

# Research Brief – Ceasefire: The Effects of “Pulling Levers” Focused Deterrence Strategies on Crime



Law enforcement agencies use offender-based policing efforts on the small percentage of persons committing the

or "pulling levers" strategies rely on research that has shown that a relatively small number of offenders are responsible for a large number of the crimes that are committed. Focused deterrence/pulling levers strategies are policing strategies that follow the core principles of deterrence theory. Deterrence theory posits that crime can be prevented if potential offenders believe the costs of committing a crime outweigh the benefits, especially if consequences for committing crime are swift and certain. The logic behind these strategies is that violent, gun, and drug crime can be reduced by identifying and targeting these offenders; and once identified, the offenders receive a direct and explicit message intended to deter them from future criminal behavior. This message informs the offender that police, criminal justice stakeholders, and community partners are aware of their illegal activities and if they continue to engage in this behavior, there will be swift and certain legal sanctions. If the targeted offenders respond positively, they are provided with a variety of social service opportunities. If they fail to heed the deterrence message, they are subject to an array of enforcement actions. These enforcement actions are the "levers" that can be "pulled" in response to the offenders' continued criminal behavior.

strategies to address crime by focusing resources and efforts on the greatest percentage of crimes. These “focused deterrence”

The results from a growing body of research suggest that focused deterrence/pulling levers strategies are a promising means of addressing specific crime problems and the chronic offenders that commit many of these crimes. Findings from these initiatives generally show that these strategies are associated with substantial declines in the targeted crimes by the targeted offenders. But it is important to note that these strategies may not achieve the desired outcomes if the enforcement actions are not immediate, if the offer of social services is not genuine and realistic, and if the partners (police, community providers, probation/parole) do not stay committed to the strategies.

The remainder of this document provides a brief review of the past 10 years of research on these strategies, from the leading experts in this area. These resources, and additional ones from prior to 10 years, can be found on the VRN web site at <http://www.vrnnetwork.org/>.

## Focused Deterrence/Pulling Levers Subject Matter Experts

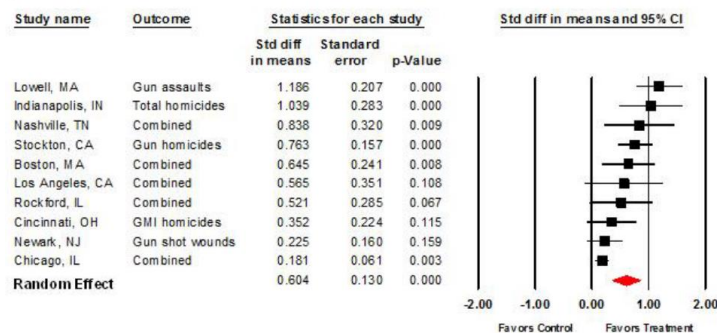
- David Kennedy, John Jay College of Criminal Justice
- Ed McGarrell, School of Criminal Justice Michigan State University
- Natalie Hipple, Department of Criminal Justice Indiana University
- Scott Decker, Arizona State University School of Criminology and Criminal Justice
- Lt. Thomas Woodmansee, Madison, WI Police Department



Braga, Anthony, and David Weisburd. "The Effects of 'Pulling Levers' Focused Deterrence Strategies on Crime." *Campbell Systematic Reviews* 8.6. 2012. <http://campbellcollaboration.org/lib/project/96/>

- The study examines the impact of the implementation of "pulling levers" deterrence strategies by several American police departments on levels of gang and group-involved violence.
- Researchers analyzed ten cities (Boston, Indianapolis, Stockton, Lowell, Cincinnati, Newark, Los Angeles, Chicago, Nashville, and Rockford) that implemented pulling levers strategies to determine if the strategies were associated with a reduction in crime.
- Results: nine of the ten cities evaluated reported statistically significant reductions in crime using nonrandomized quasi-experimental designs. The meta-analysis conducted suggests that the pulling levers strategies are associated with an overall statistically significant medium-sized crime reduction effect.

#### 10.1 MEAN EFFECT SIZES FOR AREA OUTCOMES



Corsaro, N., Eleazer D. Hunt., Natalie Kroovand Hipple, and Edmund F. McGarrell. 2012. "The Impact of Drug Market Pulling Levers Policing on Neighborhood Violence." *Criminology & Public Policy*, 11: 167–199.

<http://onlinelibrary.wiley.com/doi/10.1111/j.1745-9133.2012.00798.x/pdf>

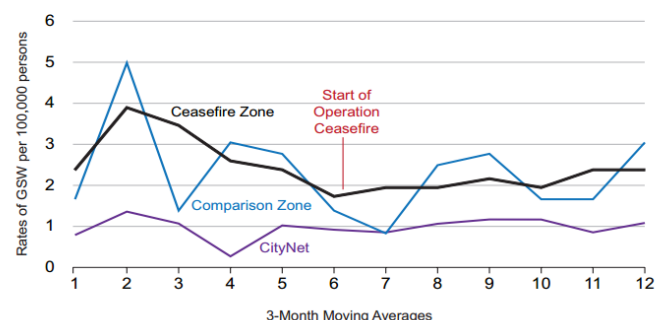
- The study examines the effect of various place-based pulling levers strategies implemented across different targeted neighborhoods on violent crime trends between 1998 and 2008 within targeted neighborhoods and within the overall city of High Point.
- Pulling levers interventions have shown positive results when focused on gang violence but there are few studies that analyze the effects of the strategies when they are applied to open-air drug markets.
- The findings reveal that the pulling levers intervention had a moderate impact on crime in the most volatile target areas but the researchers suggest that the level of potential impact may vary by place and market which would produce mixed findings across different areas.
- While violence in High Point increased, the proportion of overall violent incidents within the targeted areas in the citywide total decreased over the same period.

Boyle, Douglas J., Jennifer L. Lanterman, Joseph E. Pascarella, and Chia-Cherng Cheng. 2010. *The Impact of Newark's Operation Ceasefire on Trauma Center Gunshot Wound Admissions*. Newark, NJ: University of Medicine and Dentistry of New Jersey, Violence Institute of New Jersey. <http://ubhc.rutgers.edu/vinjweb/publications/Boyle%20et%20al%202010%20Final.pdf>

- Researchers evaluated the impact of Operation Ceasefire gang violence strategy in Newark, NJ, adopted in May 2005, on the weekly number of non-fatal gunshot wounds treated at the Trauma Center at University Hospital in Newark within the Ceasefire targeted zone.
- The strategy worked to prevent gun violence through public education, community mobilization, faith-based leader involvement, youth outreach, and criminal justice system engagement.
- Researchers examined non-fatal gunshot wound trends in the Ceasefire Zone, a comparison zone, and the remainder of Newark minus the Ceasefire Zone from January 1, 2004 to December 31, 2006.
- Results: Newark Ceasefire was associated with a non-statistically significant decrease in the weekly number of non-fatal gunshot wound victims within the Ceasefire Zone. The comparison zone also experienced a smaller, non-significant decrease while the remainder of Newark experienced a non-significant increase. Therefore, Newark Ceasefire was not associated with any significant reductions in non-fatal gunshot wounds.

Figure 1

Time Series for Rates of GSW Incidents by Week for the Ceasefire and Comparison Zones (1/1/04 – 12/31/06)



Corsaro, Nicholas, Rod Brunson, and Edmund McGarrell. 2010. "Problem-Oriented Policing and Open-Air Drug Markets: Examining the Rockford Pulling Levers Strategy." *Crime & Delinquency* (forthcoming).

<http://cad.sagepub.com/content/early/2009/10/14/0011128709345955.full.pdf+html>

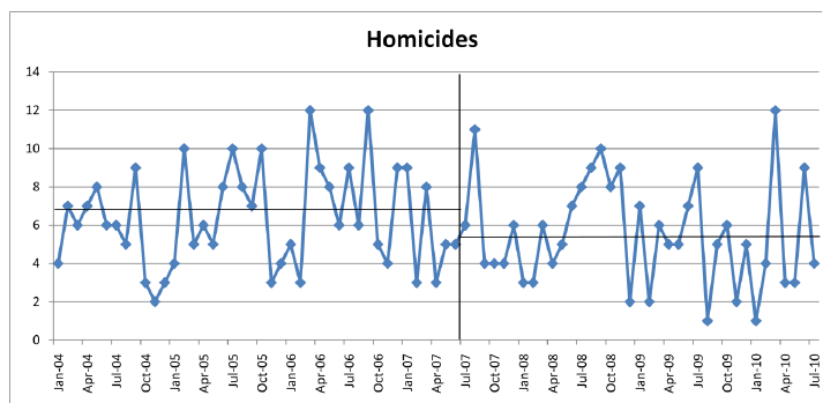
- The study analyzes the effect of a strategic pulling levers intervention implemented in Rockford, Illinois in May 2007 on open-air drug markets within the high-crime Delancey Heights neighborhood.
- The evaluation analyzed the number of monthly violent and nonviolent crime incidents between June 2006 and June 2008.
- Results: The intervention was associated with a statistically significant 22% decline in nonviolent offenses and a non-statistically significant reduction in violent offenses in the target neighborhood of Delancey Heights. In the rest of Rockford, there were no significant reductions in violent or nonviolent offenses. An interview of 34 adult residents revealed that residents felt that there were improvements in crime and disorder after the strategy was implemented in Delancey Heights.

Corsaro, Nicholas and Edmund McGarrell. 2010. *An Evaluation of the Nashville Drug Market Initiative (DMI) Pulling Levers Strategy*. East Lansing, MI: Michigan State University, School of Criminal Justice.

<http://www.drugmarketinitiative.msu.edu/NashvilleEvaluation.pdf>

- The study evaluates the impact of a pulling levers focused deterrence strategy, implemented in March 2008, on crime and disorder problems associated with an illegal drug market operating in the McFerrin Park neighborhood in Nashville, Tennessee.
- The evaluation compared trends in violent, property, illegal drug possession offenses, drug equipment offenses, and total calls for police service from March 2005 to April 2009 in the McFerrin Park neighborhood, adjoining areas of the McFerrin Park neighborhood, and the remainder of Davidson County.

Figure 1: Trends in Homicide



- Results: the intervention was associated with a statistically significant 28.4% reduction in property offenses, a statistically significant 55.5% reduction in illegal drug possession offenses, and a statistically significant 36.8% reduction in drug equipment offenses. The intervention was also associated with non-statistically significant reductions in violent crime incidents and total calls for police service. The evaluations did not find significant declines in the remainder of Davidson County but there were statistically significant reductions in illegal drug possession offenses, drug equipment offenses, and total calls for service in the adjoining area.
- Conclusion: The drug market intervention strategy aimed at McFerrin park neighborhood was associated with the reduction of the decline within the target and adjoining areas.

Engel, Robin S., Nicholas Corsaro, and Marie Skubak Tillyer. 2010. *Evaluation of the Cincinnati Initiative to Reduce Violence (CIRV)*. Cincinnati, OH: University of Cincinnati Policing Institute.

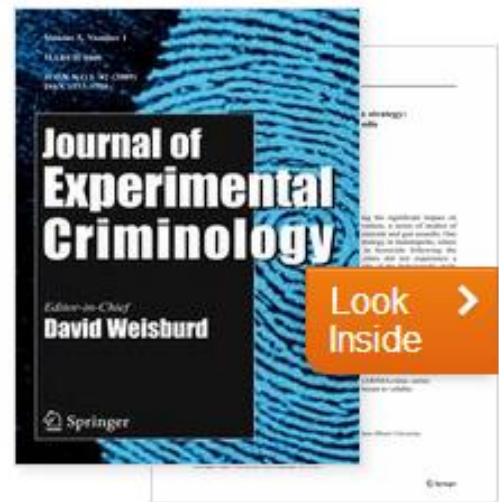
[http://apps.pittsburghpa.gov/dps/CIRV\\_Evaluation\\_Report\\_2010\\_FINAL.pdf](http://apps.pittsburghpa.gov/dps/CIRV_Evaluation_Report_2010_FINAL.pdf)

- The authors evaluate the impact of the Cincinnati Initiative to Reduce Violence (CIRV), implemented in July 2007, on group/gang-related violence in Cincinnati. The CIRV team sought to identify active and chronic violent offenders and target them and their groups/gangs for intervention and create a sustainable system to reduce gun violence in the future. Some of the strategies used were: offender notification meetings, probation meetings, community conversations, prison call-in sessions, home/street/jail visits by law enforcement, provision of social services, direct outreach, violence interruptions, assessment of the community's assets, and community outreach activities.
- The study analyzed the number of homicides, group/gang member involved homicides, non-group/gang member involved homicides, and total shootings between January 2004 and July 2010.
- Results: there was an overall but non-statistically significant decline in all times of homicides and non-group/gang member homicides experienced a slight, non-significant increase. There was a statistically significant 35% reduction in group/gang-related homicides and a 21.3% decline in fatal and non-fatal shootings in the city that corresponds directly with the implementation of CIRV.

Corsaro, Nicholas and Edmund McGarrell. 2009. "Testing a Promising Homicide Reduction Strategy: Re-assessing the Impact of the Indianapolis 'Pulling Levers' Intervention." *Journal of Experimental Criminology*, 5: 63 – 82.

<http://link.springer.com/article/10.1007/s11292-008-9065-1#page-1>

- The researchers re-assess the results of the pulling levers strategy intervention, the Indianapolis Violence Reduction Partnership (IVRP), implemented in Indianapolis, Indiana in 1999.
- Homicide trends from 1997 to June 2001 indicated a significant decline of 34.3% in homicides following the intervention while six similar cities in the Midwest similar to Indianapolis in homicide and population rates, did not experience a similar decline.
- This study divides the number of monthly homicides from 1997 to June 2001 into gang and non-gang-related homicides. Results indicate that gang-related homicides experienced a statistically significant decline of 38.1% following the intervention while non-gang-related homicides experienced a non-statistically significant decline of 8.6% after the intervention.
- The findings suggest that the reduction of homicides was more significant in gang-related homicides than non-gang-related homicides, supporting the claim that IVRP led to a decline in gang violence in Indianapolis.



Kennedy, David. 2009. "Drugs, Race, and Common Ground: Reflections on the High Point Intervention." *National Institute of Justice Journal*, 262: 12 – 17. <http://hpcav.com/wp-content/uploads/2009/12/HP-model-article-1.pdf>

- The author examines the impact of the 'focused deterrence' approach on drug markets and gun violence in High Point, North Carolina. The intervention targeted a specific overt drug market in which law enforcement arrested violent dealers but, for nonviolent dealers, law enforcement conducted meetings with community entities about the consequences of continued drug dealing and offered social services.
- The author notes that one of the biggest challenges to the intervention was the creation of a partnership between law enforcement and the community due to a history of distrust and miscommunication.
- A 2006 evaluation of the High Point Intervention found that in one neighborhood, violent crime decreased by 39% and drug crime decreased by 30% four years after the intervention was implemented. There appears to be little to no displacement of violent and drug-related crime in surrounding areas.



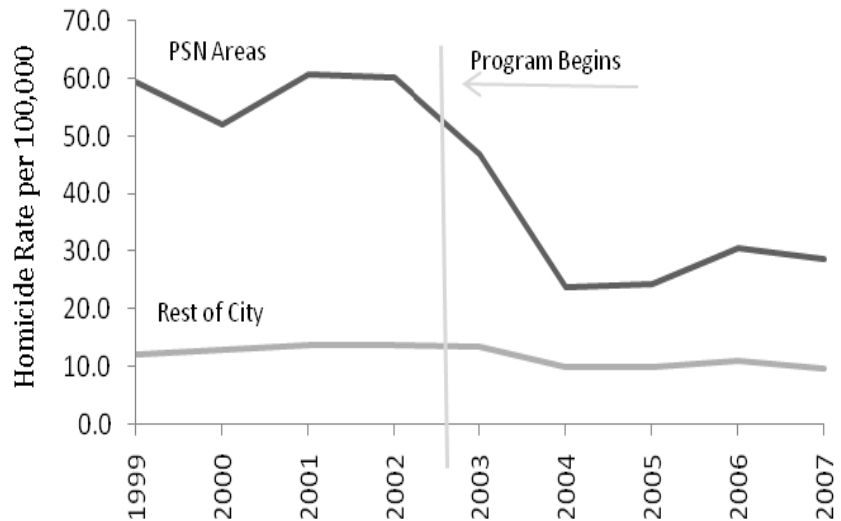
Drugs, Race and Common Ground:  
Reflections on the High Point Intervention  
by David Kennedy



Meares, Tracey, Andrew Papachristos, and Jeffrey Fagan. 2009. Homicide and Gun Violence in Chicago: Evaluation and Summary of the Project Safe Neighborhoods Program. Review of Research. [http://www.psnchicago.org/PDFs/2009-PSN-Research-Brief\\_v2.pdf](http://www.psnchicago.org/PDFs/2009-PSN-Research-Brief_v2.pdf)

- The study evaluates the impact of the Project Safe Neighborhood (PSN) program, implemented in 2002, in Chicago on homicide rates.
- PSN research found that a small number of neighborhoods were responsible for the majority of Chicago's violence and the majority of victims and offenders of gun violence were young African American males living in neighborhoods on the West or South sides of Chicago.
- Results: compared to 3 years before the program started, there was a 37% decrease in the monthly homicide rate after the program was implemented. The reduction in the PSN area was significantly larger than the decline in the rest of the city. Increased federal prosecutions and the number of guns recovered were also associated with the decline in homicide rates.
- The PSN Offender Notification Forums had a large effect on the decline of recidivism: Individuals who attended a forum were almost 30% less likely to return to prison compared to individuals in the same neighborhood who did not attend a forum.

Figure 1. Homicide Rates in Chicago, 1999 to 2007



Braga, Anthony A. 2008b. "Pulling Levers Focused Deterrence Strategies and the Prevention of Gun Homicide." *Journal of Criminal Justice*, 36 (4): 332 – 343. [http://www.iacpyouth.org/Portals/0/Resources/Braga\\_Operation\\_Peacekeeper.pdf](http://www.iacpyouth.org/Portals/0/Resources/Braga_Operation_Peacekeeper.pdf)

- The author analyzes the implementation of a "pulling levers" deterrence strategy, Operation Peacekeeper, which focused law enforcement and community attention on gun violence committed by gang members, in Stockton, California between 1997 and 2002, when the effort was discontinued.
- The evaluation compared gun homicide trends, particularly the number of monthly gun homicides, in Stockton and eight other mid-sized cities in California between 1990 and 2005.
- Operation Peacekeeper was associated with a statistically significant decrease of 42% in the monthly number of gun homicides while none of the comparison cities experienced a statistically significant reduction. It is likely the strategy had a deterrence effect.

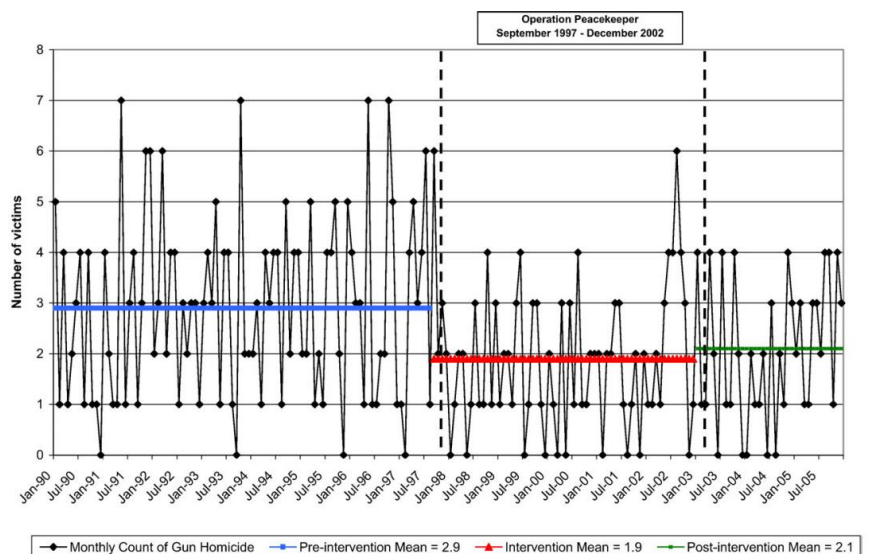


Fig. 2. Monthly Counts of Stockton Homicide Incidents, January 1990 - December 2005.

Braga, Anthony A., Glenn L. Pierce, Jack McDevitt, Brenda J. Bond, and Shea Cronin. 2008. "The Strategic Prevention of Gun Violence Among Gang-Involved Offenders." *Justice Quarterly*, 25 (1): 132 – 162.

<http://www.tandfonline.com/doi/full/10.1080/07418820801954613>

- The study examines the impact of a pulling levers deterrence strategy, implemented in 2002 as part of the Project Safe Neighborhoods initiative, aimed on gun violence among Hispanic and Asian gangs in Lowell, Massachusetts.
- Law enforcement developed different strategies to target each gang and their activities and emphasized the severe and swift consequences of gun violence. Law enforcement also partnered with communities to provide social services for gang members.
- The researchers examine the number of monthly gun assault incidents between January 1996 and the end of December 2005 in Lowell, seven other cities within Massachusetts, and the state of Massachusetts itself. The study found that the Project Safe Neighborhood initiative in Lowell was associated with a 44% reduction in the monthly number of gun assaults while none of the other cities experienced a statistically significant decline.



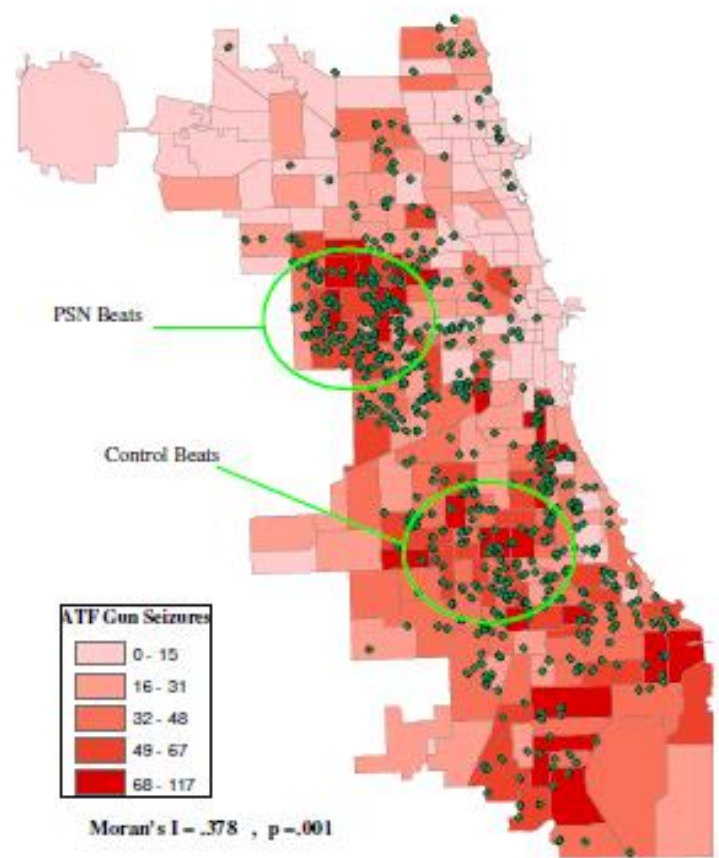
Fagan, Jeffrey, Tracey Meares, Andrew V. Papachristos, and Danielle Wallace. 2008. "Desistance and Legitimacy: Effect Heterogeneity in a Field Experiment with High-Risk Offenders." Presented at the annual meeting of the American Society of Criminology, St. Louis, MO, November.

[http://www2.law.columbia.edu/fagan/papers/Desistance\\_and\\_Legitimacy\\_PSN\\_Recidivism\\_2.ppt](http://www2.law.columbia.edu/fagan/papers/Desistance_and_Legitimacy_PSN_Recidivism_2.ppt)

- The study evaluates the effects of Project Safe Neighborhoods' (PSN) Offender Notification Forums, implemented in 2002, on rates of individual recidivism among a population of returning prisoners in Chicago.
- In a 2007 study, PSN was associated with a 37% decline in quarterly rates of homicides in PSN areas when compared to those without PSN. PSN Officer Notification Forums, designed to alter negative opinions offenders may have about the law and to relay messages of deterrence, have demonstrated significant associations with reduced levels of crime in neighborhoods in several PSN cities.
- Researchers employ a quasi-experimental design to examine if and how a legitimacy-based intervention program influences rates of recidivism among a group of recently-released offenders who participated in Chicago's PSN program.

Results: the findings suggest that involvement in PSN significantly reduces the risk of subsequent incarceration. Therefore, participation in PSN Offender Notification Forums is associated with significantly longer intervals that offenders remain out of prison.

FIGURE 2. ATF Gun Seizures and Homicides in Chicago, 2002

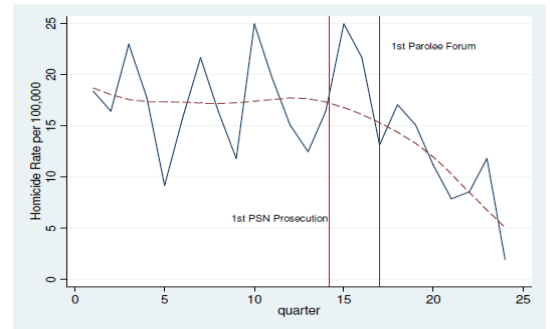


Papachristos, Andrew, Tracey Meares, and Jeffrey Fagan. 2007. "Attention Felons: Evaluating Project Safe Neighborhoods in Chicago." *Journal of Empirical Legal Studies* 4: 223 – 272.

[http://lsr.nelco.org/cgi/viewcontent.cgi?article=1021&context=columbia\\_pllt](http://lsr.nelco.org/cgi/viewcontent.cgi?article=1021&context=columbia_pllt)

- The authors examine the impact of Project Safe Neighborhood (PSN) on neighborhood-level crime rates in Chicago.
- The study evaluates the monthly and quarterly number of homicide incidents between January 1999 and December 2004 within two adjacent police departments, selected from Chicago's 25 police districts as treatment areas, and two other police districts, selected as controls. The study also analyzes four other interventions.
- Results: the study found that the intervention was associated with a statistically significant 37% decline in homicides in the treatment districts versus to control districts. The overall intervention was also associated with statistically significant declines in gun homicide and aggravated assault incidents, and a non-statistically significant decline in gang homicide incidents. It was also found that the more offenders who attended PSN Offender Notification Forums, the greater the decline in homicide rates in treatment areas.
- The other interventions, increased federal prosecutions and the number of guns recovered by gun teams, were associated with modest, statistically significant declines in homicides in the treatment districts versus control districts. Getting guns off the street and prosecuting offenders federally for gun crimes was associated with small but meaningful homicide reductions. The length of sentences associated with federal prosecutions was not associated with the observed homicide reductions.

FIGURE 5. Monthly Homicide Rate in PSN Treatment Group, 2001 to 2004



Braga, Anthony A., Jack McDevitt, and Glenn L. Pierce. 2006. "Understanding and Preventing Gang Violence: Problem Analysis and Response Development in Lowell, Massachusetts." *Police Quarterly*, 9:20 – 46.

[http://nnscommunities.org/Understanding\\_Lowell.pdf](http://nnscommunities.org/Understanding_Lowell.pdf)

- The study evaluates the collaboration between police and academics that resulted from the Project Safe Neighborhoods initiative in Lowell, Massachusetts. The Project Safe Neighborhood initiative focused on gun violence unique to Lowell.
- Research found that homicide and gun violence in Lowell was concentrated among a small number of youth, gang-affiliated offenders. Additionally, a majority of gun violence and homicides stemmed from disputes within Asian and Hispanic gangs.
- Using the research, taskforces were created to concentrate prevention, intervention, and enforcement resources on the small number of offenders responsible for the majority of Lowell's gun violence. The message of deterrence and the offering of social services was directly communicated to gang members. The taskforce also gained a new understanding of how Asian gangs operated and developed strategies to better respond to their use of gun violence.

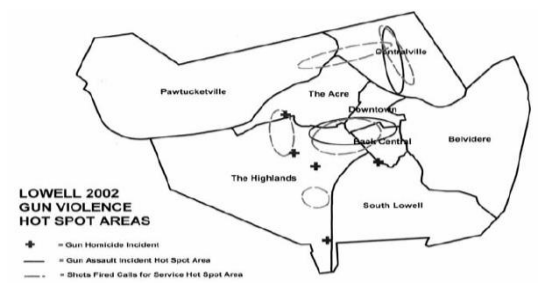


FIGURE 3: Lowell 2002 Gun Violence Hot Spot Areas

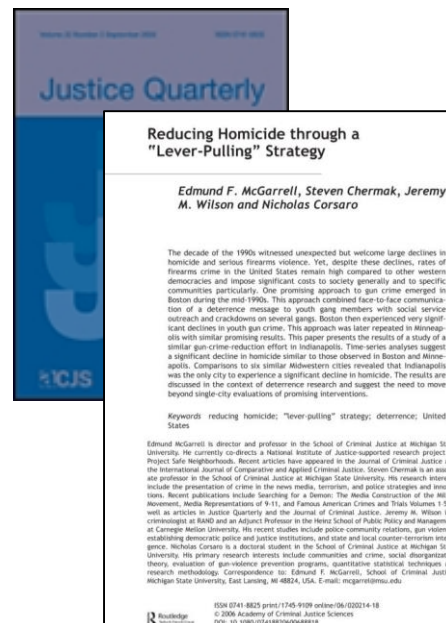
Braga, Anthony A., and David L. Weisburd. "Police innovation and crime prevention: Lessons learned from police research over the past 20 years." *Washington DC: US National Institute of Justice Police Research Planning* (2006).

<https://www.ncjrs.gov/pdffiles1/nij/grants/218585.pdf>

- The authors analyze a number of recent developments in policing aimed at preventing crime and creating safer communities. The new strategies (community policing, "broken windows" policing, problem-oriented policing, "pulling levers" policing, third-party policing, hot spots policing, Compstat, and evidence-based policing) have largely had positive effects on communities and are associated with recent advancements in crime control.
- In each strategy, law enforcement changes into problem solving in order to resolve incidents and increase public satisfaction.
- Pulling levers strategies involve the selection of a certain crime problem and creation an interagency working group of law enforcement agents that conducts research to identify main offenders, groups, behavior patterns, and a response to deter the continued use of violence.
- The group also focuses social and community resources on offenders and directly communicates with them on the consequences of violence. These strategies showed positive results in controlling violence committed by chronic offenders. Evaluations of Boston, Chicago, Indianapolis, Lowell, and Los Angeles reported reductions in violence versus other areas.

McGarrell, Edward, Steven Chermak, Jeremy Wilson, and Nicholas Corsaro. 2006. "Reducing Homicide through a 'Lever-Pulling' Strategy." *Justice Quarterly*, 23: 214 – 229. <http://www.tandfonline.com/doi/pdf/10.1080/07418820600688818>

- The authors analyze the effectiveness of the focused 'lever-pulling' deterrence strategy, the Indianapolis Violence Reduction Partnership (IVRP), as a response to youth gun crime in Indianapolis.
- The strategy, implemented in 1998, called for meetings in criminal justice officials and community members relayed a message of deterrence and offered to provide social services to high-risk probationers and parolees. Law enforcement also cracked down on the Brightwood gang.
- The authors conduct time-series analyses of the monthly number of homicides between January 1997 and June 2001 across Indianapolis and six comparable Midwestern cities.
- Results: The intervention was associated with a statistically significant 34% decline in the monthly number of homicides. Compared to the six other Midwestern cities, only Indianapolis experienced a statistically significant change. The decline was greatest during the month after the crackdown on the Brightwood gang which further suggests an intervention effect.



Tita, George, K. Jack Riley, Greg Ridgeway, Clifford Grammich, Allan Abrahamse and Peter Greenwood. 2004. *Reducing Gun Violence: Results from an Intervention in East Los Angeles*. Santa Monica, CA: RAND Corporation.

[http://www.rand.org/content/dam/rand/pubs/monograph\\_reports/2010/RAND\\_MR1764-1.pdf](http://www.rand.org/content/dam/rand/pubs/monograph_reports/2010/RAND_MR1764-1.pdf)

- The authors analyzed the impact of an Operation Ceasefire initiative and 'pulling levers' strategy implemented in 2000, in the Boyle Heights neighborhood in Los Angeles on gun violence.
- The researchers examine the effects of the pulling levers strategy on violent, gang, and gun crime within Boyle Heights during the pre-intervention period (6 months before); the suppression period (4 months where all parts of the intervention were applied); and the deterrence period (2 months where only certain parts of the intervention were applied).
- The study analyzes trends in: the Boyle Heights and the rest of the Hollenbeck area; the five reporting districts where the intervention was targeted and the rest of Boyle Heights; and the census block groups comprising the turf of the targeted gangs and a group of census block groups scattered in the Hollenbeck area that matched characteristics of the targeted area.

Table 2.2  
Intervention Levers and Components

Agency	Primary Levers	Secondary Levers	Prevention Services
Parole officers	Enforcement of parole regulations		Access to job training and development
Probation officers	Enforcement of probation regulations		Access to tattoo removal; substance abuse treatment
LAPD	Warrant enforcement, saturation patrol, drug market abatement		
Housing police	Enforcement of public housing residency requirements	Property code enforcement	
Hospital			Tattoo removal; substance abuse treatment
Homeboy Industries/Jobs for a Future			Tattoo removal; job training and development
Various city agencies		Child support payment enforcement; property code enforcement	Job training and development

- Results: gang crime in Boyle Heights declined significantly compared to other regions of Hollenbeck during the suppression period, and violent, gang, and gun crime decreased significantly in the deterrence period. The evaluation suggested that the significant decline in gang crime may have started during the suppression period but violent crime did not decrease significantly during the suppression period. In the five targeted police districts, violent crime decreased significantly in the suppression and deterrence periods and gang crime decreased significantly in the suppression period. Neither gang crime in the deterrence period nor gun crime in the deterrence or suppression periods decreased significantly compared to the rest of Boyle Heights. Additionally, violent crime in the census block groups overlapping the targeted districts decreased significantly compared to the matched blocks.