
Deterrence Effects of Policing Programs

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An educator at heart, she has developed and trademarked approaches to complex national level issues which include: *Fuciferi Versuti*® (AKA *Crafty Bastards*): A highly specialized, metric-based analytical process created to provide multidisciplinary problem solving and custom-tailored solutions for the world's most complex current and emerging threats and challenges; *Emerging Technology Innovation Center*: Identifies, exploits, and often recombines technology capabilities across the virtual (cyber) and physical trade space; *PWP*®: *Preparedness Without Paranoia*, a community-based program that provides a common sense educational and training approach to preparedness at the intersection of fear and fact for active threats in consonance with national level standards and guidance. Additionally, Dr. Kiernan is an adjunct faculty member of the Johns Hopkins School of Education and the Center for Homeland Defense and Security at the Naval Postgraduate School.

Dr. Kiernan has been the recipient of several national awards to include the Women of Influence-Public Sector award; the American Security Today Platinum Award for Best Educational Program in Homeland Security from 2017 through 2022, the Illinois Security Professionals Association Excellence in Emergency Management in 2019. Other highlights of Dr. Kiernan's credentials include: Chair of InfraGard, now Emeritus, previous member of the Army Science Board, where she led a panel exploring the transition of law enforcement training and technology to the warfighter; previous member of the

Air Force Strategic Studies Board; former Chair of the Domestic Intelligence Council for the Intelligence and National Security Alliance (INSA); graduate of the FBI's National Executive Institute (Class 26), and a member of the Business Executives for National Security (BENS). Kiernan is a member of the Advisory Board for the Washington DC Police Foundation and San Diego Harbor Police Foundation and a member of the Advisory Board for the Center for Advanced Red Teaming at the University of Albany, SUNY.

Deterrent Effects of Policing Programs

Dr. Kathleen Kiernan,¹ NEC National Security Systems (NSS)

While there are parallels, the environment in which deterrence occurs for the U.S. Military is vastly different in context than for domestic or international law enforcement.

Police can reduce opportunities for crime by intervening before they arise, and deterrence is an even more efficient means of policing. Deterrence essentially convinces potential offenders that their risk of apprehension and punishment is too high to make committing a crime worth the risk. Visible police presence (actual *or* apparent), publicized arrests, police successes, and community engagement all affect this perception. Operational, financial, and technical limits on police agencies, however, can make deterrence programs challenging to implement. Technology can be a 'deterrence multiplier.' Appropriately regulated and responsibly employed surveillance technologies and sophisticated data analytics can increase criminals' risk of detection and arrest, amplifying deterrent effects. Program outcomes vary and include crime displacement, deteriorating police-community relations, and public perception of threats to rights. Implementing new methods and technologies, however, requires consideration of privacy and potential biases.

Challenges in implementing deterrence programs include the existence of strategies that may not transfer between locations, the allocation of limited resources, and the lack of accurate, reliable crime data. Implementation and maintenance costs for high-tech, or large-scale, efforts can also be prohibitive. Finally, funding sources may believe funds would be better spent on alternative, or existing, efforts.

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Direct police action can reduce opportunities for crime by intervening before the crimes occur (e.g., removing illicit drugs from circulation, identifying and monitoring known offenders, etc.). Deterrence, however, is an even more efficient means of policing.

The purpose of deterrence is to convince potential offenders that the chance of apprehension and punishment is too high to make committing a crime worth the risk. However, operational, financial, and technical constraints on police agencies can make deterrent programs meant to increase offenders' risk of apprehension challenging to implement.

US law also limits police authority to act after a crime is committed, not before. Police options are essentially limited constitutionally to persuasion (without coercive authority) and enforcement steps after establishing probable cause to show other illegal predicate acts occurred (conspiracy laws).

Notable challenges can occur with regards to measurement and establishing reliable metrics for crime to allow recognizing changes. In January 2021, the FBI's *National Incident-Based Reporting System* (NIBRS)² became the national standard for United States crime data reporting. This was a significant change, and potential improvement, to crime tracking by the federal government. Based on NIBRS data, the FBI *Crime in the United States* report for 2021 showed only 45% of violent crimes in the United States led to arrest and prosecution, which might be viewed as an acceptable risk of consequences by some potential offenders.

These figures are estimates, however, not scientifically accurate measurements. The 2021 FBI *Crime in the Nation* report notes only 63% of the over 18,000 United States law enforcement agencies submitted data for 2021—the lowest participation level in collecting national crime data since at least 1979.³ So, reliable, accurate metrics can be challenging in efforts to establish crime deterrence programs, particularly those encompassing multiple jurisdictions and agencies.

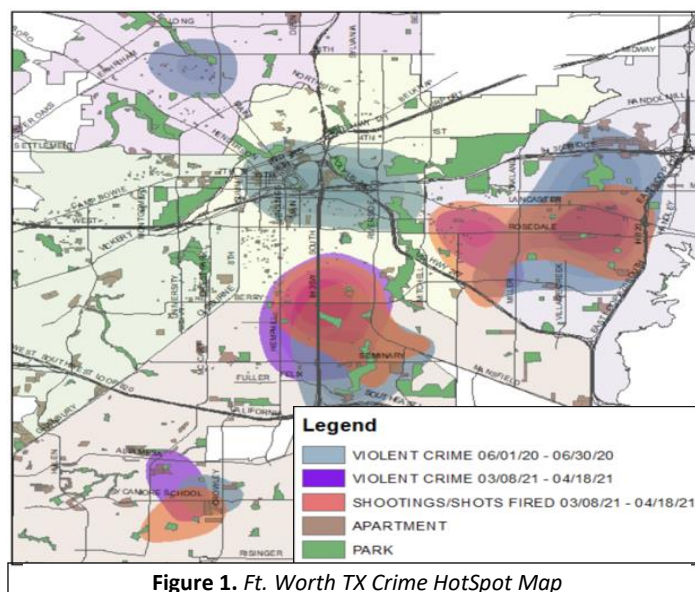


Figure 1. Ft. Worth TX Crime HotSpot Map

² U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics (n.d.). *National Incident-Based Reporting System* (NIBRS). <https://bjs.ojp.gov/national-incident-based-reporting-system-nibrs>

³ Thompson, A., & Tapp, S. N. (2023, July 5). *Criminal victimization, 2021* [Report no. NCJ 305101]. U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics. <https://bjs.ojp.gov/content/pub/pdf/cv21.pdf>

“Who” Seemed More Significant Than “Where” or “When”

A meta-analysis of research on the effects of police presence found the most significant results on crimes involving motor vehicle or property theft, violence, and guns. Police presence reduced calls for service and improved traffic behavior. For maximum effect, police concentrated on specific areas, times, and types of crime. However, the reviewed studies had a large degree of variation in reporting, limiting comparability across studies.

Another study examined policing focused on small places or groups of people in those places. Police applied specific solutions derived from analysis of local conditions, and these efforts seemed to reduce violent crime.

Researchers ran a randomized, controlled field experiment testing three policing tactics in small, high-crime places: 1) *foot patrol*, 2) *problem-oriented policing*, and 3) *offender-focused policing*.

81 experimental sites were identified in Philadelphia’s highest violent crime areas (27 amenable to each policing tactic). In each group of 27 areas, 20 were randomly assigned to receive treatment, and 7 acted as controls.

Offender-focused sites showed a 42% reduction in all violent crime and a 50% reduction in violent felonies compared to control sites.

Problem-oriented policing and foot patrol did not significantly reduce violent crime or violent felonies. Potential reasons were “dosage,” “execution,” and “hot spot stability” over time.

A crime, among other things, involves a “risk v. reward” calculation. Increased police presence or more efficient policing can increase perceived risk of arrest and potentially lower incidence of crime. A perceived risk of getting caught can be a strong deterrent. Visible police presence (actual or apparent), publicized arrests, successful investigations, and community engagement, can all affect this perception.

Community trust is also crucial to successfully deterring crime. Effective policing can create a reinforcing cycle of increasing community trust, leading to better cooperation with police, producing further crime deterrence effects, and increasing information flow to police (which increases offenders’ arrest and prosecution risks).

Technology can act as a ‘deterrence multiplier.’ Systems, such as Automatic License Plate Readers (ALDR), Closed Circuit Television (CCTV), and sophisticated data analytics, can increase criminals’ risk of detection and arrest, amplifying policing deterrent effects.

Limitations and Criticisms

Displacement: Effective policing in one area might simply move criminal activities to less well-policed areas. Criminal organizations are increasingly agile. This was the case during the late 1980s regarding the infamous cocaine cowboys. They changed venues from South Florida to other ports of entry, especially Mexico.

Backfire Effects: Aggressive policing can backfire, increasing mistrust between community and police, making law enforcement less effective overall.

Erosion of Civil Liberties: Some tactics (e.g., *stop-and-frisk* or mass surveillance) may be effective in the short term but are seen by some as eroding civil liberties and

disproportionately affecting minority communities.

Transferability: Tactics effective in one context may not be effective in another. Local conditions, budget limitations, community relations, and other factors influence policing efficacy.

Insufficient Data: There is often a lack of historical, comprehensive data with necessary details, especially to evaluate the long-term impact of some interventions on community wellbeing and social fabric.

Resource Allocation: Costs to implement and maintain high-tech policing solutions, or large-scale interventions, can be prohibitive. Funding governments might feel that funds could be better spent on alternate, or even existing, public safety measures.

In summary, while there is evidence that police can deter crime, the relationship is complex and involves a variety of factors, including crime types, strategies employed, and context of application. Given a potential for both positive and negative outcomes, it is crucial that agencies approach deterrence strategy or intervention with solid stakeholder agreement and commitment to rigorous measurement, including ongoing monitoring and cost/benefit analysis of the program and relevant ethical implications.

Crime Deterrence—the Measurement Challenge

An early, significant challenge to creating an effective deterrence program is gaining wide stakeholder agreement on reliable, measurable goals. Measuring and improving deterrent effects of law enforcement is a challenging task without a settled solution.

Essentially, the goal to accomplish is counting crimes *that do not occur*—measuring the absence of crime is required for accurately and reliably inferring deterrent results and identifying accurate and useful crime metrics *before* deterrence program efforts. The availability and quality of such records is often problematic.



Figure 2. NYPD Leadership “CompStat” Crime Data Meeting

Visible police presence *may* serve to deter opportunistic crime. The sight of a patrol car or uniformed officer can discourage would-be offenders from acting on impulse. The Washington, DC Metropolitan Police Department adopted a policy of illumination of emergency lights (minus sirens) to increase awareness of police presence in neighborhoods. However, explicitly clear, widely accepted evidence of deterrence is unlikely to be available for public safety operations. Effective data collection and analysis, however, can provide solid data to support repeatable inferences about deterrence success.

Inconsistency in data collection across United States law enforcement agencies adds complexity to crime analysis efforts to support deterrence programs. Even where relevant crime data is available, the information can often be inconsistent across agencies and jurisdictions, imprecise, and ‘fuzzy’—lacking

well-matched categories and consistent definitions. This makes effective analysis more costly and difficult.⁴

With no specific or standardized means to determine if crime has been deterred, or broad agreement on how changes will be accurately and reliably measured, aligning police efforts across jurisdictions and government levels is challenging.

Organizational Impact

Agencies or jurisdictions sometimes announce crime deterrence successes. In many cases, those conclusions are based on data collection and analysis by people within, or close to, the policing entity, which increases risks of a partial or fully biased evaluation. Claims of successful deterrence lack credibility when no independent measurement or assessment is available. Inviting academic organizations or even government inspection offices to participate in assessment might offer programs a more reliable and valid assessment of effectiveness.

Many times, new programs, and the corresponding effective assessment methods, consume resources allocated for other tasks. When initiating new programs, agencies, and the jurisdictions they serve can encounter organizational friction when trying to divert labor, funds, and other resources from already approved operations.

Some common examples of resource competition caused by new policing programs can include:

- increased on-scene time for officers to increase crime report detail and accuracy,
- diversion of crime data analysis capacity and resources used for operations,
- consumption of training resources and attention for new programs, and
- increased time coordinating with partner agencies and community stakeholders.

⁴ Limited funding is a fact of life for police agencies, and those agencies commonly apply limited resources to demonstrably successful policing operations. This can create perverse incentives to find data support for declaring a program successful, rather than conducting accurate and reliable research and analysis. (This is also frequently more defensible when facing inquiries from funding authorities.)

Common Steps to Policing Programs

Needs Assessment

Engagement: Engage community to understand concerns and perceptions of crime.

Data Analysis: Review past and present data; identify most significant crime areas and categories.

Framework Development

Objectives: Clearly define deterrence program goals and objectives.

Scope: Determine if program will address specific crime types or areas or be broadly focused.

Strategies: Choose policing strategy (e.g., problem-oriented policing, community policing, hotspot policing, etc.).

Resource Allocation

Manpower: Allocate personnel to implementation, monitoring, and community interaction.

Technology: Integrate information systems data: surveillance cameras, gunshot detection systems, predictive policing software, and data analytics.

Budget: Allocate funding for training, equipment, and expenses.

Implementation

Training: Train personnel on specifics of program, community relations, and new technologies or methods to be used.

Collaboration: Engage other stakeholders—local governments, businesses, community organizations, and residents. May include watch programs or collaboration with schools and institutions.

Visibility: Enhance police visibility in identified crime hotspots (patrols or police posts).

Communication: Inform community on efforts, results, and ways they can assist and give feedback.

Analysis

Feedback: Regularly solicit community and officer program feedback.

Crime Data Analysis: Use crime data to evaluate the effectiveness of interventions, determining which are most effective and which may need adjustment.

External Evaluation: Consider bringing in external experts or researchers to provide an unbiased assessment of the program's effectiveness.

Documentation

Records: Document program from planning to execution to analysis. Ensure transparency to build basis for review and adjustment.

Periodic Reports: Report regularly on progress and effectiveness.

Case Studies: Document successful interventions as case studies for future reference and training.

Transparency: Make all allowable documentation easily available for public scrutiny.

Personnel: Officers, community engagement specialists, and data analysts.

Technology: Crime mapping software, surveillance gear, and predictive analytics tools.

At any level, police *alone* cannot sustainably deter crime. Recognition of this limitation gave rise to early community-oriented policing efforts in the 1960s and 1970s. Interest in research and policy development in community policing attracted public interest in the 1980s. This was perhaps

exemplified by wide general interest in findings of George L. Kelling and James Q. Wilson published in the article “Broken Windows” in *The Atlantic Monthly*.⁵

Technical Tools

Video Surveillance: An evaluation series by the United Kingdom Home Office in the 1990s and 2000s found CCTV cameras can reduce certain types of crime. Specifically, they found CCTV most effective in reducing property crimes, like vehicle theft and burglary, with mixed results in reducing violent crimes. Effectiveness, nevertheless, can be context-dependent and often varies by location, time of day, and the particular crime in question.

Shot Spotters: Networked microphones in urban environments can instantaneously identify and locate the source area of gunshots, enabling rapid response to gun violence.

Predictive Policing: Predictive policing uses historical crime data and algorithms to forecast where future crimes are likely to occur. By directing patrols and resources to these high-risk areas, police can deter criminal activity. Ethical concerns arise due to potential biases in the data and the risk of over-policing certain communities, however.

The effectiveness of traditional policing models in dealing with complex social issues was questioned as police-community relations were often strained during incidents involving the civil rights movement and Vietnam anti-war protests.

This led to seeking alternatives to conventionally authoritative, “top-down” law enforcement approaches that were seen as not only inadequate to address causes of crime but also failing to build police-community trust.

Technology as a ‘Deterrence Multiplier’

Integrating technology into policing can aid crime deterrence, but it is not a panacea. Technology, strategically deployed and ethically managed, can enhance police ability to prevent and respond to criminal activity.

A balanced approach that considers privacy rights, ethical considerations, and potential biases is essential. The future of technology in crime deterrence lies in collaboration between law enforcement, developers, and communities to ensure advancements are applied to improving overall social peace and stability while respecting civil liberties. Information gathering and analysis technologies, effectively integrated across multiple categories, can improve police responsiveness and operational effectiveness, which may deter crimes.

Fragmented or ineffectively integrated police technologies can, however, cause *sub-optimization*. Performance of one element may improve, but the overall combined results remain the same (or sometimes even decline).

Predictive policing algorithms analyze historical crime data and project likely future times and locations of crime. Police resources assigned to those high-risk areas can deter crimes. Yet valid ethical concerns do exist because of potential biases in data and risks of over-policing communities where historical data originated.

These risks can be exacerbated by advances in technology that allow the remote collection and broad integration of personally identifying information (images and data). Sensors of all kinds have become

⁵ Kelling, G. L., & Wilson, J. Q. (2012, November). Broken windows. *The Atlantic*.
<https://www.theatlantic.com/magazine/archive/2012/11/broken-windows/309142/>

ubiquitous in modern life, and police may meet public resistance to capturing, analyzing, and storing such information without formal accountability and oversight.

Social media monitoring is a technology-based deterrence method used by jurisdictions hoping to preemptively identify emerging threats and criminal activity. Results of such efforts can disrupt planning and coordination by criminals.

The application of artificial intelligence to monitor tasks will also likely spread and increase effectiveness and accuracy of investigations to deter crime.

Limitations: Technology holds promise for aiding crime deterrence, but knowledge of related challenges and limitations is important. These include:

- **Privacy Concerns:** Police surveillance can raise concerns about individual privacy and potential abuses of power.
- **Criminal Adaptation:** Tech-savvy criminals constantly seek to circumvent or manipulate surveillance systems to make them less effective.
- **Resource Limitations:** High costs of acquisition and maintenance of advanced technology systems can strain law enforcement budgets.
- **Bias and Equity:** Technology-led strategies risk disproportionately affect certain communities, exacerbating existing biases.

Focused Deterrence

Programs like Operation Ceasefire in 1990s Boston showed significant reductions in youth homicide. Evaluations generally show focused deterrence can effectively reduce specific violent crimes.

Staffing & Recruiting Effects on Deterrence

The relationship between recruiting, staffing, and the effectiveness of police crime deterrence programs is complex and nuanced. Academic and practitioner research has found that more police officers does not automatically translate into more effective deterrence; the quality, training, and distribution of those officers can have an impact. Relevant factors include:

Quality Recruitment: Thoroughly screened, highly trained officers are generally better at community engagement, problem-solving, and complex crime deterrence strategies.⁶

Adequate Staffing: Research found that adequate staffing is essential to effectively implementing proactive police strategies, such as hotspot policing and community policing. Effective community policing requires officers to have time and resources for community engagement, which is difficult for an understaffed agency. Understaffed agencies are often constrained to reactive methods, which are less effective for crime deterrence.⁷

⁶ Sklansky, D. A. (2007). *Democracy and the police*. Stanford University Press.

⁷ Koper, C. S. (2014). Assessing the practice of hot spots policing: The impact of officers' discretion on the effectiveness of hot spots policing. *Justice Quarterly*, 31(2), 338-362.

Specialized Units: Specialized units (e.g., gang units, narcotics units, etc.) can be effective options to focus deterrence efforts. However, such units require additional resources, particularly staffing, beyond routine patrol.⁸

Response Times: Fast response times alone do not necessarily deter crime but are important for public confidence and can enhance offender risk of apprehension. Adequate staffing is critical for maintaining quick response times.⁹

Financial Constraint: Finances can limit a department's ability to both hire sufficient staff and implement innovative deterrence programs. Managing resource allocation is crucial. Although the relation between staffing and effectiveness of crime deterrence is not direct, research does indicate that both the quality and quantity of police staff affect the success of various crime deterrence initiatives. Police recruiting and staffing should be carefully considered in planning any effective deterrence strategy.

Conclusion

Deterring crime and disorder is a sophisticated approach to public safety, requiring expert skills and sensitivity to building and maintaining public support and public engagement. Focus on the front end of policing—the recruitment of qualified individuals, born on this side of the digital divide, eager to serve—is a key factor. Recruitment strategies are evolving as a result, broadening to a wide area of experience and an emphasis on the diversity of roles within policing: operational, strategic, analytic, forensic, intelligence, cyber, canine, etc.

Law enforcement is also facing a severe recruitment crisis coupled with an increase in retirements at the earliest age, an increase in suicides, and behavior-based career derailments. The mistakes of the few tend to taint the great work of the many with cascading impacts on internal morale and productivity— in some cases leading to the adoption of a more defensive, reactive agency posture. There is also an evolving focus on employee and officer wellness, which can positively impact recruitment, retention, and effectiveness of policing and community service.

⁸ Kennedy, D. M. (2008). *Deterrence and crime prevention: Reconsidering the prospect of sanction*. Routledge.

⁹ Cordner, G. (2014). Reducing fear of crime: Strategies for police. U.S. Department of Justice.

Deterrence v. Enforcement

Conflict is costly in money, reputation, community relationships, and trust. Effective leaders understand the intellectual and psychological aspects of conflict, not merely force or power. They see ideal victory as swift and with the least possible cost to all—not only in terms of resources, but also in terms of human life and morale.

In *The Art of War*, Chinese military theorist Sun Tzu writes, “The supreme art of conflict is to subdue the opponent without fighting.” The 2,500-year-old classic text is still a standard in military and organizational leadership studies.

Effective leadership values intellectual and psychological dimensions of conflict more than mere force or sheer power. Sun Tzu felt ideal victory is swift and comes at the least possible cost—in terms of resources and also in terms of human lives and morale.

Sun Tzu implies the best leaders wisely use strategy to win *before* conflict starts—by out-thinking, out-planning, and out-maneuvering opponents, making direct conflict unnecessary. This involves an array of strategies, such as misleading opponents, dividing their attention and resources, undermining their will to resist, and forming alliances against them.

This approach emphasizes flexible strategy, intelligence and information, and interconnectedness of all organizational efforts. A wise leader adapts to circumstances, predicts opponent’s moves, and acts to secure the best achievable outcome with least necessary conflict. This contrasts with more aggressive doctrines of overwhelming force and coercive might as the way to victory. For Sun Tzu, such an approach wins but would be very costly in resources, lives, and relationships when the conflict is over.

This quote emphasizes an approach to conflict valuing strategic depth, minimal cost, and fundamental aspects of struggle.