Oakland Ceasefire Impact Evaluation: Key Findings

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Introduction

The City of Oakland, California, has long suffered from very high levels of serious violence. According to the FBI's Uniform Crime Reports, Oakland's homicide rate (31.8 per 100,000) was almost 6.8 times higher than the national homicide rate (4.7 per 100,000) in 2012. That year, the City of Oakland engaged the California Partnership for Safe Communities (CPSC) to help design and implement a focused deterrence program to reduce serious gun violence. The CPSC collaborated with the Oakland Police Department (OPD) on ongoing problem analysis research to understand the underlying nature of gun violence in Oakland. The OPD led an interagency Ceasefire enforcement group comprised of federal, state, and county criminal justice agencies. The broader Oakland Ceasefire Partnership included the Mayor's Office, social service agencies led by the Human Services Department, and community leaders from local organizations such as Oakland Community Organizations (OCO).

The Oakland Ceasefire program closely followed the key elements of a focused deterrence Group Violence Reduction Strategy (GVRS). Briefly, GVRS programs seek to change offender behavior by understanding underlying crime-producing dynamics and conditions that sustain recurring crime problems, and implementing a blended strategy of law enforcement, community mobilization, and social service actions. The Oakland Ceasefire program was fully implemented in early 2013.

Figure 1 presents the yearly counts of gun homicide and non-fatal shooting victimizations between 2010 and 2017. Total Oakland shooting victimizations peaked at 710 in 2011 (93 gun homicide victims and 617 non-fatal victims) and decreased by 52.1 percent to a low of 340 in 2017 (63 gun homicide victims and 277 non-fatal victims). The impact evaluation was designed to determine whether the Ceasefire intervention was associated with this steep decline in serious gun violence and assess how Ceasefire partners and community leaders perceived the implementation of the strategy.

Oakland Gun Homicides and Non-Fatal Shootings, 2010 - 2017 Non-fatal gun assaults Gun homicides

Figure 1.

Place Impact Evaluation

Methods

The place impact evaluation comprised two quasi-experimental designs to determine whether the implementation of Oakland Ceasefire was associated with citywide reductions in gun homicide.

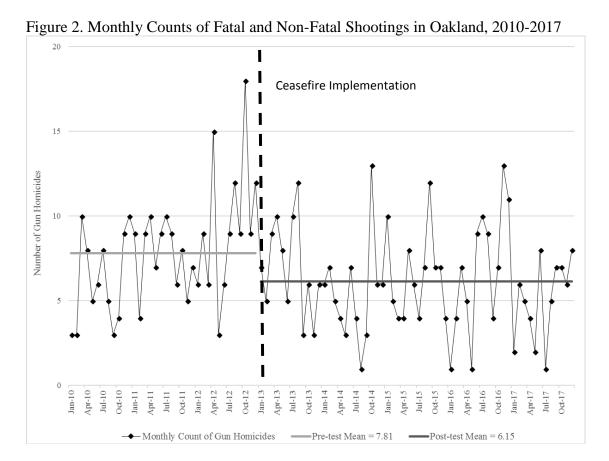
First, the cross-city quasi-experimental design compared gun homicide trends in Oakland to gun homicide trends in 12 comparison cities: Fresno, Sacramento, Stockton, Santa Ana, Anaheim, Long Beach, Riverside, Bakersfield, Alameda, San Francisco, Richmond, and East Palo Alto. For each of the 13 cities, interrupted time series analyses of monthly counts of gun homicide between 2010 and 2017 were used to estimate the existence of post-2013 gun violence reduction impacts. These models controlled for population trends, violent crime trends, linear and nonlinear trends, and seasonal effects.

Second, the within-Oakland quasi-experimental design compared shooting trends in census block groups with gangs / groups that experienced the Ceasefire intervention relative to shooting trends in matched census block groups with gangs/ groups that did not experience the intervention. Some 93 of 311 census block groups (24.9%) had groups/gang turf that experienced Ceasefire treatment. Propensity score matching was used to develop matched treated and untreated block groups based on prior violence, the number of gangs / groups with turf in the block group, neighborhood disadvantage, resident race/ethnicity, and gentrification (this resulted in 47 treated

and 95 untreated matched block groups). Growth curve regression models with differences-in-differences estimators (DID) were used to analyze monthly counts of fatal and non-fatal shootings in matched treated and untreated block groups between 2010 and 2017. Gun violence displacement and diffusion of program benefit effects were analyzed in block groups adjacent to treated and untreated places.

Results

- The Ceasefire intervention was associated with an estimated 31.5% reduction in Oakland gun homicides controlling for other trends and seasonal variations (*p*<.05, see Figure 2). Only 2 of 12 comparison cities experienced significant reductions during this time period (Stockton, San Francisco). The cross-city quasi-experiment suggests that the Ceasefire intervention was associated with a noteworthy citywide reduction of gun homicide in Oakland that seemed distinct from gun homicide trends in other California cities.
- The DID estimator suggested that the Ceasefire intervention was associated with a 20.0% reduction in shootings in matched treated block groups relative to matched comparison block groups (*p*<.05). The analysis further suggested a non-significant reduction in shootings in areas surrounding treated block groups relative to areas surrounding untreated block groups. The within-Oakland quasi-experiment suggests that neighborhoods with gangs / groups that experienced the Ceasefire treatment experienced noteworthy reductions in gun violence that were not displaced to surrounding areas.

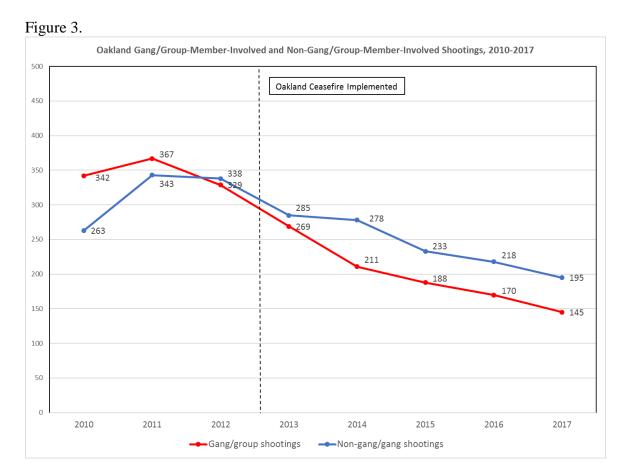


Gang / Group Impact Evaluation

Methods

A quasi-experimental design was used to determine whether shooting trends involving gangs and other criminally-active groups that experienced Ceasefire treatment were reduced relative to shooting trends involving gangs / groups that did not experience Ceasefire treatment. Problem analysis research revealed that there were 76 active gangs / groups in Oakland between 2010 and 2017. There were 15 gangs / groups directly treated by Ceasefire intervention after the 2013 launch of the program. Social network analysis revealed 13 gang / groups connected to treated gangs / groups through conflicts and alliances (i.e., vicarious treatment). The identification of these socially-connected gangs / groups provided an opportunity to determine whether the Ceasefire program generated "spillover" violence reduction impacts on these untreated gangs / groups.

Propensity score matching based on prior violence, gang / group size, conflicts / alliances, longevity, housing project location were used to identify similar gangs/groups (this process resulted in 13 directly treated, 9 vicariously treated, 36 untreated matched gangs / groups). Growth curve regression models with differences-in-differences estimators (DID) were used to analyze monthly counts of fatal and non-fatal shootings involving matched treated, vicariously treated, and untreated gangs / groups between 2010 and 2017. These models estimated both direct and vicarious ("spillover") effects of the Ceasefire treatment.



Results

- Figure 3 presents the yearly count of fatal and non-fatal shooting incidents that did and did not involve gang / group members between 2010 and 2017. Both gang/group-member-involved and non-gang/group-member-involved shooting incidents decreased markedly during the study time period. However, the decrease in gang/group-member-involved shootings was steeper than the decrease in non-gang/group-member-involved shootings after Ceasefire was implemented in 2013. The yearly mean number of gang/group-member-involved shootings decreased by 43.2 percent from 346.0 during the pre-intervention years (2010-2012) to 196.6 during the intervention years (2013-2017). By comparison, the yearly mean number of non-gang/group-member-involved shootings decreased by only 23.2 percent from 314.7 during the pre-intervention years (2010-2012) to 241.8 during the intervention years (2013-2017).
- The growth curve regression models and DID estimator suggest that the Ceasefire intervention was associated with an estimated 27.0% reduction in shootings by treated gangs/groups relative to untreated gangs/groups (p<.05). The models further revealed and estimated 26.0% reduction in shootings by vicariously-treated gangs/groups relative to untreated gangs/groups (p<.05). These results suggest that the Ceasefire intervention reduced shootings involving treated gangs/groups and their rivals and allies.

Individual Impact Evaluation

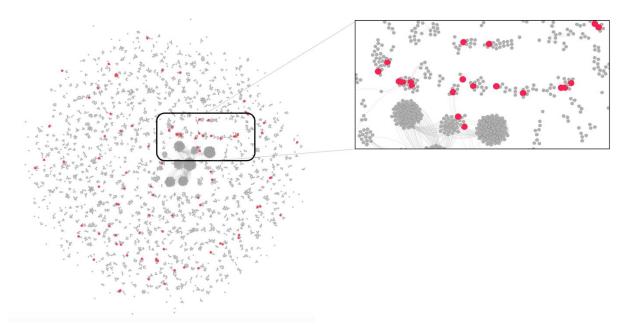
Methods

The individual impact evaluation is designed to assess the extent to which Oakland Ceasefire is associated with gunshot victimization of those *individuals* who were part of the initiative (i.e., individuals who were part of a group that was the focus of Ceasefire, who attended a call-in or custom notification, received law enforcement attention, or were referred to services by Ceasefire). The major challenge for this part of the research is how to parse about the impact of Ceasefire on any individual's behavior as distinct from the observed impact of the group. The individual impact evaluation builds on one of Ceasefire's foundational premises that gun violence concentrates within social networks and seeks to leverage these exact networks to create a quasi-experimental condition. Specifically, the individual impact evaluation leverages **co-arrest networks** of individuals arrested in Oakland.

Figure 4 depicts this co-arrest network in Oakland created by linking unique individuals through instance of co-arrest arrested from 2010 to 2017. Each of the nodes represents a unique person; each of the lines connecting the nodes represents a single instance of "co-arrest." There are more than 9,912 unique individuals in this network and the connections among them create several smaller distinct subnetworks across the city. The **red** nodes represent those individuals who were part of the Ceasefire program. As might be expected given the concentration of gun violence in such networks, one can see in the call-out in Figure one the way that the Ceasefire participants cluster in the network—i.e., multiple participants are in close proximity to each other.

This component of the evaluation will leverage the network (1) to create a quasi-experimental condition that allows us to assess changes in gunshot victimization of individual Ceasefire participants as well as and (2) to detected possible individual "spillover" effects from one participant to another, especially within network clusters and gangs/groups. The network in Figure 4 is large enough that we can use a variety of network analytics to "match" individuals who were part of Ceasefire with other individuals similar in risk factors that are in other parts of the network who did not receive treatment. The present evaluation will analyze the post-treatment patterns of gunshot victimization and violent recidivism of (1) those individuals who were part of Ceasefire relative to (2) those individuals who were also in high-shooting parts of the network.

Figure 4. Oakland Co-Arrest Network, 2010 to 2017



Anticipated Analyses and Results

Extended delays in data-sharing agreements and procedures have generated delays in the individual impact analyses. The PIs have been working work the City of Oakland to expedite these processes as much as resources will allow. The research team has already constructed the necessary network data (Figure 4) and begun the matching process which links the network data with participant data, victimization data, and service-provider data (from Measure Z). These matching and data-linkage processes are approximately 70% complete as of the time of this writing. It is difficult to say with any certainty the outcome of the proposed analyses without the complete data. Once data are complete, however, we anticipate being able to ascertain:

- The extent to which gunshot victimization and violent recidivism changed among Ceasefire individuals as compared to similar a control group within the network; and
- The extent to which any Ceasefire diffused to individuals who themselves not directly part of the intervention (e.g., network spillover).

Qualitative Assessment of Oakland Ceasefire

The objective of the qualitative assessment was to acquire a variety of local stakeholders' perceptions of and experiences with Oakland's Ceasefire strategy. To achieve this goal, in-depth interviews were conducted with individuals having considerable knowledge, varied perspectives, and keen insights regarding: (1) the effectiveness of current and prior Ceasefire initiatives, (2) the nature and extent of gun violence occurring across Oakland, and (3) whether Ceasefire has improved police-community relations and helped to build mutual trust.

Methods

The project benefitted from the use of in-depth interview techniques; which provided unique opportunities to examine not just the context and circumstances of events, but also their meanings for study participants. In particular, data collection purposively involved diverse groups of respondents in recognition of their informal/formal program roles and particular viewpoints concerning Ceasefire.

The project involved 21 qualitative, in-depth interviews with: Ceasefire call-in clients, City, clergy, and community leaders, police and probation officers, and social service providers. Interview subjects were recruited and scheduled with the assistance of Oakland-based study partners. Researchers were also permitted to use snowball sampling techniques to recruit additional participants by enlisting the help of those previously interviewed to introduce additional individuals suitable for inclusion in the study. Interviews were voluntary, conducted in private offices, and respondents were promised strict confidentiality. Furthermore, we were mindful not to record personally identifying information.

The interview guide was semi-structured, consisting of both closed- and open-ended questions that allowed for considerable probing on key topics (i.e., whether or not respondents viewed Ceasefire as both an effective and fair crime-reduction strategy, perceptions of increased/reduced gun violence, and the current state of police-community relations). Except on three occasions, interviews were digitally recorded (audio only, however) and later transcribed in their entirety for accuracy. The aforementioned transcriptions serve as the primary data for our preliminary analysis. Finally, we took considerable care to ensure that results typified the most common themes and subthemes respondents provided.

Results

The results herein are focused around Ceasefire's three key aims, representing respondents' statements and observations consistently found throughout the data. We also present study participants' views regarding what appears to be working along with their recommendations for moving forward.

Aim 1: Reduce shootings and homicides citywide

➤ There was strong consensus among study participants that Ceasefire greatly enhanced the City's capacity to systematically and thoughtfully reduce shootings

and homicides. Respondents living and providing social services in the most disadvantaged neighborhoods, however, were quick to point out that too much violence persists. Nonetheless, study participants uniformly agree that a few bad actors are disproportionately responsible for serious violence in Oakland.

- Many study participants reported that the City is experiencing a generational shift concerning the nature of interpersonal violence. In particular, respondents commented that non-fatal shootings and homicides are no longer about gaining control of drug territory. To the contrary, contemporary violence is primarily fueled by everyday disputes (e.g., card games, fights over romantic interests, disparaging social media posts)., making it appear more random and uncontrollable.
- Unlike in the past concerning gang beefs, those at highest risk of gun violence are seldom aware of impending danger (and or potential assailants' identities and/or motives).
- ➤ While the overwhelming majority of study participants were highly supportive of Ceasefire, they took care to express concern about its sustainability given deeply entrenched, underlying social conditions highly correlated with urban violence (i.e., extreme poverty, unemployment, poor educational outcomes).
- ➤ Untreated / undiagnosed psychological trauma resulting from living in high crime environments was a prominent theme among some respondents. This subset of study participants believed that this potentially debilitating byproduct of urban violence has not received adequate attention.
- > Study participants questioned whether the current Ceasefire messaging resonates with younger (i.e., juveniles), at-risk individuals who have not yet come to the attention of criminal justice agents.

Aim 2: Decrease recidivism and improve outcomes for those at highest risk of violence

- ➤ There is considerable confusion (even among those highly supportive of the intervention) regarding the accuracy and integrity of the call-in lists. At the heart of the issue may be definitional differences among partners from different professional backgrounds. Nonetheless, there is considerable misunderstanding (among nearly all non-police stakeholders) regarding what actions warrant being "in the game" and ambiguity regarding what call-in clients must do to be removed from the list.
- There is also concern among respondents that call-ins are not always conducted in a respectful manner (e.g., they tend to feel coercive and exploitive), deepening clients' distrust of police and the overall criminal justice system.

Aim 3: Strengthen police-community relations and trust.

- ➤ While the majority of study participants reported that police-community relations had steadily improved since 2012, almost every respondent identified the nationally publicized sex scandal (of 2016 involving a minor) as a devastating setback that continues to undermine citizen trust.
- Respondents emphasized that positive police-community relations were not merely about officers no longer shooting unarmed blacks. Instead, they were insistent that OPD police leadership must also ensure that rank-and-file officers treat citizens with dignity and respect during routine encounters.

What is working / going well

- There is great support for dedicating law enforcement and social service resources to the small number of individuals at highest risk for violence (both as perpetrators and victims). Study participants prefer Ceasefire over indiscriminate and heavy-handed policing initiatives that have the potential to criminalize entire communities.
- Study participants enthusiastically applaud City leaders for their unwavering commitment to Ceasefire. Respondents openly acknowledge that the current political support is unprecedented, deserving a great deal of credit for the observed success.
- Ceasefire has deliberately enlisted and mobilized people of color to work toward improved police-community relation.

Recommendations

- ➤ Better involve clients' romantic partners and family members to reduce program stigma and increase community support.
- ➤ Be more inclusive and strategic regarding the public messaging (and face) of Ceasefire. Several study participants pointed out that compared to well-publicized OPD enforcement efforts (e.g., press conferences held following arrests and seizures), the general public knows very little about the equally important social service delivery component.