

Boston, Massachusetts Smart Policing Initiative

*Evaluating a Place-Based Intervention to
Reduce Violent Crime*

Smart Policing Initiative: Site Spotlight

August 2012

Smart Policing: Research Snapshot

From 2004 to 2006, the city of Boston experienced notable increases in violent crime, especially robberies and assaults committed with guns. The majority of the violence was concentrated in disadvantaged, predominately minority neighborhoods. In December 2006, Edward Davis was appointed Commissioner of the Boston Police Department (BPD); he immediately set about addressing the spike in violent crime. Commissioner Davis developed the Safe Street Team (SST) strategy through which police officer teams were assigned to 13 different violent crime hot spots. The SSTs applied problem-oriented, community-policing strategies to identify and address recurring problems in their target areas.

In 2009, the BPD received funding from the Bureau of Justice Assistance's Smart Policing Initiative (SPI) to conduct an ex-post facto evaluation of the place-based SST strategy. The Boston SPI project was composed of a process evaluation of the actual work carried out by SST officers, a 28-year longitudinal analysis of the stability of violent crime hot spots in Boston, and an impact evaluation of the SST strategy using a nonrandomized quasi-experimental design that matched the 13 SST target areas with comparable violent crime hot spots throughout the city. The evaluation showed that violent crime hot spots in Boston have been remarkably stable over time. The SST officers deployed nearly 400 different situational/environmental, enforcement and community/social service interventions in the 13 targeted hot spots during the study period. The impact evaluation showed that the SST strategy was associated with a 17.3 percent reduction in the total number of violent index crimes, a 19.2 percent reduction in the number of robberies, and a 15.4 percent reduction in the number of aggravated assaults—with no evidence of displacement or diffusion effects.

Although it is best to include evaluation as a part of the planning, development, and implementation of police programs, the Boston SPI experience showed that rigorous, retrospective evaluation can still be carried out effectively. The Boston SPI team successfully addressed the challenges associated with building a solid, after-the-fact program evaluation, and the study produced findings that are of considerable value to BPD and other law enforcement agencies across the United States.

BOSTON, MASSACHUSETTS SMART POLICING INITIATIVE: EVALUATING A PLACE-BASED INTERVENTION TO REDUCE VIOLENT CRIME

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INTRODUCTION

From 2004 to 2006, the city of Boston witnessed a notable increase in crime: violent index crimes¹ rose by 9 percent and the number of homicides jumped by 23 percent. The increase in violence caused great concern among Boston residents and began to shake their confidence in the ability of the police to effectively prevent crime. In response to the spike in violence, in 2007, the Boston Police Department (BPD) implemented a place-based, problem-oriented policing strategy called Safe Street Teams (SST). SST officers sought to modify the place characteristics, situations, and dynamics that promoted violence in 13 targeted hot spots. Initially, the SST strategy was implemented without an evaluation in place to assess the program's effectiveness. In 2009, BPD received a grant from the Bureau of Justice Assistance's Smart Policing Initiative (SPI) to conduct a rigorous, retrospective evaluation of the SST strategy in order to assess its impact on violent crime.²

I. THE PROBLEM

After a dramatic decrease in violent crime in the 1990s, Boston experienced a resurgence of serious violence during the early to mid-2000s, peaking at 7,533 violent index crimes in 2006 (Figure 1). Most concerning was an increase in assaultive street violence, especially assaults committed with guns. The yearly number of fatal and non-fatal shootings increased 133 percent from 162 in 2000 to 377 in 2006. Most of the shootings were concentrated in a small number of gun violence hot spots in Boston's disadvantaged, predominately minority neighborhoods of Dorchester, Mattapan, and Roxbury. The gun violence hot spots covered only 5.1 percent of Boston's 48.4 square miles, but generated nearly 53 percent (199) of the 377 fatal and non-fatal shootings in 2006.³

During this time, Boston residents became more concerned about crime and less confident in the ability of BPD to prevent it.⁴ In 1997, 14.2 percent of Boston residents reported crime as their biggest concern. This statistic dropped to 7.2 percent in 1999, remained low from 2001 to

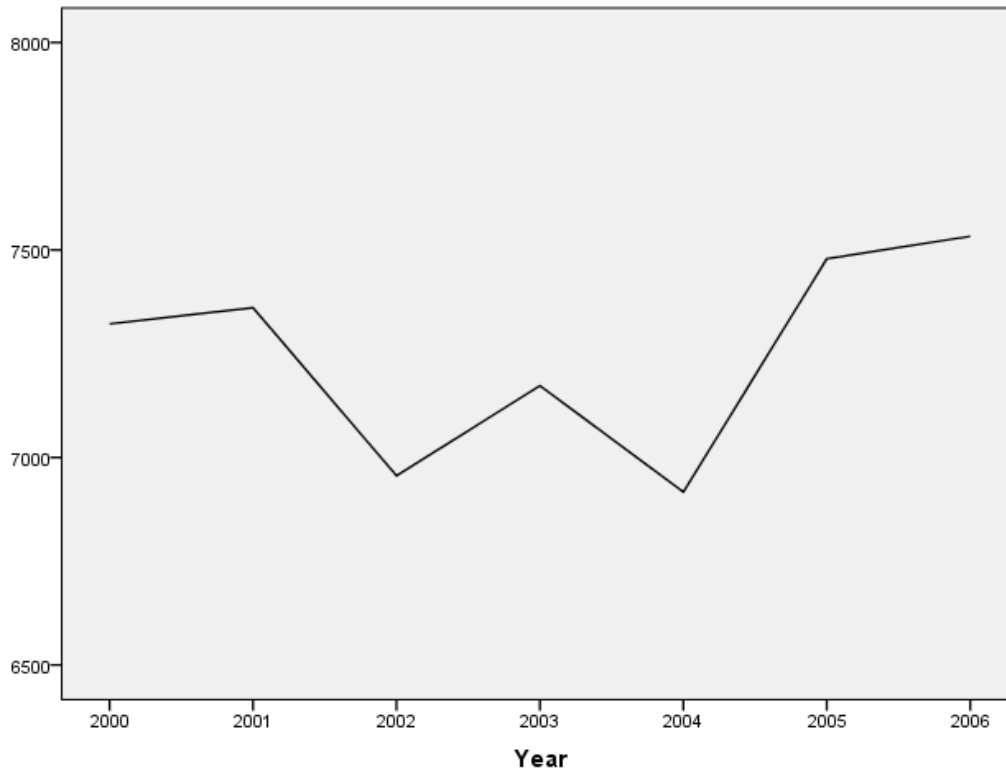
¹ Violent index crimes include murder and non-negligent manslaughter, forcible rape, robbery, and aggravated assault.

² For additional discussions of SSTs in Boston, see A. A. Braga, D. M. Hureau, and A. V. Papachristos. "An ex post facto evaluation framework for place-based police interventions." *Evaluation Review* 35(6), 2011: 592–626; A. A. Braga and Edward F. Davis. "Evidence-based policing in practice: The case of Safe Street Teams in Boston." *Translational Criminology*, Winter 2012: 8–9.

³ A. A. Braga, D. Hureau, and C. Winship. "Losing faith? Police, black churches, and the resurgence of youth violence in Boston." *Ohio State Journal of Criminal Law*, 6 (1), 2008: 141–172.

⁴ A. A. Braga, D. Hureau, and C. Winship. "Losing faith? Police, black churches, and the resurgence of youth violence in Boston." *Ohio State Journal of Criminal Law*, 6 (1), 2008: 141–172.

Figure 1 Annual Number of Violent Index Crimes in Boston, 2000–2006



2003, and then increased to 15.5 percent in 2006. In 1997, only 16.2 percent of Boston residents had little or no faith in the BPD to prevent crime, but by 2006, the lack of faith in the police had risen to include nearly 25 percent of Boston residents.

II. THE RESPONSE

In December 2006, Edward Davis III was appointed as Commissioner of the Boston Police Department. Davis, former Chief of the Lowell (MA) Police Department, was a strong advocate of community and problem-oriented policing, and he had successfully implemented a hot spots policing initiative in Lowell that included a randomized controlled design to

rigorously evaluate program impact.⁵ The new BPD Commissioner immediately set about reducing violent crime in Boston. Using computerized mapping technology and violent index crime data from 2006, BPD identified 13 violent crime hot spots; these were the ones targeted for intervention. The hot spots represented 6.1 percent of Boston’s street geography, but were responsible for 23.1 percent of Boston’s violent crime in 2006. BPD put together Safe Street Teams (SSTs) to work in each of the identified areas. Each SST consisted of a sergeant and six patrol officers. The SSTs were responsible for employing community and problem-oriented policing

⁵ For a description of the Lowell hot spots program and its effect on crime, see A. A. Braga and B. Bond. “Policing crime and disorder hot spots: A randomized controlled trial.” *Criminology* 37, 2008: 541–580.

techniques (e.g., SARA model—scanning, analysis, response, and assessment) to identify and address recurring problems in the targeted areas. All team members went through in-service training that focused both on the SST program specifically and problem-oriented policing more generally. SST officers were required to engage community members and local merchants in identifying and responding to identified problems. SST officers were required to stay in their assigned areas unless an emergency call required their involvement. To ensure accountability, a deputy superintendent was assigned to oversee the SST program, and quarterly meetings were held either at BPD headquarters or in the SST target areas to review crime trends and discuss officer responses.

III. THE SST EVALUATION

Although BPD was unable to include an evaluation of the SST program during its development and early implementation, in 2009 the Department received a grant from the Bureau of Justice Assistance’s Smart Policing Initiative (SPI) to conduct a retrospective evaluation of the program. BPD partnered with Dr. Anthony Braga, Professor of Criminal Justice at Rutgers University and Senior Research Fellow in the Program in Criminal Justice Policy and Management at Harvard University, to design and implement an intensive process and impact evaluation of the SST program. The Boston SPI team devised a three-phase evaluation strategy. Each phase is described below.

Examining the Work of the Safe Street Teams⁶

The first phase of the Boston SPI strategy involved an intensive examination of the work undertaken by the SSTs. The Boston SPI team reviewed the weekly reports submitted by the 13 SST sergeants to the deputy superintendent who oversees the program. The SPI team also interviewed the SST sergeants and made regular visits to the SST target areas. The team identified 396 distinct problem-solving activities that SST officers had implemented in the 13 targeted areas. These nearly 400 strategies fell into three general categories:

- *Situational/environmental interventions*: activities that sought to change the underlying characteristics and dynamics of the targeted hot spots. These activities included removing graffiti and trash; adding or fixing lighting; removing abandoned vehicles; posting signage (e.g., no trespassing); installing CCTV systems; evicting problem tenants; repairing sidewalks, fences, and locks; and giving out crime prevention literature.
- *Enforcement interventions*: activities that sought to deter and arrest offenders who committed offenses and contributed to the disorderly environment in the targeted hot spots. These activities included focused enforcement efforts on drug selling crews, street gangs, robbery crews, burglars/shoplifters, public housing trespassers and unregulated vendors,

⁶ For a more detailed description of the work of the Safe Street Teams, see A. A. Braga, D. M. Hureau, and A. V. Papachristos. “An ex-post facto evaluation framework for place-based police interventions.” *Evaluation Review* 35 (6), 2012: 592–626.

Table 1: SST-Implemented Problem-Oriented Policing Interventions

Team	Situational	Enforcement	Community/Social	Total
Orchard Park	44	19	20	83
Grove Hall	16	6	25	47
Codman Square (B3)	18	6	14	38
Upham’s Corner	20	4	12	36
Eagle Hill	29	4	2	35
Codman Square (C11)	12	6	15	33
Bowdoin/Geneva	13	3	8	23
Franklin Field	9	6	7	22
Downtown Crossing	10	6	2	18
Heath/Centre Street	6	5	7	18
Lower Roxbury/S. End	8	5	2	15
Morton/Norfolk	5	2	7	14
Tremont/Stuart	5	7	1	13
Total	195	79	122	396
Mean	15.0	6.1	9.4	30.5

as well as focused efforts on indicators of social disorder (public drinking, loitering, etc.).

- *Community outreach/social service interventions:* activities that sought to engage SST area residents and business owners in crime prevention, as well as to provide services and related opportunities to those engaged in disorderly and criminal behavior. These activities included providing new recreational opportunities for youth (e.g., basketball leagues), partnering with local agencies to provide needed social services to youth, working with clinicians to provide street outreach to the homeless, and planning community events (e.g., block parties).

Table 1 shows a summary of the different types of problem-solving activities across the 13 SST targeted hot spots. Each SST area received, on average, 30.5 interventions during the study period—ranging from a high of 83 in Orchard Park to a low of 13 in Tremont/Stuart. Situational/environmental interventions were the most common (15.0 per SST area), followed by community/social interventions (9.4) and enforcement interventions (6.1). The number and type of interventions varied notably across the SST hot spots depending on the nature of the problems in each location. The review of SST officer activities also showed variation in the commitment of SST sergeants to using the problem-solving model to examine and respond to problems. In simple terms, some SST officers implemented the problem-oriented policing intervention as intended, while others relied on

more traditional, enforcement-based responses. The difference in commitment to the problem-solving model across SSTs explains some of the variation in interventions that are highlighted in Table 1.

Examining the Stability and Concentration of Violent Crime Hot Spots in Boston⁷

For the second phase of the SST evaluation, the Boston SPI team analyzed gun violence and robberies in the city using almost 30 years of crime data (from 1980 to 2008). The primary objective was to determine whether the designated SST hot spots represented persistently violent locations that warranted substantial and long-term investment of police resources.

As a first step in the analysis, the study team created a database that captured each intersection and street segment (the street sections in between two intersections) across the city. They identified 18,155 street segments and 10,375 intersections in Boston. The team then gathered data from BPD on all reported robberies (street and commercial; 142,213 robberies) and all injurious shooting events (shots were fired and a person was wounded; 7,602) from 1980 to 2008. The crimes were geocoded and assigned to the appropriate “street unit” (segment or intersection).⁸

⁷ For a more detailed description of the longitudinal analysis, see A. A. Braga, D. M. Hureau, and A. V. Papachristos. “The relevance of micro places to citywide robbery trends: A longitudinal analysis of robbery incidents at street corners and block faces in Boston.” *Journal of Research in Crime and Delinquency* 48(1), 2011: 7-32. See also A. A. Braga, A. V. Papachristos, and D. M. Hureau. “The concentration and stability of gun violence at micro places in Boston, 1980-2008.” *Journal of Quantitative Criminology* 26(1), 2010: 33–53.

⁸ Researchers were able to geocode 135,276 of the 142,213 robberies that occurred (95 percent of the total). They were also

The team then used sophisticated growth curve regression models⁹ to examine the stability of trends in robbery and gun violence over the study period. The analysis uncovered remarkable stability in crime trends at these micro places. With regard to robbery, from 1980 to 2008 about 1 percent of street segments and 8 percent of intersections were responsible for nearly 50 percent of all commercial robberies and 66 percent of all street robberies. Figure 2 shows this stability in robbery trends in a slightly different way. The steady lower line demonstrates that about 2 percent of the street units experienced 50 percent of the robberies during each of the years under examination. The top line shows the percentage of street units that experienced 100 percent of the robberies during each year.

For example, in 1980 all of the robberies that year occurred at just under 12 percent of the street units in Boston. Over time the concentration of robberies increased dramatically. By 2008, all of the robberies during that year occurred at just 6 percent of the street units in Boston.

For gun violence, the story is much the same. Five percent of street units experienced 74 percent of the gun violence from 1980 to 2008. Table 2 shows the distribution of gun violence across each of the 28,530 street units. From 1980 to 2008, 88.5 percent of the street units in the city did not experience a single shooting

able to geocode 7,359 of the 7,603 shooting events that occurred (97 percent of the total).

⁹ Growth curve regression models are multi-level models that facilitate the analysis of trends at individual units over time. In these exercises, the research team was interested in analyzing violent crime trends at each street unit in Boston over the study period.

Figure 2: Robbery Incidents at Street Units in Boston, 1980-2008

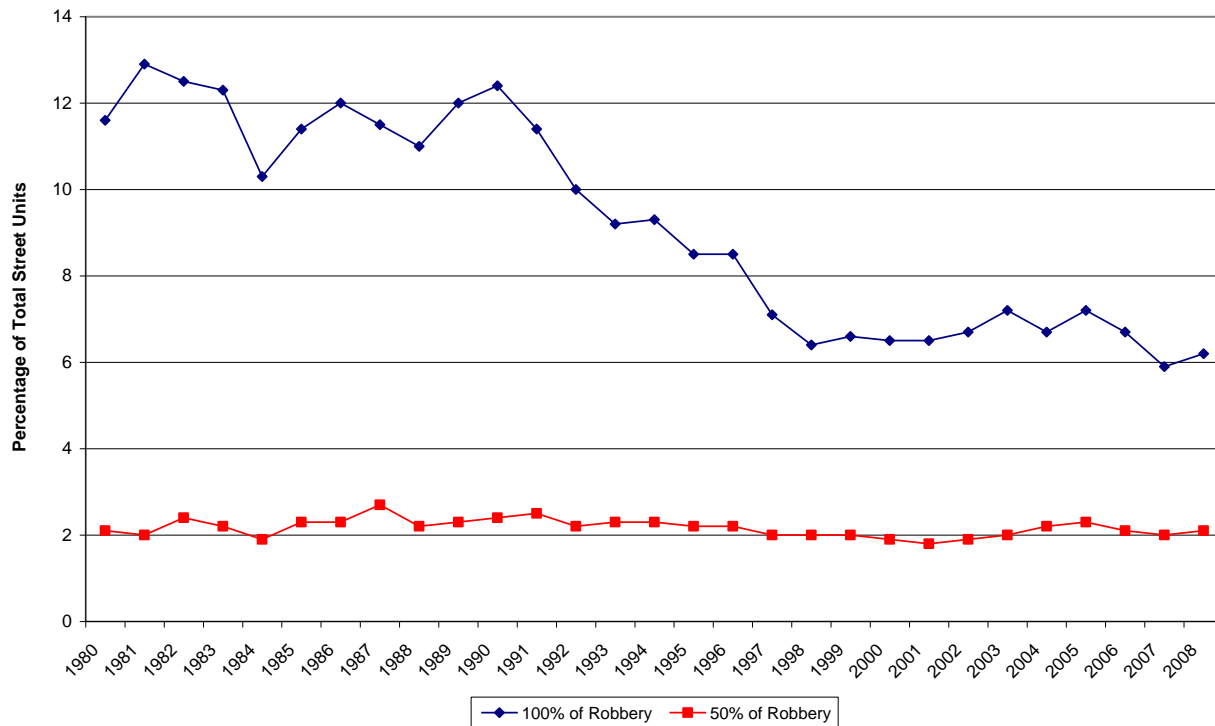


Table 2: Distribution of Gun Violence at Street Units in Boston, 1980-2008

No. of incidents per street unit	No. of street units	% of street units	Sum of incidents	% of incidents
0	25,245	88.5%	0	0.0%
1	1,923	6.7%	1,923	26.1%
2-4	1,037	3.6%	2,674	36.3%
5-9	269	0.9%	1,730	23.5%
10 or more	65	0.2%	1,032	14.0%
Total	28,530		7,359	

event. However, 269 street units experienced from five to nine shooting events, and 65 street units experienced 10 or more shooting events. In short, both robberies and gun violence were highly concentrated in a small number of micro places in Boston, and this concentration has remained remarkably stable over time.

Impact Evaluation of Safe Street Teams

The final phase of the Boston SPI strategy involved an impact evaluation of the SSTs. In the years following the implementation of the SST intervention, violent crime in Boston steadily declined. In 2006, there were 7,533 violent index crimes; by 2009, there were 6,192—a decline of nearly 19 percent.

However, the absence of a rigorous impact evaluation prevented BPD from attributing the decline in crime to the SST strategy. The decline could have been part of a larger national trend, as violent crime across the United States decreased through 2009. In addition, the decline could have been the result of other BPD programs that were implemented around the same time as the SST strategy.¹⁰ Notably, the results from the longitudinal analysis demonstrated that there were a significant number of persistently violent locations that were not under the SST program; these, the study team realized, could serve as control locations for the 13 SST hot spots. To assess the independent effects of the SSTs on violent crime, the Boston SPI team carried out a nonrandomized quasi-experimental design that compared violent crimes in the SST areas with violent crimes in matched control group hot spots elsewhere in Boston.

As part of the hot spot matching process, the Boston SPI team examined the official BPD reports of 70,446 violent crimes that occurred in the city from January 1, 2000, through December 31, 2009. The team successfully geocoded 69,550 of the violent crimes to specific street addresses. Geocoded incidents were then assigned to their proper street segments and intersections, and annual counts for each of these street units were calculated. The 13 SST areas were made up of 587 intersections and 1,166 street segments,

¹⁰ For a review of the various violence reduction initiatives launched by the BPD under Commissioner Davis, see A. A. Braga, D. Hureau, and C. Winship. "Losing faith? Police, black churches, and the resurgence of youth violence in Boston." *Ohio State Journal of Criminal Law*, 6 (1), 2008: 141–172.

representing 6.1 percent of all street units in the city. Recall that in 2006, the SST areas experienced 23.1 percent of all violent crimes.

The SPI team then used complex propensity score matching techniques to identify street segments and intersections that would serve as controls for the SST street units. The goal of this matching process was to identify additional violent street units that would have been selected for the SST strategy if the BPD had enough resources to field SSTs in all violent crime hot spots in Boston.¹¹ Once the matching was complete, the Boston SPI team used growth curve regression models to compare SST and control street units in terms of the prevalence of violent index crime, while controlling for other relevant factors. The results presented in Table 3 show that the SST strategy was associated with a 17.3 percent reduction in the total number of violent index crimes, a 19.2 percent reduction in the number of robberies, and a 15.4 percent reduction in the number of aggravated assaults. The analysis showed no evidence of significant displacement or diffusion effects as a result of the SST strategy. These findings are strong evidence

¹¹ The team used PSMATCH2 propensity score matching routines. Any street unit that was within a two-block distance of an SST area was excluded, thereby creating a two-block buffer zone and facilitating an analysis of potential displacement and diffusion of crime benefits. Any street unit (including those in the SST areas) that did not experience violent index crime in 2006 was also excluded. The following street unit characteristics were considered in the propensity score matching analysis: (1) 2006 violent index crime counts, (2) whether the street unit was an intersection or a street segment, (3) the number of street units in the surrounding 2000 U.S. Census block group that experienced three or more violent index crimes in 2006, and (4) the concentration of social disadvantage in the surrounding 2000 U.S. Census block group. For more detail on the matching process, see A. A. Braga, D. M. Hureau, and A. V. Papachristos. "An ex-post facto evaluation framework for place-based police interventions." *Evaluation Review* 35 (6), 2011: 592–626.

that the SSTs have been successful in reducing violent crime in Boston.

Table 3: Measuring the Effect of SSTs on Violent Crime

Crime Type	Percent Reduction
Violent index crimes*	17.3%
Homicide	No change
Robbery*	19.2%
Aggravated assault*	15.4%
Rape/Sexual assault	No change

*statistically significant $p < .05$

IV. LESSONS LEARNED

For the Police Manager

There is compatibility between the evidence-based policing model and the exigencies of 21st century policing: The realities and exigencies of policing in the 21st century are, on first glance, not conducive to evidence-based policing. Evidence-based policing is grounded in the principle that high-quality scientific evidence regarding which strategies work (and which do not) should guide police program development and implementation. Many police departments, however, adopt new strategies without considering program evaluation. Police managers work in high-pressure public environments that typically require immediate responses. In many cases, managers work in “crisis mode,” racing from one emerging problem to the next. Their responses tend to be reactionary and no evaluation takes place. In fewer cases, managers seek to draw on best practices when addressing problems. They either peruse the professional literature or

reach out to colleagues in other jurisdictions. Unfortunately, program evaluation is rarely part of this process either. As a result, police departments are unable to determine whether their adopted strategies actually have the intended effect.

The Boston SPI experience highlights how the realities of police program development and implementation are indeed compatible with an evidence-based policing model. Rigorous evaluations of police programs ideally occur prospectively in “real time.” But that does not have to be the case. Retrospective evaluations can be devised well after a program has been implemented, and if they are methodologically sound, such evaluations can offer important information on the success of a program. When Davis became the Commissioner of BPD in late 2006, he quickly developed a plan to address the violent crime problem. Although he had an impressive track record with regard to evidence-based policing, the exigencies of the environment did not allow for a prospective evaluation. Nevertheless, Commissioner Davis required that a data-driven process be employed to identify violent crime hot spots, and he implemented a response strategy with a significant evidence base (problem-oriented policing). This ongoing commitment to evidence-based policing laid an important foundation for the rigorous retrospective evaluation of the SST strategy that would not begin until three years after program implementation. The results presented here clearly demonstrate the compatibility of the evidence-based model with the current policing environment.

Police-university partnerships are the cornerstone of solid program evaluation:

Of all the phases of the SARA model, the phase that is most unnatural for police is assessment. The traditional model of policing that dominated much of the 20th century was grounded in a triage philosophy: respond to a call for service, deal with the dispute as quickly as possible, and get back into service to be ready for the next call. Also, police officers typically do not have the time, resources, or skill set to successfully carry out a rigorous assessment of their work. These two points generally represent a fatal blow to police program evaluation. Nevertheless, there are numerous evaluation success stories in policing, and these successes have often been the direct result of strong police-university partnerships. Academic partners offer a different skill set and additional resources that facilitate rigorous scientific evaluation of police programs, either prospectively or retrospectively. Moreover, if an evaluation is prospective, the analysis conducted by university partners can help to determine early on that a program is not achieving its goals, thereby allowing the agency to re-direct or re-tool its strategy. Academic partners can also draw on the existing evidence base to identify potential strategies that could be deployed to target a problem. In short, strong university partners can infuse science into police policy and practice.

Training and supervision are crucial to successful program implementation:

The results from the Boston SST evaluation indicate that officer commitment to the problem-oriented policing strategy was mixed across the 13 SST hot spots. There is a tendency among police to scan for problems and develop quick

responses without completing either (1) a full analysis of the scope, nature, and cause of the problem or (2) an assessment of whether the response had its intended effect. Interventions that are either designed based on an incomplete understanding of the cause of the problem or not properly evaluated are unlikely to achieve their goals. The best way for police managers to avoid these problems is to provide training on the problem-solving strategy. The Center for Problem-Oriented Policing offers a model curriculum that police managers can use to ensure that officers have a complete understanding of all phases of the strategy and to reduce the likelihood that officers will stray from the model when working in the field.¹²

Moreover, it is not uncommon for police officers to resist change, such as new strategies like the problem-solving model. It is no secret that police departments are complex bureaucracies defined by inflexibility and rigidity.¹³ In fact, more than 30 years ago police scholar Dorothy Guyot coined the term bending granite to describe police resistance to change, and there is evidence that, for many departments, her observations are still accurate (e.g., officers' resistance to community policing).¹⁴ Given police department culture, managers must closely supervise officers in order to ensure that their programs are implemented as intended in the field, that officers are fully engaged in the program, and

¹²See http://www.popcenter.org/learning/model_curriculum/.

¹³ See C. Perrow. *Complex organizations: A critical essay*. Glenview, IL: Scott, Foresman, 1972. See also J. Q. Wilson. *Bureaucracy*. New York: Basic Books, 1989.

¹⁴ D. Guyot. "Bending granite: Attempts to change the rank structure of American police departments." *Journal of Police Science and Administration* 7, 1979: 253–284.

that problems can be fixed early on before the program mission is jeopardized.

For the Line Officer

Violent crime hot spots are remarkably stable:

A large and growing body of evidence indicates that crime is not evenly distributed. The results from the Boston SPI evaluation add to this knowledge base; in Boston, violence can be traced to a small number of micro places and these violent micro places have remained remarkably stable over time. These findings have important implications for line officers. First, line officers should work with crime analysts and university partners to identify the street units where violence most commonly occurs. (In many cases, this analysis will confirm the hunches of officers.) The evidence suggests that focusing on precincts, sectors, beats, and even neighborhoods is too general. Officers should be thinking in terms of intersections, street corners, and specific street segments. Second, officers should target their efforts on these micro places. If the results from Boston can be generalized to other cities (and we believe they can), line officers can get the most “bang for their crime control buck” by focusing their limited resources on these persistently violent micro places. These are the areas where change can and needs to occur.

Complex, persistent crime problems require comprehensive responses:

Line officers will not be surprised that a small number of places generate the vast majority of violence. In fact, veteran officers can usually identify the violent street segments and intersections on their beat. It is not uncommon to hear police officers say, “that apartment complex has been a problem for years,” or “that street corner has

experienced shootings for as long as I have been here.” The question is, why have these places been persistently violent for so long, despite law enforcement and community awareness of the problem? The answer, in many cases, is that law enforcement has failed to change the nature and characteristics of those environments that are conducive to violence. For example, short-term, high-volume crackdowns (e.g., saturation patrol) have been a common law enforcement response to violent crime hot spots. These crackdowns can produce a temporary decline in crime, but they are resource intensive and cannot be maintained in the long term. When the saturation patrol ends, little has changed and the problems soon return.

Line officers, then, must employ a comprehensive response—one that includes strong enforcement, as well as prevention and outreach strategies. Comprehensive responses go far beyond field interrogations, “Terry stops,” and arrests. They are grounded in the notion that the aspects of a place itself are responsible for the violence and need to be changed. For example, Table 1 above shows the diversity of situational/ environmental activities used by SST officers to change the physical and social environment in their target areas. Comprehensive responses include activities such as graffiti removal, fixing lighting and signage, and sharing tips on crime prevention. In addition, comprehensive responses center on engaging other partners in crime control and prevention efforts. Again, see Table 1 for examples from the Boston SST officers. Line officers should focus on building relationships with others who have a stake in the area, including residents, business owners, and other

local agencies. The involvement of stakeholders in the officer's analysis of the problem, the response to the problem, and the assessment of the response's effect on crime is critical to turning the tide in persistently violent areas.

Leave a paper trail: The key to rigorous program evaluation is good data. Fortunately, the police are very adept at collecting data. However, the data collected by police tend to be superficial and numbers-driven, and at times, data collection (e.g., report writing) is viewed as a necessary evil that may not warrant an officer's full attention. Nevertheless, researchers can usually rely on "old stand-bys" such as calls for service and reported crime and arrest data. In a rigorous scientific evaluation these data are necessary but not sufficient. Calls for service and arrest data can be useful in documenting whether a given program was effective in reducing crime, but they do little to explain why that impact occurred or, perhaps more important, why a program was effective in one area but not in another.

The key to answering these more in-depth questions involves capturing the substance of what officers are doing (or not doing) during the program intervention. Though it is relatively easy for police to report on enforcement-related activities, the situational/environmental and outreach/relationship-building activities are often more difficult to quantify. Yet, it is these low visibility activities that are most crucial to altering the environment and changing the culture in a targeted area. All of these activities need to be captured in order to gain a full understanding of the effectiveness of a police program.

In short, line officers should document everything they do, enforcement-oriented or otherwise. This will allow researchers to tell a complete story of what has transpired in a target area. In addition, thorough documentation will allow researchers and practitioners to continue to build the evidence base of what works in policing.

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Edward F. Davis is the Commissioner of the Boston Police Department and Co-Chair of the Research Committee of the International Association of Chiefs of Police. Prior to becoming Commissioner of the Boston Police Department, Davis served as the Superintendent of Police in Lowell, Massachusetts, for 12 years. During his tenure, the City of Lowell realized a 60-percent reduction in Part I crime. Davis received the prestigious National Institute of Justice Pickett Fellowship and attended the John F. Kennedy

School of Government's Program for Senior Government Executives at Harvard University. He holds a Bachelor of Science degree in Criminal Justice from New Hampshire College and a Master's degree in Criminal Justice from Anna Maria College. Commissioner Davis has served on the Police Executive Research Forum board of directors and was a founding member of the Massachusetts Major City Chiefs Association.

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