and early twenties” (Hallsworth & Young, 2008, p.175). In addition, the use of higher caliber assault rifles in gang shootings has not only resulted in a higher extent of injuries for the targeted victim, but also for the innocent bystander (PERF, 2008, p.14). Better understanding of the offenders’ targeted locations and demographics aids law enforcement in developing characteristics of their offenders.

Offenders

To attain an understanding of the individual committing a crime, police forces must understand that offenders are inclined to take advantage of opportunities to commit crime. Victims often become exposed as targets in these hot zones by being in the offender’s way. Hotspot policing helps circumvent victimization, providing the offender less opportunity to successfully commit the crime. Street hotspots are areas of repeated victimization, often spanning within a relatively short distance of an offender’s daily travel. However, some of these hotspots occur not along the routes of offender’s daily activities, but rather in places where the victim could be trying to go for help (USDOJ Programs, 2005).

Hotspots of crime have criminogenic variables that have lasted over a long period of time. Essentially, past criminal incidents lay the foundation for future criminal activity to occur. Motivated offenders assess their own risks as well as their perceptions of features of the landscape, facilitating new crimes (Caplan, Kennedy, & Piza, 2013, pp.245-246). For instance, a study on crime in Reno, NV revealed 22% of the city’s crime incidents occurred within 1,000 feet of casino venues. A majority of the city’s drug and liquor crimes, financial crimes, and prostitution/vice crimes occur in these areas (Barthe & Stitt, 2007, p.122). Intoxicated patrons leave the premises and fall victim to criminal activity or problematic individuals choose to engage in illegal behaviors outside the venue (p.131). Research shows sexually oriented businesses (SOB) act as gathering places to prey upon “suitable targets.” Evidence concludes SOB’s attract criminally motivated offenders “Providing a visible law enforcement presence in the immediate vicinity of such establishments is an obvious means for counteracting the effects of such businesses” (McCord & Tewksbury, 2012, p.1121).

In Houston, Texas, 55% of homicides are gang related. Gang enforcement officers look closely at offenders to identify violent gang members. The officers analyze a specific gang member's history and possible juvenile record, and link it to current activity. This allows officers to give the top 10 gangs their full attention to lower violent crimes (PERF, 2008, pp.11-12). This article section shows how exposing gang members placed pressure on the individual in order for them to re-think their criminal involvement.

Researchers gathered data from probation officers to help determine potential journeys to crime. Findings indicated youths' methods of travel and primary hangouts, besides home and school, are relevant variables to consider when assessing potential crime occurrence in delinquent youth (Bichler, Christie-Merrall, & Sechrest, 2011, pp.480-481). Researchers also studied anti-social behavior in identifying youth hotspots in an urban inner-city area called Ashton Estates. Patrols focused on groups of young people to observe in order to discourage this behavior. Residents felt their neighborhood was being profiled: "most of the young people had a strong sense of being criminalized for living on Ashton, because of its strong reputation for drugs" (Sadler, 2008, p.67). The ability to utilize offender profiles, in conjunction with victim assessment and prevalence of crime, aids to establish strategies to minimize the effects of future crime through predicting forthcoming behavior.

Better Practices

When focusing on better practices, it is necessary to look at implementations that have been tested and proven to work. Better practices are not just a bright idea, rather they are tested and recognized as making a difference in policing efforts. "From a theoretical standpoint, environmental criminology suggests displacing crime to another location is likely to result in a reduction in offending as criminals are pushed to commit a crime in a less optimal site" (Ratcliffe, Taniguchi, Groff & Wood, 2011, p.815). Ratcliffe, et al. discovered putting more officers on foot patrols in a known higher-crime area reduced violent crimes in the area, but pushes criminals to commit crimes in a place less ideal for delinquency.

Increasing traffic stops has also proven to decrease crime. Though difficult to implement, most agencies discovered increasing traffic stops and man power, focused on certain crime types was appreciated by the public as long as they were not being stopped for minor traffic violations. When agencies did increase the amount of traffic stops it also increased the amount of people arrested on drug charges (Koper, Taylor, & Woods, 2011, p.232). The Police Executive Research Forum (PERF) assessed problematic areas and reacted accordingly. This forum asked different law enforcement agencies to ascertain policies that concentrated on decreasing violence (PERF, 2008, p.3). The authors in this study believed the reason there was strong feedback from the study was because of license plate recognition (LPR). An LPR system is a high-speed camera used to scan license plates to search various databases.

The Disruption Unit (DU) has demonstrated success in the number of days they positioned officers in hotspot areas by also using more traffic stops. This unit is part of the Dallas Police Department, and they focus on rotational saturation deployment and certain sectors that are part of their jurisdiction. They started by conducting a multitude of traffic stops, resulting in an increased number of citations and arrests. These citations and arrests resulted in reducing disorderly conduct, prostitution and drug distribution (Jang, 2011, p.597).

The Prediction Accuracy Index (PAI) focuses on the likelihood of how many offenses a hotspot map can foresee. As a map is divided into categories, such as percentages and certain areas of crime, the PAI forecasts the next location where crimes may occur. This PAI gives law enforcement the ability to compare hotspot mapping and crimes committed to predicting future crime locations (Chainey, et al., 2008, pp.22-25).

Taylor, Koper and Woods (2012) theorize violent offenders often commit crimes within close vicinities to their homes. “While these factors might make distant displacement of violence less likely, they may also increase the likelihood of displacement to very nearby areas, at least in the short run” (p.174). The study revealed problem solving interventions caused a reduction in violent crimes by 20% and property crimes by 5% (pp.173-178).

These various practices in hotspot policing have helped the criminal justice system decrease rates of crime and increase public safety. They are again proven to work and are being used by many law enforcement agencies throughout the country. Technology, more man power, and hotspot mapping are just a few of the better practices working in the justice systems today. Implementation of effective strategies has the potential to improve and shape outcomes at individual, community, and societal levels.

Implications for Policy and Training

Studies into better practices can lead to new policies within law enforcement. The Koper, et al., (2012) study of license plate recognition (LPR) technology, revealed multiple suggestions for ways in which LPR systems can aid in crime reduction. For reduction of motor vehicle thefts, the authors suggest having non-sworn officers manning the LPR systems and dispatching “hits” on stolen vehicles to patrol officers in proximity (p.43). The value seems to come from the use of the cameras being displayed, rather than the identification and incapacitation of offenders. This implies the visibility of the cameras was the deterrent while also creating a small decline in personal crimes and auto theft (p.177).

A 2005 report by the U.S. Department of Justice Programs suggests the combined use of statistical tools and human analysis in the identification of hotspot areas of criminal activity effectively strengthened law enforcement’s ability to monitor and prevent crime (USDOJ Programs, p.65). Identification of particular crime types (e.g. sexual assault, domestic violence, robbery) within a crime hotspot is important because it allows police to allocate the appropriate resources to combat the particular crime prevalent in the area. Temporal factors of crime in a hotspot, such as time of day, day of the week, and month of the year must also be assessed prior to implementation (p.68). In order to determine if crime hotspots occur in high-risk places or in clusters, the DOJ suggests three steps to investigate. The first step is to use hotspot analysis to determine where crimes cluster spatially in the jurisdiction. Second is to model environmental risks by using the risk terrain model (RTM) to identify high-risk places. Third is to use near-repeat analysis to identify the spatial-temporal nature of hotspots in a jurisdiction (Caplan, et al., 2013, p.260).

Findings from the 2008 Police Executive Research Forum (PERF) stress the importance of community involvement in combating violent crime. “[Police] Chiefs realize that they cannot be effective if they lack support within the community” (p.29). Proactive police presence has an impact on crime (Wells & Wu, 2011, p. 298). Employment, recreation, and other opportunities

often cease to exist in neighborhoods plagued by violent crime. It is also important for law enforcement agencies to inform all members of the community the intentions of their increased presence (p.30). Sorg, et al., (2012) studied foot patrols as “certainty communicating devices” in the community but found that longer deployment time did not acquire better results of deterrence decay (p.88).

Former Yugoslavian countries are still influenced by the economic decline of the 90’s in regards to security and crime prevention strategies. Researchers in this study agree harsh sentencing policies and building correctional facilities do not help in reducing crime. Instead, safety management begins with educated security managers focusing on master level criminology (Mesko, Tominc, & Sotlar, 2013, p.289-293). The authors express those strategies for managing community safety should be driven by professional evaluations of what works.

Conclusions

All of implications in this report have the same common goal: to aid law enforcement officials in improving their policies and training to better serve communities. Undergoing a thorough investigation, the authors of this review revealed hotspot policing and crime mapping to be effective tools and can be utilized within the Portland Police Bureau. A number of studies have shown these implemented tactics aid in decreasing crime with positive results to help make a healthier community and improved police relations.

Certain steps should be employed in order to effectively apply hotspot policing and crime mapping. First, it is crucial to identify areas with higher rates of criminal activity. Studies show that certain business (e.g. casinos, sexual orientated business, and even large tourist locations) cultivate a higher rate of criminal activity such as prostitution, robbery, property crimes, and drugs. Second, it is important to understand characteristics of the offenders, and the patterns of the victims within the areas, identified as hotspot areas. Offenders realize victims within these areas tend to develop everyday patterns, and opportunistic offenders take advantage of routine. Third, the Police Executive Research Forum (PERF) has indicated implementing hotspot policing correlates to a vast decrease in crime rates. Studies also indicate community support becomes an integral part of the success of hotspot policing.

Criminological research illustrates the necessity of efficient policing and management of crime control in order to ensure the safety of a community during law enforcement’s daily battle to fight crime. Success of these officers in minimizing potential crime correlates to a safer community; a community more inclined to support research of preventative measures.

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