



Oakland Unite 2019–2020 Strategy Evaluation: Shooting and Homicide Response

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Abbreviations

CAD	Computer-aided dispatch
CalVCB	California Victim Compensation Board
CCEB	Catholic Charities of the East Bay
CIC	Caught in the Crossfire
COVID	Coronavirus disease
CURYJ	Communities United for Restorative Youth Justice
CV	Cure Violence
CYO	Community & Youth Outreach
DOJ	Department of Justice
DVP	Department of Violence Prevention
FBI	Federal Bureau of Investigation
GRYD	Gang Reduction and Youth Development
HH	Highland Hospital
HIPAA	Health Insurance Portability and Accountability Act
HSD	City of Oakland's Human Services Department
HVIP	Hospital-based violence intervention program
KWP	Khadafy Washington Project
MOU	Memorandum of understanding
OPD	Oakland Police Department
RDA	Resource Development Associates
SOS	Save Our Streets
UCR	Uniform Crime Reporting
UCSF	University of California, San Francisco
UDS	Uniform Data System
VCB	Victim Compensation Board
VI	Violence interrupters

EXECUTIVE SUMMARY

Oakland Unite Shooting and Homicide Response Evaluation

Oakland Unite aims to interrupt and prevent violence by administering grants through a diverse set of strategies, which includes shooting and homicide response. Each year, this strategy provides \$1.4 million in grants to community-based organizations that in turn offer services to hundreds of individuals. Grantees support two groups affected by gun violence: (1) those who have been the victim of gun violence or serious assault, and (2), those who have lost a loved one to gun violence. Grantees aim to address the immediate needs of shooting victims and their families; provide longer-term supports as the victims recover from injury or loss; and prevent retaliatory violence. Oakland Unite convenes and coordinates the network of providers and serves as the liaison between the network and law enforcement.

The Oakland Unite 2019–2020 strategy evaluation report provides an in-depth analysis of the implementation of the four shooting and homicide response programs (summarized below), and the outcomes of participants over the 2016–2019 period. The evaluation's findings suggest that shooting and homicide response offers needed supports to victims of violence and contributes to reducing re-injury and retaliation following a violent incident. As a single shooting injury can cost the city more than \$1 million, the investment in these services has the potential to save the city considerable spending in the long run.

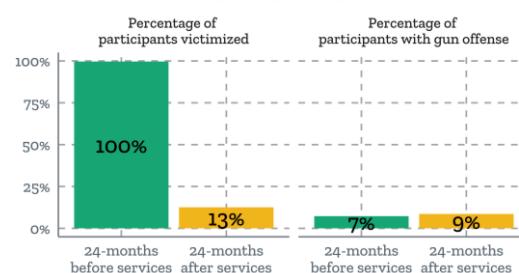
Program name	Grantee	Description
Violence interruption	Youth ALIVE!	Mediates between hostile groups to negotiate truces. Violence interrupters are on call to address immediate safety issues in their communities, including attending to crime scenes and/or being present at the hospital directly following a violent crime to speak with victims and assess the threat of retaliation.
Caught in the Crossfire	Youth ALIVE!	Provides intensive outreach and case management to individuals in Oakland who have been treated for violent injuries at Oakland hospitals.
Relocation support services	Community and Youth Outreach	Works with people at immediate risk of injury or death to assist them and their families with services for temporary emergency relocation.
Homicide support services	Catholic Charities of the East Bay, in partnership with subgrantee Youth ALIVE! and its Khadafy Washington Project	Provides intensive outreach and mental health services to those directly affected by homicide in Oakland.

Violence interruption

- After a shooting incident was referred to violence interrupters, victims largely avoided retaliation and re-injury in the following two-year period. Gun offense rates are relatively low before and after receiving services.
- Violence interrupters are among the first responders to gun violence but can also remain in contact with victims for months or longer to prevent subsequent violence.

- In addition to formal referral pathways, community relationships lead to word-of-mouth referrals for violence interrupters to help prevent or mediate conflict.
- Violence interrupters' unique relationships within their communities make them trusted assets to the work of violence prevention, but this also means that one individual cannot easily take the place of another.

Violence interruption participant outcomes

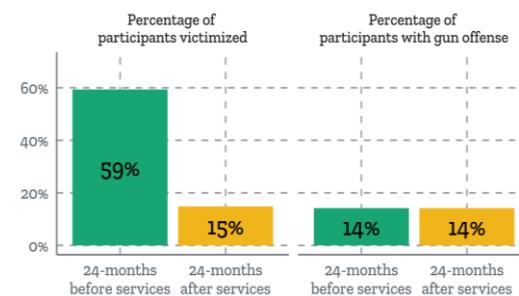


Note: 100 percent of individuals show victimization before services because participants of violence interruption services are only identifiable through police victimization records.

Caught in the Crossfire

- Over the two years after starting Caught in the Crossfire services, participants largely avoided re-injury. Participants' arrest rates for gun-related crimes following the start of services suggest that participants did not engage in retaliatory violence in the months following their victimization.
- Although many participants engaged with services over a sustained period, almost half of all participants' entire involvement with Caught in the Crossfire ended after two weeks or less.
- Following the start of Caught in the Crossfire services, 22 percent of participants eventually connected to other Oakland Unite-supported programs, with life coaching being the most common.
- Participants' need for mental health therapy may, at times, exceed what the program is able to provide. At the same time, there are some participants who may need therapy but feel they cannot engage due to more urgent needs or priorities in their lives.

Caught in the Crossfire participant outcomes



Note: Victimization rates are likely underestimated because of underreporting to police.

Relocation support services

- Recipients of relocation support were less likely to experience violent re-injury after beginning these services, though the share of participants arrested for a gun offense was higher in the two years following relocation services than over the previous two years.
- Relocation support staff assess short- and long-term safety needs for relocation, and most participants receive short-term support to relocate. Relocation plans are set in motion quickly, often within a day.

Relocation support services participant outcomes

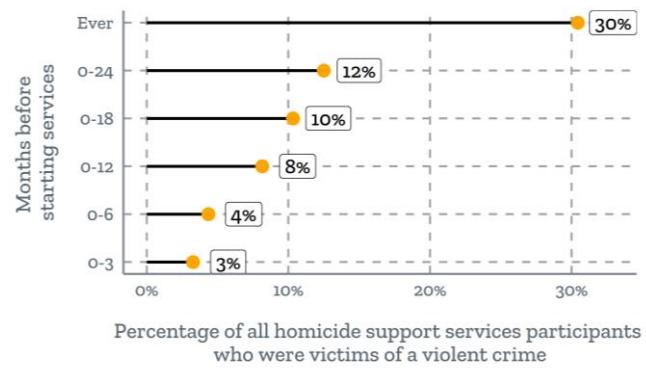


Note: Victimization rates are likely underestimated because of underreporting to police.

- After individuals relocate outside of Oakland, the program provides them with no further services. Once individuals or families are relocated and staff have ascertained that they are safe, there is no formal follow-up.
- More than half of the relocation support services participants eventually participated in other Oakland Unite-supported programs, and primarily to life coaching.

Homicide support services

- Most participants were adult women and 30 percent were themselves the victim of a violent crime at some point in their lives. In the 12-month period before receiving homicide support services, eight percent of participants had been victimized.
- The homicide support services program leverages connections to the community to provide timely and valued services to families affected by homicide.
- Homicide support services connected grieving families with immediate, practical assistance, such as help in applying for Victims of Crime support and planning for funeral and memorial services.
- While nearly all participants receive some amount of intensive outreach, less than 20 percent received mental health services, which focus specifically on the grief associated with the traumatic loss of a loved one.



Note: Victimization rates are likely underestimated because of underreporting to police.

Considerations for Oakland Unite

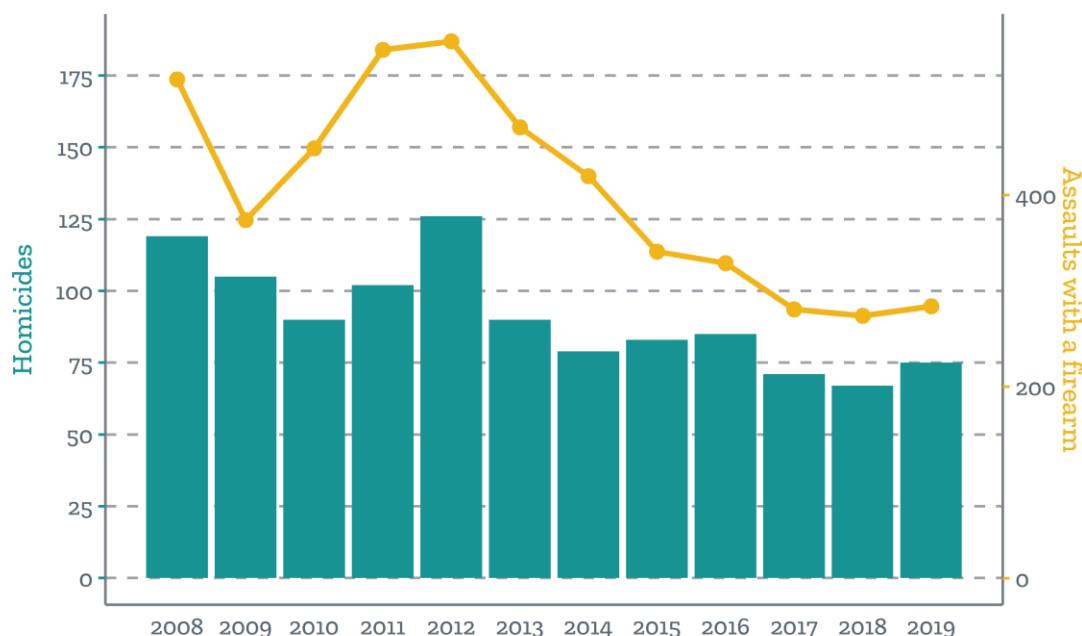
- Distribute roles and responsibilities in the shooting and homicide response sub-strategy to ensure that services will continue uninterrupted if key individuals leave or are unavailable.
- Identify data fields most likely to create value for program improvement and evaluation and formally codify their collection, particularly for the violence interruption program. If details on all mediations were systematically recorded, more insightful analyses on program effectiveness and impacts could be pursued.
- Engage grantees and system partners as “thought partners” in the design of violence prevention strategies and programming.
- Continue to foster efforts to address the root causes of violence in those communities that are most affected by violence, by strengthening the collaboration between crisis response and programs that focus on adjacent issues like housing, job opportunities, and substance abuse treatment.

I. Introduction

Background

Over the past 30 years, the U.S. national violent crime rate has precipitously fallen since peaking in the early 1990s. However, those gains have not been universal nor sustained across many U.S. cities. For example, Baltimore, Charlotte, Chicago, and St. Louis, among others, have recently experienced large increases in annual homicides, with 2020 likely to be one of the deadliest years over the past decade for many of them. Oakland, in contrast, has been a success story with declining homicide and firearm assault counts, as seen in Figure I.1 (see Muhammad 2018; McLively and Nieto 2019). Despite these gains, Oakland's average of 75 homicides a year over 2016–2019 still positions The Town among the 30 most violent American cities.

Figure I.1. Annual homicides and firearm-related assaults in Oakland, California



Source: Mathematica calculation using data from the Oakland Police Department and Oakland Police Department End of Year Crime Report – Citywide.

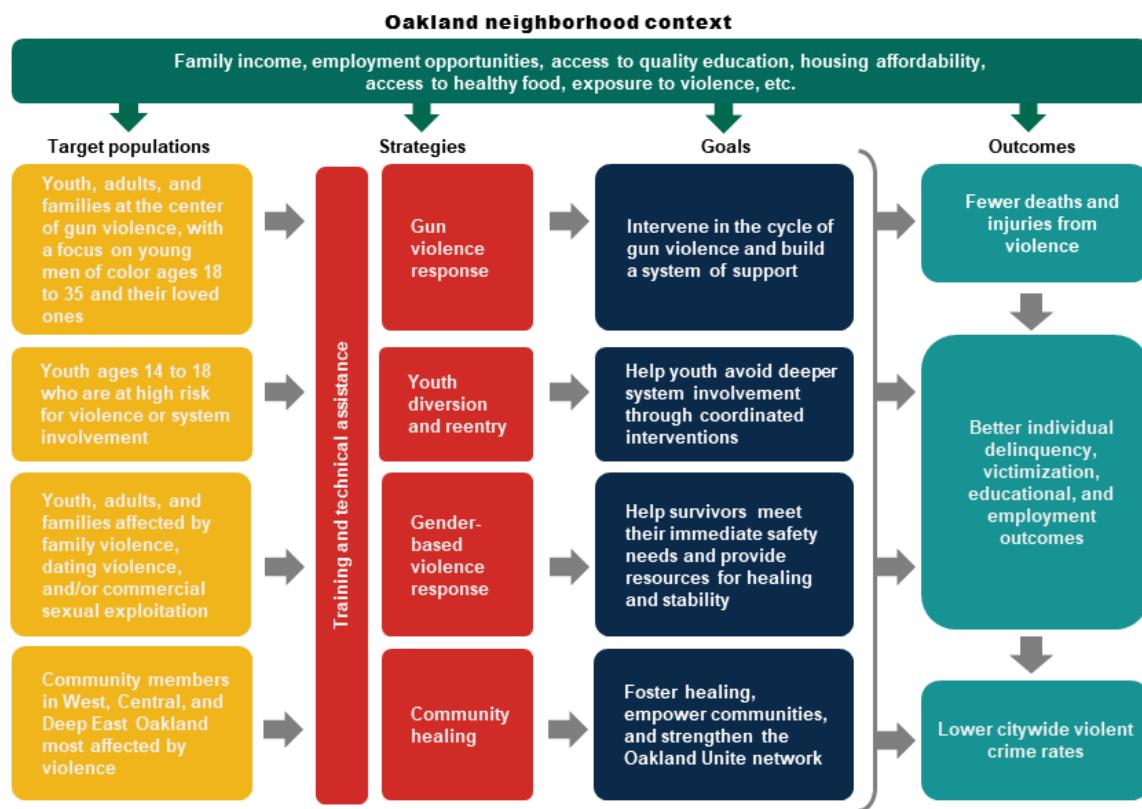
Note: Assaults with a firearm are Penal Code 245(a)(2) offenses. Homicide totals include Penal Code 187(a) offenses and exclude justified, accidental, fetal, or manslaughter by negligence offenses.

One of the City of Oakland's main violence prevention efforts during this period has been Oakland Unite, a publicly funded network of grantees that offer community-based programs focusing on the youth and young adults in Oakland at highest risk of direct exposure to violence, violent victimization, and active involvement in violence. Oakland Unite dates back to the Violence Prevention and Public Safety Act of 2004, also known as Measure Y, which raised funds for community-based violence prevention programs and policing and fire safety personnel through a parcel tax on Oakland property and a parking tax assessment. In 2014, Oakland residents voted to extend these levies for 10 years through Measure Z, which now raises about \$27 million

annually.¹ Roughly 40 percent of these funds are invested in community-based violence prevention programs through Oakland Unite, a division in the City of Oakland's Human Services Department.²

Oakland Unite administers grants to community-based organizations through a set of complementary strategies designed to improve outcomes for participants and ultimately reduce citywide violent crime rates. A conceptual model of Oakland Unite and its strategies is illustrated in Figure I.2. Neighborhood context—including exposure to violence and access to quality education, affordable housing, and employment opportunities—affects the population served by Oakland Unite. The strategies thus focus on improving outcomes for populations that are disproportionately affected by these stressors. Other parts of Measure Z, such as Ceasefire, Oakland Police Department (OPD) crime reduction teams, community resource officers, and emergency response through the Oakland Fire Department, are outside of the purview of Oakland Unite and this evaluation but also play important roles in the city's efforts to reduce violence.

Figure I.2. Conceptual model of Oakland Unite



Source: Mathematica review of Oakland Unite programs.

During fiscal year 2019–2020, Oakland Unite administered \$9,495,850 in 30 grants. Every two to three years, Oakland Unite prepares a new spending plan based on community input and evaluation findings. Table I.1 summarizes the five strategies (gun violence response, youth diversion and reentry, gender-based

¹ The annual estimated revenue from Measure Z is available at [https://ballotpedia.org/City_of_Oakland_Police_Services_Parcel_Tax_and_Parking_Tax,_Measure_Z_\(November_2014\)](https://ballotpedia.org/City_of_Oakland_Police_Services_Parcel_Tax_and_Parking_Tax,_Measure_Z_(November_2014)).

² As of July 1, 2020, Oakland Unite became the Department of Violence Prevention.

violence response, community healing, and training and technical assistance) and seven sub-strategies supported in the current period. This most recent spending plan changed the structure and names of the strategies and sub-strategies. Detailed information about the previous structure of Oakland Unite strategies, sub-strategies, and grantees is available in the 2016–2019 agency report (Eslami et al. 2020).

Table I.1. Oakland Unite strategy and sub-strategy descriptions for the 2019–2020 funding period

Strategy	Sub-strategy
Gun violence response	Adult life coaching (\$1,525,850, 5 grantees) works closely with high-risk young adults to deter involvement in violence and in the justice system. Adult employment and education support services (\$900,000, 3 grantees) agencies work to improve the career prospects of hard-to-employ young adults through skill building and transitional employment.
Youth diversion and reentry	Shooting and homicide response (\$1,400,000, 2 grantees) offers support to shooting and stabbing victims during hospital stays and victims' return home; relocation services for individuals at immediate risk of harm; and support for victims' families and others affected by homicide. Youth diversion and life coaching (\$1,400,000, 6 grantees) works closely with high-risk youth to help them engage in school and avoid violence and involvement in the justice system.
Gender-based violence response	Youth career exploration and education support services (\$600,000, 2 grantees) agencies aim to strengthen educational outcomes and increase career readiness through academic support and employment experience.
Community healing (\$1,725,000, 5 grantees)	Commercially sexually exploited youth intervention (\$750,000, 3 grantees) reaches out to exploited youth, gets them into safe environments, and provides wraparound supports to end their exploitation. Family violence intervention (\$800,000, 2 grantees) supports victims of family violence with legal and socioemotional services as well as crisis response, including emergency housing and a 24-hour hotline.
Training and technical assistance^a (\$395,000, 2 grantees)	Supports the Oakland Unite grantee network in serving participants effectively through various approaches, including certification opportunities in life coaching and career development, networkwide trainings for grantee staff, peer learning communities, one-on-one agency support, and employment engagement events.

Source: Oakland Unite Violence Prevention Services Funding Recommendations, April 2019.

Note: Strategy and sub-strategy funding amounts and grantees cover July 1, 2019, through June 30, 2020.

^a This strategy is administered by the City of Oakland's Human Services Department.

Under Measure Z, the city funds an independent evaluation of Oakland Unite, which includes annual reports assessing the implementation and effectiveness of a selection of Oakland Unite strategies. Key findings from previous strategy-level evaluations are summarized in Table I.2. In this 2019–2020 strategy-level evaluation, we present our findings on the shooting and homicide response sub-strategy, which includes four

components: violence interruption, Caught in the Crossfire, relocation, and homicide support services. We describe the sub-strategy and its components in greater detail in the next chapter.

Table I.2. Overview of previous, related Oakland Unite strategy evaluations

Evaluation year	Sub-strategy focus	Key findings
2005–2013	Violence prevention programs (RDA 2014)	<ul style="list-style-type: none"> Across the strategies, participants were less likely to be arrested or convicted of a new offense after participating in Oakland Unite programs. Oakland Unite refined its programming over time to better serve high-risk populations.
2012–2015	Crisis Response and Support Network, Family Violence Intervention Unit, Peace in the Parks, and Restorative Justice for Oakland Youth (RDA 2015a)	<ul style="list-style-type: none"> Oakland Unite's programs help break cycles of intergenerational violence Programs are well integrated into Oakland Unite's violence prevention delivery and collaborate with other Oakland Unite providers to support individuals at risk of engaging in street violence.
2014–2015	Relocation program (RDA 2015b)	<ul style="list-style-type: none"> An overwhelming majority of relocation clients did not become victims of violent crime. Relocation program staff have developed working partnerships with businesses and community organizations to provide transitional support to relocation clients.
2016–2017	Adult life coaching and employment and education support (EESS) (Gonzalez et al. 2017)	<ul style="list-style-type: none"> Adult life coaching reduces short-term arrests for violent offenses in the 6 months following services but has limited impact on arrests for any offense. Adult EESS decreases short-term arrests both for both violent and nonviolent offenses.
2017–2018	Youth life coaching and employment and education support (EESS) (Gonzalez et al. 2019)	<ul style="list-style-type: none"> Youth life coaching reduces school dropout and short-term violent offense arrests but has limited effect on 12-month arrest rates. Youth EESS reduces school dropout rates but has limited effect on 12-month arrest rates.
2018–2019	Commercially sexually exploited youth (CSE) (Gonzalez et al. 2019)	<ul style="list-style-type: none"> Agencies serve the intended population of girls and young women of color with a history of victimization, contact with law enforcement, and school disengagement. Multiple agencies and branches of government are tackling the issue of CSE in Alameda County, but a cohesive strategy is lacking.

Overview of the report

The remainder of the report is organized as follows. In Chapter II, we present an overview of Oakland Unite's shooting and homicide response sub-strategy and describe how the various organizations involved work together to deliver services to the targeted populations. We summarize our evaluation strategy in Chapter III. In Chapters IV through VII, we discuss our findings on each of the sub-strategy components, respectively addressing the violence interruption program, Caught in the Crossfire, relocation support, and homicide support services. We close in Chapter VIII with an overarching discussion of our findings and final recommendations.

II. Oakland Unite's shooting and homicide response sub-strategy

The Shooting and Homicide Response sub-strategy funds grantees supporting two groups affected by gun violence: (1) those who have been the victim of gun violence or serious assault and (2) those who have lost a loved one to gun violence. Grantees funded through this sub-strategy aim to address the immediate basic, social-emotional, and safety needs of shooting victims and their families; provide longer-term supports as the victims recover from injury or loss; and prevent retaliatory violence. Oakland Unite convenes and coordinates the network of grantees and serves as the liaison between the network and law enforcement. Grantees maintain communication and receive information from Oakland Unite about violent incidents and threats of retaliation through multiple channels, including weekly coordination meetings organized by Oakland Unite. In the fiscal years of 2016–2017, 2017–2018, and 2018–2019, the sub-strategy funded four grants (Table II.1).

Table II.1. Shooting and homicide response grantees, 2016–2019

Grantee	Grant total	Participants served
Youth ALIVE! provides violence interruption support. Violence interrupters mediate between hostile groups to negotiate truces. They are also on call to address immediate safety issues in their communities, including being present at the hospital directly following a violent crime to speak with victims and assess the threat of retaliation.	\$963,900	n/a
The Caught in the Crossfire program at Youth ALIVE! provides intensive outreach and case management to individuals in Oakland who have been treated for violent injuries at Highland Hospital, University of California, San Francisco (UCSF) Benioff Children's Hospital – Oakland, and Eden Medical Center. Intervention specialists engage victims of gun violence and establish a connection with them. In the hospital, staff review the incident with the participant, assess the risk of retaliation, and develop a plan to stay safe following discharge. Staff follow up with clients after they have been discharged from the hospital to provide further support, and work in tandem with Youth ALIVE! violence interrupters and participants' families and associates to prevent retaliatory violence.	\$446,250	514
The Community & Youth Outreach (CYO) relocation support team works with people at immediate risk of injury or death to assist them and their families with services for temporary emergency relocation. Individuals may be referred by law enforcement or Oakland Unite partners, including other agencies working in the shooting and homicide response sub-strategy. Services begin with an initial meeting with the participant, the person referring the individual, and the relocation support team. Participants receive financial support for their relocation, assistance identifying safe places outside their area of immediate risk, and connections to other services such as mental health supports. In rare cases, CYO also supports permanent relocation to another area to reduce the risk of subsequent violence.	\$357,000	66
Catholic Charities of the East Bay (CCEB), in partnership with subgrantee Youth ALIVE! and its Khadafy Washington Project, provides intensive outreach and mental health services to those directly affected by homicide in Oakland. Youth ALIVE! staff assist families with funeral or vigil planning and costs, Victim of Crime applications, and other immediate needs in the days or weeks following a homicide. Families, friends, classmates, and other individuals can access CCEB to receive grief, trauma, and crisis counseling.	\$1,071,00	1,261

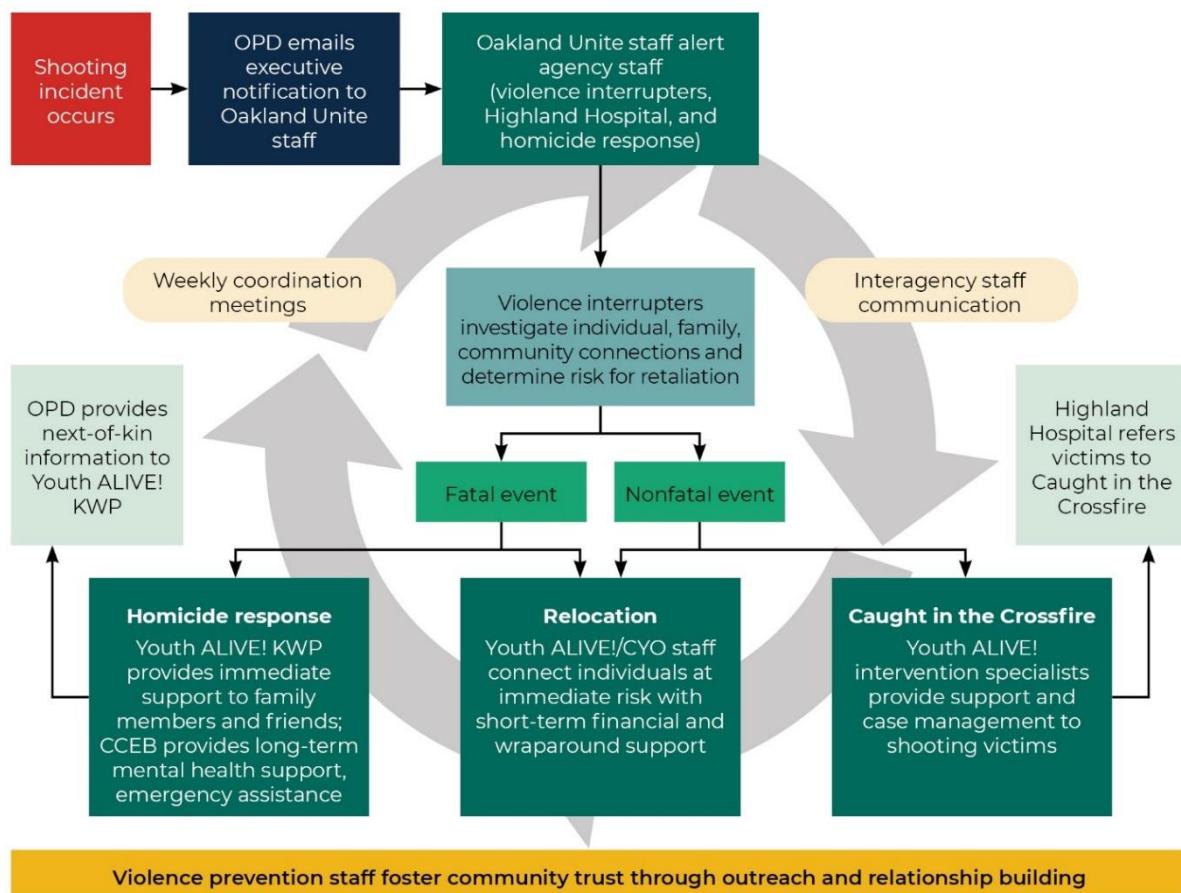
Source: Grant documents and Cityspan data.

Note: Funding amounts and participant counts cover the period from January 1, 2016, through June 30, 2019. The grant amount for Youth ALIVE! violence interruption does not include subgrants for street outreach awarded to CYO.

Oakland Unite and the grantees work together across the four grant programs to interrupt and respond to violence through several complementary activities (Appendix Table A.1). Violence interrupters and violence prevention network staff respond to crises, partner with and mobilize communities, message nonviolence, and develop relationships with individuals who most often are least receptive to traditional services.

Immediately following a shooting incident, staff from Oakland Unite and grantees provide a rapid assessment through hospital bedside visits, home visits, and mediations/interruptions. Grantee staff offer victims and their families support and service linkages for relocation, grief counseling and mental health services, and funeral support. Figure II.1 shows how these activities unfold when a shooting incident takes place in Oakland.³ First, OPD sends an executive notification to designated Oakland Unite staff that includes basic information about the incident location. Oakland Unite's violence prevention network coordinator will then initiate an email chain to violence interrupters, their supervisors, and other violence prevention staff across Youth ALIVE!, CYO, and Oakland Unite. These staff are positioned to conduct outreach to uncover what is happening due to their relationships and connections within the communities they serve. The trust and respect of the community undergirds the ability of violence prevention staff to rapidly respond to violent events and engage individuals in services.

Figure II.1. Shooting and homicide response activities following a shooting incident



³ Figure II.1 illustrates one pathway for how violence prevention staff and system partners engage with and refer individuals following a shooting incident. There are additional ways in which participants are referred to shooting and homicide response services; these are described in Chapters IV through VII.

These staff quickly work their networks to find out details about the incident, informing the violence interrupter's assessment of whether the incident is likely to lead to retaliation and therefore warrants a referral for relocation. Through the assessment, a trauma center social worker, most often at Highland Hospital, will determine whether a victim should be referred to Youth ALIVE!. This assessment can include a discussion of safety, school, job, mental health, and whether the individual is on probation or parole. When the patient is a victim of a violent crime (particularly with risk of serious injury), meets the age requirement for services, and agrees to a referral, Highland Hospital will refer the individual to Youth ALIVE!. Within 24 hours of the incident, the violence interrupter will conduct a bedside assessment to gauge safety and retaliatory risk and receptivity to additional services.⁴ Simultaneously, the group of violence prevention staff will identify others related to the incident and coordinate outreach efforts to offer support services.

The relocation process is set in motion when the result of a safety assessment indicates that a victim, perpetrator, or others connected to these individuals are at risk for retaliation. Typically, CYO will provide immediate emergency relocation support. For additional relocation support needs, Youth ALIVE! will lead the development of a plan to relocate the individual to a more permanent location outside of Oakland.

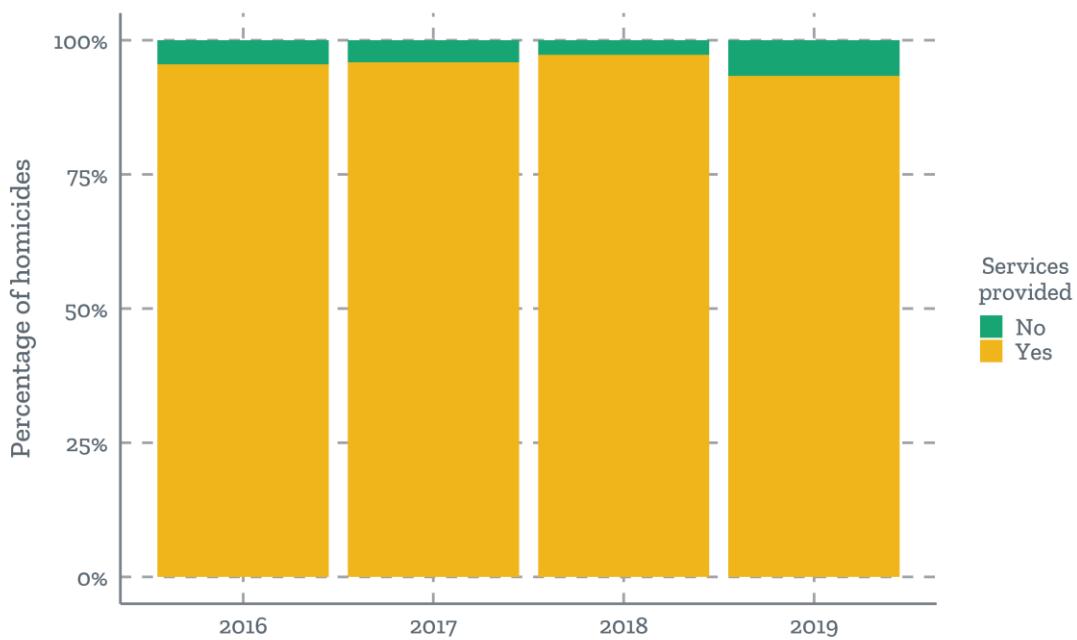
If relocation is deemed unnecessary, the victim is referred within Youth ALIVE! to Caught in the Crossfire (CIC) for case management. A CIC intervention specialist is then assigned and begins reaching out to the victim to determine what assistance or services he or she needs. CIC helps victims with the after-effects of their trauma, such as navigating health care and referrals to therapy.

When a shooting results in homicide, violence intervention staff will also reach out to the victim's family to offer assistance. OPD provides next-of-kin information to Youth ALIVE!, where staff offer crisis response, such as help applying for financial assistance, making funeral arrangements, and assessing for immediate danger. If needed, victims' family members may be referred to relocation. After this initial stabilization, Youth ALIVE! staff identify when family and/or friends of the victim are ready for and interested in therapy, and they work with CCEB to refer the client to them for mental health support.

Over the past four years, violence intervention staff have responded to and/or provided support services overwhelming to a majority of homicide cases, as shown in Figure II.2. Using internal tracking data maintained by the City of Oakland's Human Services Department, we found that of the 310 homicides logged from 2016 to 2018, sub-strategy staff were involved in 96 percent of all cases. There are, on average, four cases per year in which shooting and homicide response is not involved. A common reason is if the homicide victim is not from Oakland and does not have relatives in the city who would be eligible service recipients.

⁴ Due to COVID-19, bedside visits have been prohibited since March and have not resumed as of the date of this report. Communications between Youth Alive! staff and hospitalized individuals have been taking place by phone.

Figure II.2. Percentage of homicides for which shooting and homicide response mobilized services



Source: Mathematica calculations using data from City of Oakland's Department of Human Services (various years).

Throughout the crisis response, violence prevention staff from Oakland Unite, Youth ALIVE!, CCEB, and CYO remain in communication. This group meets weekly to discuss shootings and homicide cases to ensure that multiple efforts were made to find individuals and connect them with appropriate services, to facilitate a common understanding of the status of recent incidents, and to decide whether additional action is needed or if previous weeks' cases can be considered resolved. Beyond these weekly meetings, staff communicate within and across roles and grantees to ensure that the coordination of services is meeting participants' needs. For example, CCEB and Khadafy Washington Project staff from Youth ALIVE! have additional meetings to facilitate the transition of participants to mental health support at CCEB.

III. Overview of evaluation research strategy

In this section, we describe the key research topics that motivate the evaluation, summarize the data sources used, and describe the research methods used in the evaluation. Further information on data collection procedures, data processing, and research methodology is available in Table A.3.

Evaluation focus

This evaluation assesses both the *implementation* and *outcomes* of shooting and homicide response programs, focusing on the 2016–2019 period. Table III.1 lists the research domains that informed our data collection, interview protocol development, and analytic approach.⁵ The analyses draw on data for all individuals who participated in any of the sub-strategy's services during this period. We use quantitative analysis to describe the characteristics of program participants and how they engaged in Oakland Unite services, and to examine both their prior and subsequent arrest and victimization incidents. Our qualitative approach complements our quantitative analyses, providing deeper context on participants' and agency staff's perceptions of the services offered under the sub-strategy, and the ways in which participants engage with and benefit from the programs.

Table III.1. Evaluation research domains

Evaluation focus	Key research domains
Program implementation	<ul style="list-style-type: none"> Characteristics of service recipients (e.g., demographics, prior Oakland Unite service participation) Types and extent of services provided to recipients Collaboration with other partners and stakeholders Successes and challenges in program implementation Follow-on usage of other Oakland Unite services Opportunities for service delivery improvements in effectiveness and efficiency
Program outcomes	<ul style="list-style-type: none"> Likelihoods of being involved in arrest and victimization incidents following services

Data sources

We use a combination of administrative and programmatic data to support our quantitative analyses (Table III.2). Data from the OPD provide insight into the arrest and victimization incidents that program participants experienced before and/or after participating in any Oakland Unite services and are a key data source for measuring program effectiveness. For arrests, we use Uniform Crime Reporting (UCR) violation codes to classify arrest incidents as "gun offenses" or "violent offenses." The "any arrest" outcome includes all arrests independent of violation type. For victimization incidents, we exclusively examine incidents in which the program participant was the victim of a violent crime. For all incidents, we calculate the timing relative to the start of receiving a specific Oakland Unite service, such as "3 months before starting Caught in the Crossfire" or "18 months after receiving relocation support services."⁶ We note that because of unreported victimization incidents (Langton et al. 2012), recorded victimization rates for program participants are likely to be underestimates relative to true victimization rates.

Using historical arrests data from the OPD dataset, we also construct the co-arrestee networks of all individuals who received Oakland Unite services. An Oakland Unite participant's co-arrestees include all

⁵ The complete list of research questions guiding this evaluation is included in Appendix A.

⁶ Appendix B provides additional information on data processing procedures.

people arrested on the same case number and with the same UCR violation code as the participant, before the participant's involvement with the sub-strategy. Consequently, co-arrests occurring *after* the start of Oakland Unite's shooting and homicide response services are not considered as incidents from which co-arrestees would be selected.⁷ Following earlier work investigating the role of individuals' social networks in gun violence behavior (e.g., Papachristos and Wildeman 2014; Gravel and Tita 2015), we examine whether Oakland Unite participants displace retaliatory violence to individuals with whom they share a criminal history. We also use service participation data recorded in the Cityspan database by the grantees, which include details on participation dates, types of services received, and the number of hours of each service contact. There currently is no systematic, participant-level data tracking for the violence interruption program, so we rely on information contained within executive notification emails distributed by OPD and compiled by Oakland Unite to construct a dataset of individuals associated with mediations.

To link individuals across the multiple sources of administrative data, we use identifying information, including first and last name, date of birth, gender, and address. Oakland Unite participants had to provide consent before their identifying information could be shared with evaluators. For Caught in the Crossfire, the consent rate was 54 percent. The consent rate for relocation support was 66 percent, and for homicide support it was 12 percent. Individuals who did not consent to share their personal information are included in descriptive statistics about services received but are excluded from any analyses of outcomes, which require linking participants to other administrative data.

Table III.2. Description of quantitative data sources

Domain	Source	Outcomes of interest	Years covered
Arrests	OPD	<ul style="list-style-type: none">• Arrest type, by FBI UCR category• Arrest date and location• Co-arrestees	2006–2019
Victimization	OPD	<ul style="list-style-type: none">• Incident type, by FBI UCR category• Incident date and location	2006–2019
Oakland Unite program participation	Cityspan	<ul style="list-style-type: none">• Individual-level participation in program services, by type and timing• Demographic characteristics	2016–2019
Violence interruption mediations	Executive notification emails provided by Oakland Unite	<ul style="list-style-type: none">• Timing of mediation services provided to shooting victims	2016–2019

Note: FBI = Federal Bureau of Investigation; OPD = Oakland Police Department; UCR = Uniform Crime Reporting.

To better understand the experiences and perceptions of individuals who provided, received, and were referred to strategy services, we conducted 26 semi-structured interviews with program staff at Oakland Unite, staff from grantees involved in the shooting and homicide response sub-strategy, system partners, and program participants (Table III.3). All interviews occurred in spring through summer 2020. Due to COVID-19, interviews did not take place during in-person site visits as originally planned, but instead were completed by videoconference or phone. The challenges of interviewing individuals about a sensitive topic remotely make it likely that participants who took part were among those most engaged with the sub-

⁷ Our approach therefore only considers individuals whose presence in a participant's "social network" can be verified before the participant's victimization incident that brought them into connection with Oakland Unite. We did not restrict networks to only those co-arrests that share a common incident date, since co-arrestees may be arrested for the same violation on different dates.

strategy. Qualitative data collection also included documents and materials provided by Oakland Unite and grantee staff, including scopes of work, grantee budgets, service logs, and prior evaluation reports.

Table III.3. Semi-structured interviews, by type of informant

Type of informant	Number interviewed
Oakland Unite and grantee managerial/leadership staff	5
Grantee frontline staff who provide services	10
Program participants	6
System partners from Highland Hospital, OPD, and the Alameda County District Attorney's Office	5

Research methods

Our evaluation employs a mixed-methods research approach combining both qualitative and quantitative data analysis to answer the research questions. For the analyses of program implementation, we reviewed materials provided by Oakland Unite, analyzed interview responses within and across grantees using a coding scheme, and summarized participant survey and administrative data about services and participants. We triangulated across these different sources to identify key implementation themes.

For the analyses of individual outcomes (Table III.4), we employed an event study regression methodology (Fama et al. 1969; Binder 1998). An event study employs statistical methods to examine time-evolving changes in outcomes relative to the timing of a specific event (in this case, the start of Oakland Unite services following a shooting or other violent incident). By comparing individuals' outcomes after an event to before the event, we can trace whether outcomes follow a temporal pattern and have a baseline level of behavior to compare post-treatment outcomes. The event study approach accounts for other factors that could affect the timing of outcomes, such as seasonal trends in crime. This methodology is often used when there is repeated data collected on an outcome over time and when the event of interest is unforeseen, as is often the case with a shooting or other violent incident.

Event studies can be a useful approach to examining impacts when there is no comparison group or when a meaningful comparison group cannot credibly be constructed. As a result, the methodology is especially relevant to the shooting and homicide response sub-strategy, where services such as violence interruption are universally offered to eligible individuals. Even though there is no comparison group of similar individuals who were not offered Oakland Unite services to form a counterfactual, repeated observations of the same individuals over time mean that participants can serve as their own control group.⁸ In essence, the arrest and victimization behavior of an individual in the months before starting Oakland Unite services acts as a baseline against which outcomes observed after starting Oakland Unite services can be compared. This method consequently controls for differences in unobserved individual characteristics, such as personality traits and risk tolerance, that are likely to be first-order determinants of arrest and victimization behavior.

⁸ Individuals who were victims of a violent crime and who turned down Oakland Unite services are unlikely to form a credible comparison group to individuals who accepted services. In some cases, the sample sizes were also very small (such as the number of individuals who received relocation support and consented to share their information for evaluation purposes).

Table III.4. Outcomes examined in the time before and after starting Oakland Unite services

Domain	Outcome definition
Arrests	<ul style="list-style-type: none"> Had an arrest for any offense in Alameda County, excluding parole and probation violations
Gun offenses	<ul style="list-style-type: none"> Was arrested for a gun-related offense
Violent offenses	<ul style="list-style-type: none"> Was arrested for a violent offense
Victimization	<ul style="list-style-type: none"> Was a victim of any violent crime reported to OPD

Note: OPD = Oakland Police Department.

Unless otherwise specified, we run event study regression models with monthly-frequency data, starting with the 12th month preceding a participant's involvement in Oakland Unite's sub-strategy services through 24 months following the service start month. In all models, monthly coefficients are reported relative to the first month following initial service, which is the omitted time period. The sample for each regression consists of all participants whose arrest and victimization outcomes are observable over the complete post-treatment period in order to devise a balanced panel and guarantee that results are not driven by attrition. Since our OPD dataset contains incidents through December 2019, this selection decision effectively omits individuals with a service initiation date of January 2018 or later.⁹

Caveats and limitations

The data sources and methods used for this evaluation provide rich information about the implementation and outcomes of the shooting and homicide response sub-strategy, but they have limitations worth noting:

- **The outcomes evaluation does not include a comparison group.** As discussed earlier, it was not possible to construct appropriate comparison groups for program participants. For example, in the case of the violence interruption program, there were no comparison group members because services are broadly offered in response to all shooting incidents in Oakland. Although the event study methodology can provide evidence of impact, it is important to remember that the start of Oakland Unite services is triggered by a violent incident, which in itself can affect the timing and likelihood of subsequent arrest and victimization outcomes (for example, if the individual is in the hospital or recovering). Therefore, the results do not indicate the impact of Oakland Unite services exclusively.
- **Individual participation in violence interruption was inferred from email records.** We used executive notification emails sent by OPD to identify the violent incidents that violence interrupters responded to, and we then linked these incidents to victimization records using incident case numbers to identify the victims involved. The executive notifications themselves provide no identifying information on the victim or victims; in cases where there were multiple victims, we assume that all involved met with violence interrupters. Further, we were unable to confirm the extent to which the victimized individuals received mediation or other support from violence interrupters, as the notification email threads commonly lacked sufficient detail confirming the provision of antiviolence services.

⁹ In Appendix A, we also describe results for less exacting models that have 12-month follow-up periods, analogously comprising only participants with complete post-treatment data available. This shorter time frame means that events taking place more than a year after initiating Oakland Unite services would not be detectable.

- ***The report excludes arrest and victimization data not reported in the available sources.*** The report used data reported by OPD, which do not include incidents outside of Oakland's jurisdiction. Victimization data reflected only incidents reported to OPD, which are subject to underreporting, and frequently lacked complete personally identifiable information needed to link to other records.
- ***Analyses of arrest and victimization outcomes were limited to participants who consented to have their information matched to other data sources.*** As noted above, significant shares of participants in this sub-strategy did not consent to share their identifiable information. Individuals who do not consent to participate in the evaluation may differ from those who do, and therefore the outcomes analysis may not be representative of all participants' experiences. Oakland Unite data show that participants who did not consent received fewer service hours, on average, than those who consented.
- ***The perspectives collected through surveys and interviews may not reflect the perspectives of all stakeholders.*** Participant interviews were conducted with a small sample of participants who were nominated by agency staff. Participants (as well as the staff and key informants we interviewed) could have provided responses that they felt would reflect favorably upon themselves or their agencies. As well, agency staff are more likely to nominate participants who have stronger ties to program services and therefore may be more positive in their assessment of program effectiveness. Finally, system partner interviews reflect the perspectives of a limited number of stakeholders.

IV. Violence interruption

Overview of violence interruption services

Oakland Unite's violence interruption program is designed to disrupt cycles of violence. Violence interrupters conduct safety assessments in situations where conflict may lead to more violence. They also mediate to reduce the likelihood of retaliation by working with individuals and groups at highest risk of becoming victims or perpetrators. Individuals are referred by local hospitals, Oakland Unite, OPD executive notifications, and community connections. Violence interrupters conduct outreach in their assigned territories (East, West, Central Oakland, and citywide) and work shifts to provide coverage at all hours of the day, seven days a week. The objective is to immediately respond when a violent incident occurs; violence interrupters are expected to conduct safety assessments within an hour of receiving an executive notification from OPD. Violence interrupters also conduct bedside visits in the hospital or home visits after discharge, coordinate with emergency relocation staff when an individual's safety is at risk, and refer individuals to other services as appropriate.

The program follows similar deterrence-focused programs first pioneered through Chicago's CeaseFire program and later rechristened as Cure Violence. This program model has since been implemented in more than 25 U.S. cities, including New York City, Baltimore, New Orleans, and Kansas City. A central component to these programs is the profile of violence interrupters, who typically come from the communities they work in, have a history of involvement in the criminal justice system, and may have previous gang ties. Because they are perceived as "credible" or "culturally appropriate messengers," they are better positioned to influence high-risk individuals' norms on gun violence and retaliation than other community leaders or the police (Skogan et al. 2009; Picard-Fritsche and Cerniglia 2013).

A small body of evidence has accumulated on the impact of violence interruption programs on social norms and shooting behavior. The majority of studies present mixed results, with reductions in shootings or crime rates in select locations coexisting with increases in other locations (Butts et al. 2015). The earliest evidence, a Department of Justice-funded evaluation of Chicago's CeaseFire program, found a reduction in attempted and actual shootings in four of the seven intervention neighborhoods included in the analysis (Skogan et al. 2009). The evaluation of Baltimore's Safe Streets program indicated decreases in homicides in some neighborhoods and increases in others (Webster et al. 2012). An evaluation of the Save Our Streets program in the Crown Heights neighborhood in Brooklyn, New York found a 6 percent reduction in monthly shooting rates, whereas adjacent neighborhoods not receiving the program saw an increase (Picard-Fritsche and Cerniglia 2013).

Los Angeles' Gang Reduction and Youth Development (GRYD) program, which was independently designed and not directly transplanted from the Chicago CeaseFire model, also relies on violence interruption strategies. Regional program coordinators and community intervention workers perform rapid response crisis intervention to obtain information about a shooting incident and provide victim assistance services. An independent evaluation found GRYD services dramatically reduced levels of retaliatory violence relative to gang crimes committed outside of GRYD catchment areas (Brantingham et al. 2017).

In addition to analyzing data on homicides and shootings, evaluations have also addressed the extent to which violence interruption programs have influenced attitudes. Milam et al. (2016) examine whether

Baltimore's Safe Streets program shifted high-risk men's norms on gun violence by surveying their responses to hypothetical situations in which violent responses might be deemed acceptable or appropriate. They found that youth in the intervention area grew less likely to believe violent conflict resolution methods were appropriate, but the study also found that attitudes toward violence also improved in the control areas.

In the remainder of this chapter, we describe our findings from the implementation of violence interruption services and the results of event study models examining the arrest and victimization outcomes of service participants and individuals in their co-offending networks. We offer recommendations for strengthening violence interruption services in the last section of this chapter.

Implementation findings

Based on a comprehensive review of 757 executive notification email threads shared with the study team, we find that violence interrupters followed up over email in response to 94 percent of incidents assigned to them.¹⁰ The executive notification threads encompassed 321 total unique incidents that were addressed in 2018; of these, 274 were assigned to a violence interrupter (Table IV.1). Incidents communicated by OPD to the violence interruption team may not result in assigning a specific interrupter if the victim walks into the hospital and leaves before identifiable information can be collected and shared. Given the frequency of shooting incidents, hospital walk-ins are more difficult to trace back to a specific shooting incident. In such cases, violence interrupters are directed to generally "be aware" but are not assigned to the incident. Of incidents assigned to violence interrupters, only 6 percent do not include a paper trail indicating that a violence interrupter would be involved in finding the victim or the victim's family and friends.

Table IV.1. Outcomes reported in executive notifications from 2018

Executive notification thread outcome	Number	Percentage of assigned incidents
Assigned to VI	274	100%
VI followed up with email response	258	94%
VI reported retaliatory threat rating	91	33%
VI reported low retaliatory threat rating	75	27%
VI reported medium-high retaliatory threat rating	16	6%
VI reported meeting family/friend of victim	25	9%
VI reported meeting victim	28	10%
VI reported insufficient information to locate victim	62	23%
Total unique incidents	321	--

Source: Mathematica calculations using all 2018 executive notification emails shared by Oakland Unite.

Note: VI = violence interrupter.

In most cases, violence interrupters replied to email threads numerous times with updates on their outreach efforts. Email chains frequently began with an initial assessment from the scene of the shooting and were followed by email updates in the days following the shooting as violence interrupters contacted community members and gathered more information. Although the information shared throughout the email threads

¹⁰ Incidents were frequently addressed over multiple email threads, hence a greater number of email threads than distinct incidents. Eleven notifications shared with the study team for 2018 were dropped from the analysis because they were deemed irrelevant to a violent incident. There were 34 email notifications lacking a CAD number; the study team treated each as a distinct incident in the tabulations presented above.

varied by incident, it typically included whether a violence interrupter made contact with individuals involved in an incident or affiliated with the victim, as well as an assessment of the potential risk of retaliation. Retaliation risk levels, rated low to high, influence the amount of resources Oakland Unite devotes to mediating an incident. At the highest level of risk, all interrupters and outreach staff are expected to aid in response to the incident. At lower retaliation threat levels, incidents remain region specific, with the area interrupter and area team leader handling the response. When violence interrupters were unable to gather sufficient information to assess the retaliatory risk, even after multiple days of following up with community contacts, they would note this over email. In 62 of the 274 incidents assigned to violence interrupters (23 percent), interrupters reported not being able to locate the victim(s) associated with the executive notification (Table IV.1).

In 55 percent of incidents, a violence interrupter explicitly concluded the email thread by either providing his or her retaliation threat risk assessment or stating that insufficient information was available to locate the victim. The formality and finality of these conclusions varied. For example, some emails clearly specified that no further information about the incident would be provided over email in the opening text of "Update and conclusion." Such emails either reported the violence interrupter's risk assessment for retaliation or indicated that his or her efforts in finding the victim were inconclusive. For incidents whose retaliation risk was not deemed low, communication about how to respond to the victim's needs would have shifted to other communication formats, including the weekly strategy meetings, phone calls, or in-person meetings with relevant program staff. However, over time, this convention of emailing a clear closure to violence interruption activities faded, and conclusion emails were shared less frequently. Therefore, we underscore that information available in executive notifications does not comprehensively account for all violence interruption activities provided to the shooting victim, nor all information shared between violence interruption and other strategy partners.

Violence interrupters have fostered trusting relationships with the communities they serve, enabling them to quickly and actively respond to incidents of gun violence. Violence interrupters' extensive community networks allow them to leverage their ties to approach mediation "from all angles," including friends, family, and community leaders.¹¹ As a result of these long-standing community relationships, violence interrupters can learn quickly about an incident from multiple perspectives. When a shooting incident occurs, violence interrupters may even find out about it from community connections before receiving an executive notification from OPD. One violence interrupter estimated that "80 percent of the time we get info from the streets before we actually make contact with the victims." At the same time, violence interrupters frequently responded to executive notifications by "tapping into a few contacts in the area." Obtaining information "from the street" enables violence interrupters to "get to the root of the problem" more quickly, which is a critical tool in averting subsequent violence.

¹¹ In addition to Youth ALIVE!'s violence interrupters, CYO's violence reduction coordinators and the Oakland Unite violence prevention network coordinator have developed similar relationships with community members, and the descriptions of how violence interrupters promote prevention apply to them as well.

Generally, people are aware that I'm a violence interrupter through word of mouth [from] when I'm in the neighborhood and help out with food drives and other community events... I know a lot of the kids in the community who are now adults. I know their families and their attitudes. Because of this, I know how to talk and relate to them, and they know how to relate to me.

-Violence interrupter

OPD and Oakland Unite maintain an intentional separation, as any perceived partnership between the two could erode the community trust that Oakland Unite and grantee agencies have carefully developed.

Key leaders from Oakland Unite communicate informally with OPD, as often as multiple times a day, about violent activity in Oakland neighborhoods. Oakland Unite's violence prevention network coordinator then discusses this information with violence interrupters, who determine whether it corroborates what they already know about what is happening in neighborhoods. This information helps violence interrupters focus their efforts and assess potential risks to their personal safety.

At the same time, OPD and Oakland Unite have diligently maintained separation in their roles, with information flowing only from OPD to Oakland Unite. The roles were designed this way in light of the mutual understanding that "when [violence interrupters are] in the streets, they can't be viewed as agents of the police or de facto cops with the population they serve." As one violence interrupter explained, "We have to enter neighborhoods with very little protection. We're going off of our good name ... some folks see us and don't like the work we do because they might think we're involved with the police, so our safety is a big concern." One staff person also noted, "If OPD gets involved early, we back off because we don't want the lines to be blurred" between violence prevention work and police work. Community members call upon violence interrupters to help mediate tensions that can lead to violence specifically because they trust the violence interrupters to help resolve the conflict without involving police. One stakeholder described how Oakland needs community-based violence prevention because of "a distrust in law enforcement." These sentiments echo family member and survivor feedback from a study of stakeholder perspectives of Oakland homicide and shooting scene response in 2017 (Janetta et al. 2019). Although family members and survivors had a mix of positive and negative interactions with police, experiences such as uncaring behavior from officers, a feeling of being interrogated at the scene or at the hospital, and police engaging in enforcement activities that appear unrelated to the shooting crime can all contribute to distrust.

Violence interrupters work to engage individuals on both sides of a shooting to effectively assess and mediate the potential for further violence. Accurately assessing the risk of retaliation requires having meaningful details about the shooting incident that are best learned from the individuals involved. Violence interrupters do not focus solely on the victims' side of an incident. In one email thread in response to an executive notification, a violence interrupter provided an update that "the victim's side is on freeze and [I'm] working on the other side now." Violence interrupters also try to gain information from close associates of those involved. Violence interrupters reported engaging directly with the victim or the victim's close associates in 19 percent of the incidents that appeared in the 2018 executive notifications (Table IV.1). Aside from a victim's friends, the most common relatives of a victim that interrupters had contact with were mothers, aunts, and partners. Based on the 2018 executive notifications, violence interrupters provided an assessment of retaliation risk in 33 percent of cases (Table IV.1). This rate was more than twice as high (63 percent) among the 53 incidents where violence interrupters reported meeting the victim or close

associates. The vast majority of the 89 rated incidents were deemed as having low to medium threat of retaliation; only 16 percent of incidents were assigned a medium or high retaliation level (Table IV.1).


We offer people support, whether it's dealing with the victims or the shooters. We try and get in contact with the shooter, talk with them, and try to move them toward case management. We tell them that their actions will cause a lot of hurt to their family members, and we offer them a way to change. Sometimes it takes months or years to solidify these relationships.

-Violence interrupter

Violence interrupters use their own judgment, along with input from multiple sources, in assessing whether an incident is likely to escalate. For example, one violence interrupter commented, "Sometimes you can even tell by the gunshot wounds whether they really meant to kill this person or it was just a warning." If the violence interrupter believes that the risk of further harm to the victim is high, they will coordinate with relocation staff to make sure the victim can be safely housed after he or she leaves the hospital.

Violence interrupters are among the first responders to gun violence but can also remain in contact with victims for months or longer to prevent further violence. Immediately after a shooting incident, violence interrupters assess the victim's needs during a bedside visit or over the phone if an in-person visit is not possible. As one violence interrupter explained, they treat each case as high risk until they gather more information and understand the circumstances around the incident as quickly as they can. This urgency is necessary so that appropriate steps are taken to keep the initial incident from escalating.

Violence interrupters have 72 hours to assess and "conclude" a case, but this does not mean that contact ends at this time. Continued contact depends on the situation and judgment of the violence interrupter about whether there is a risk of future violence. Multiple violence interrupters mentioned informally checking in with past cases, even several months after an incident. Communication is bidirectional, as individuals may reach out to a violence interrupter with whom they have developed a relationship to provide an update on how they are doing. Violence interrupters log details about incidents into an electronic tracking system that is maintained within Youth ALIVE!, including pertinent information such as location and follow-up and mediation activities. According to one staff member, keeping these logs up to date is a challenge for violence interrupters who are "busy 24/7" and have limited time to enter records.

Violence interrupters log details about incidents into a tracking system that also alerts them when individuals are associated with multiple incidents over time.

Collaboration with other Oakland Unite strategies and service providers helps violence interrupters connect with individuals and refer them to appropriate wraparound supports. Contacting members of the community who are affected by violence is only a first step toward engaging them in support services and violence prevention. Violence interrupters work with other programs in the shooting and homicide response sub-strategy, but also more broadly across other Oakland Unite strategies and service providers. For example, one violence interrupter noted that Communities United for Restorative Youth Justice, which is part of Oakland Unite's community healing and youth and adult lift coaching strategies, also has ties within

the community; staff there may have a prior relationship with a victim or victim's family and can reach out to them first. Such contacts were reflected in the 2018 executive notification email threads. Staff members from other agencies and programs within the sub-strategy, including CYO and Caught in the Crossfire, often entered the conversation to ask for or share relevant information. Violence interrupters also refer individuals to Oakland Unite's life coaching sub-strategy if the individual is interested in making a change in his or her life's direction. By participating in orientations with different providers, violence interrupters learn about what other service providers offer, helping them make appropriate referrals for the members of the community they encounter in their work.

A stakeholder remarked that one leader of the sub-strategy has an especially prominent standing in the community, so victims sometimes ask for him by name when there is a need for a violence interrupter to consult on next steps for safety and mediation. This individual's "connections with services and family and the community are invaluable" for helping victims who need support to take advantage of available services. However, the stakeholder noted that just one person could not meet the needs of everyone affected by violence throughout the city.

In addition to formal referral pathways, community relationships lead to word-of-mouth referrals for violence interrupters to help prevent or mediate conflict. Much of what violence interrupters do is work to prevent acts of violence, rather than just react to them. This is possible because of the trust that violence interrupters have established within their communities over the years. Requests can come from anywhere, such as schoolteachers and principals, members of City Council, family members who are concerned about their loved ones, and mental health service providers. Though violence interrupters could not quantify the volume of community-based referrals relative to that of executive notifications, one estimated that community referrals are received "almost daily." When they receive referrals about conflict in the community, which may not have led to violence yet, violence interrupters assess the situation by gathering information from all sides and then determine next steps based on the need for mediation—similar to how they address the shooting conflicts from executive notifications.

We once had a guy who broke into a car and stole the radio. People knew who took the radio and were going to do something to him. We assessed the situation. The guy had already sold the radio so we couldn't recover it, but we came up with the money to pay the victim and had to make sure there would be no retaliation from either side. We did a couple follow-ups with both parties to make sure everything was good in the neighborhood. We had to make sure the guy understood that he was in danger if he continued to do this to these people.

-Violence interrupter

Effective violence interrupters exhibit a unique combination of skills and experience that includes history with their community, "street smarts," availability to community members, and consistent follow-through. Several violence interrupters expressed that "you really have to come from and know the streets" in order to be an effective violence interrupter. That translates into a variety of qualifications, such as understanding the background of the community and, consequently, the importance of honesty and following through on your word, knowing how to tell when someone is being truthful, and being someone to whom members of the community can relate. Without gaining the respect of community members as a whole, violence interrupters' ability to mediate conflict would be hampered.

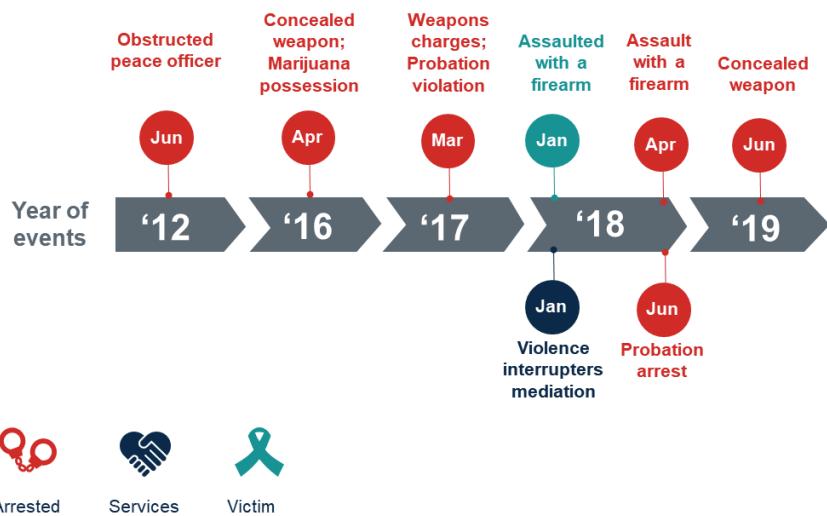
Being in the streets and in the system in a negative way was the experience I had that was relevant. It helped me to [...] understand the reasoning for a lot of the violence, and to know how to resolve a lot of the violence.

-Violence interrupter

Personal timeline of an individual offered violence interruption services

Although 80 percent of individuals we identify as having had contact with violence interrupters avoid further involvement in the justice system over the two years following their victimization (Figure X.1), this is not always the case. The timeline below provides an illustrative chronology of an actual individual who, after being shot in January 2018, had contact with violence interruption services and declined further assistance. Before the shooting incident, this individual had a history with the criminal justice system spanning nearly six years. In 2012, he was arrested for obstructing a peace officer. After four years without incident, the severity of his arrests escalated, and he was charged with having a concealed weapon and marijuana possession in 2016, and possession of large capacity ammunition in violation of the terms of his probation in 2017.

In January 2018, at around 1:45 a.m. one night, he was shot. The police found him at the scene of the crime with a gunshot wound. Within 30 minutes of receiving the OPD executive notification, a violence interrupter was already on the way to make contact with the victim. The interrupter made a bedside visit at Highland Hospital and called in additional help, who then made contact with the victim's family. The victim declined further services. The interrupter sent out an "Update" email four days later to all individuals who receive executive notification updates, noting a high retaliatory risk and stating that "All VIs [violence interrupters] are on deck with any and all resources to help stop the next act." In this case, the violence interruption mediation did not deter further violence. Three months later, in April 2018, he was arrested for assault with a firearm. Three months after that (in June 2018), and again a year later, he was arrested for possession of a firearm.



Consistency and dedication to the work are also key characteristics of effective violence interrupters. This includes dedication to the communities they serve, as one violence interrupter explained how he now receives many more requests to resolve conflicts than he did when starting the job. He attributes this to

multiple years of developing relationships in the community. Violence interrupters are always available to the communities they serve, as the work is "not just a job." For instance, to be seen as the person who can help resolve conflict, one violence interrupter explained how he would show up every time a shooting took place to raise awareness about the work of violence interruption. Multiple participants stressed how the availability of violence interrupters and their follow-through were also important during difficult times.

It's a more personal thing when people have that connection of what they see in their line of work. They're very compassionate. Giving a phone call to someone is just a job. [Violence interrupters] actually come out. They actually do what they say. They help you, come to the hospital, build the groups, build the support. They don't just say it, they actually care.

-Participant

[The violence interrupter provided] moral support, guidance, a shoulder to lean on regardless of the hours. They were just there whenever I needed them. No ghosting, standbys or issues. It was a push, effort, [and] they treated me like we were all family. [They] gave us hope, positive vibes, and good attitudes about the situation [and] helped me not [feel] distress.

-Participant

Violence interrupters' unique relationships within their communities make them invaluable assets to the work of violence prevention, but this also means that one individual cannot easily take the place of another. When executive notifications have been sent out involving a region assigned to a violence interrupter who is off duty, other violence interrupters step in to cover where possible. Often, however, the off-duty violence interrupter will also respond and promise to look into the matter and report back the same day. Violence interrupters understand that they are each individually best equipped to respond to an incident in their community, and given the high-stakes nature of the work and their high level of commitment, they do not want to let an issue rise unchecked.

Without the relationships that violence interrupters have established with their community, they would not be able to mediate between groups as effectively; their credibility in one location is not transferrable to another. For example, in response to an incident that involved individuals from both Oakland and San Francisco, a violence interrupter reported over email that he or she did not "have a handle on this matter due to no existing relationships with friends and family." These relationships were often deeply personal, and violence interrupters assigned to a case would at times "step down" if another team member knew the victim or victim's family closely. As one staff person observed, "People in the community see that it's folks from the community letting them know that things need to change." This message has resonated with participants, who appreciate how Oakland Unite services take a broad view of the needs of the community:

They really get to the root of the hurt, of "How can we change as a community?" They let you know you're not alone. It's like they feel it too, what you're going through. [In meetings with other family members,] it's not only about violence at these meetings—it's about what's happening in the world, period. It's not only about you losing a loved one, it's about education and giving knowledge for people who are in the dark. I like the impact it has made with a lot of people—it's not a program that just dies out after some time.

-Participant

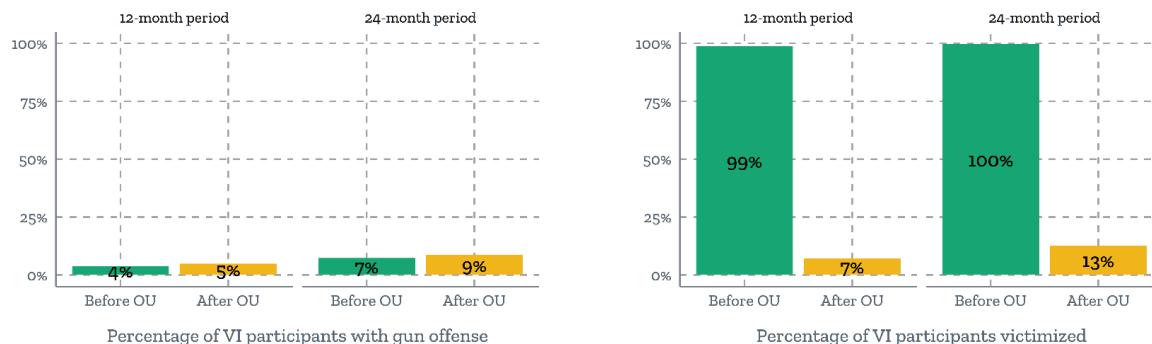
Outcome findings

The violence interruption program aims to reduce gun violence in Oakland by mediating between individuals and groups at high risk of becoming victims or perpetrators, thus disrupting cycles of violence. Because the program responds to all shooting incidents in Oakland, assessing the risk of retaliation and intervening accordingly, there is no control group of incidents that can be used to estimate the program's impacts. Rather, we examine the arrest and victimization outcomes of individuals associated with incidents appearing in executive notifications before and after the instigating shooting incident to understand whether retaliation is avoided, as would be expected following violence interruption.¹²

Participants' rates of arrest for gun offenses remain low both before and after violence interruption (Figure IV.1). This pattern is similar when examining arrests for violent offenses more broadly (see Appendix C). If victims chose to retaliate, we might expect their rates of arrest for gun or violent offenses to increase after their initial victimization incident, but this is not the case.

Participants' rates of violent victimization are dramatically lower after violence interruption (Figure IV.1). Since our sample of participants is identified through their OPD victimization records, they were recorded nearly universally as victims of violent crime in the time preceding initial engagement with violence interruption. Following violence interruption, a comparatively small share of participants were revictimized. Over a two-year follow-up period, 13 percent of participants were the victims of at least one violent crime, which is a near doubling of the 7 percent total for the one-year follow-up period.

Figure IV.1. Gun offense and violent victimization rates before and after violence interruption



Source: Mathematica calculations using data from Cityspan and OPD.

Note: OU = Oakland Unite; VI = violence interruption.

Victimization rates before receiving services are approximately 100 percent because the sample of violence interruption participants consists only of individuals who reported a victimization incident to the OPD. Actual victimization rates in the post-violence interruption periods are likely to be higher than indicated because of underreporting of victimization incidents to the police. In all figures, the "After OU" period begins the first calendar month after initial contact with Oakland Unite. Since OPD data are available only through December 2019, the 12-month period sample excludes participants starting violence interruption services in January 2019 or later, and the 24-month period sample analogously applies a January 2018 cutoff. The sample size included in the 12-month period is 594, and 301 for the 24-month period.

The raw percentages reported in Figure IV.1 do not provide insight as to the specific month when events occur relative to the initiating shooting incident, and they weight all participants equally regardless of the

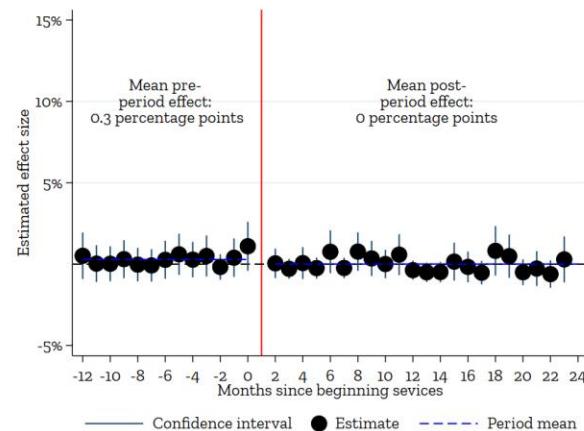
¹² So that we can observe outcome data over a 24-month follow-up period, the analysis includes only individuals associated with an executive notification before January 2018.

number of outcomes experienced over the designated time period. To provide more granular results, we employ an event study regression framework as described in Chapter III. These results also adjust for differences across participants in their baseline levels of arrests and victimization and account for seasonal and long-term crime trends. In Figure IV.2, we plot the monthly average likelihood of being arrested for a gun offense, and in Figure IV.3 the monthly average likelihood of being a victim of a violent crime, from event study models. All estimates are relative to the first month after the incident initiating violence interruption, which serves as the reference point ("base rate") and takes the value of 0. These estimates can be interpreted as the percentage point changes in the probability that a participant will experience the indicated outcome relative to month 0. Thus, if the program was effective in reducing participants' likelihood of engaging in or becoming a victim of violence, we would expect the black points in the figure that are to the right of the red vertical line to be negative and statistically significant. This would mean that after having contact with a violence interrupter, the percentage of participants who experienced an outcome (i.e., an arrest, or victimization incident) decreased to levels lower than what were observed in time periods prior to receiving services. On the other hand, if participants were to engage in retaliatory violence, we would expect to see a spike in their relative likelihood of being arrested for gun or violent offenses in the months immediately following the precipitating incident. In other words, the points just to the right of the red line would be positive and statistically significant.

After a shooting incident was referred to violence interrupters, victims avoided

retaliation over the following two-year period. The estimated effect sizes on the monthly likelihood of being arrested for an offense involving a gun are similarly low in the 24 months after the precipitating incident leading to an executive notification, compared to the levels observed in the pre-period (Figure IV.1). Victims' likelihood of being arrested for a gun offense remained the same after the initial shooting incident, suggesting that they did not engage in retaliatory violence (even if they did not necessarily become less likely to be arrested for a gun offense than before).

Figure IV.2. Event study results for violence interruption participation on gun offense outcomes

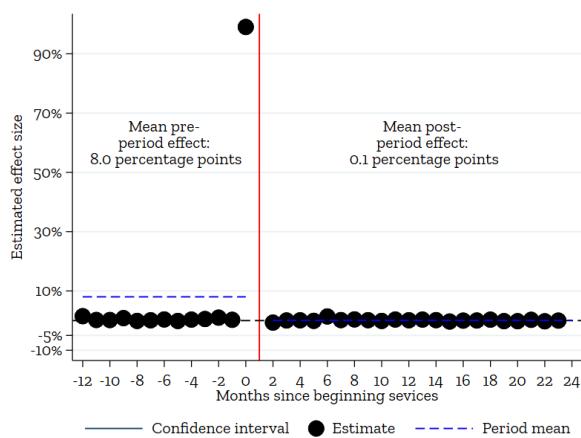


Source: Mathematica calculations using data from OPD and Oakland Unite.

Note: Values represent month-specific, estimated effect sizes from an event study regression model. The sample is restricted to the $N = 301$ individuals observed for at least 24 months following the initial receipt of violence interruption mediation, based on OPD victim records linked to executive notifications shared by Oakland Unite. The dependent variable is a binary variable for whether the participant was arrested for a gun offense in the specified month. For visual clarity, time is expressed relative to the first calendar month after the start of services ($t = 1$). For example, June 2017 is counted as month 0 for a participant receiving violence interruption services on June 18, 2017, and July 2017 is considered as month 1. The event study regression model includes person, year, and month-of-year fixed effects. Standard errors are clustered at the person level, and confidence intervals are reported at the 95 percent level.

Aside from no noticeable difference in the monthly likelihood of arrest before and after the program, there is no obvious temporal pattern in pre-service arrests for gun offenses, aside from a brief peak in the same month that violence interruption occurs. Therefore, relative to when a participant became a shooting victim and violence interrupters responded, there is not a discrete time period when arrests for gun offenses were more pronounced. We observe similar outcomes when examining violent offenses and arrests of any type, suggesting that violence interruption does not have a dramatic effect on shifting participants' involvement in crime, positively or negatively, relative to their levels before the precipitating incident occurred. However, the fact that there was no spike in gun or violent offenses afterwards suggests that violence interruption may have contributed to participants avoiding retaliation (see Appendix C).

Figure IV.3. Event study results for violence interruption participation on victimization outcomes



Source: Mathematica calculations using data from OPD and Oakland Unite.

Note: Values represent month-specific, estimated effect sizes from an event study regression model. The sample is restricted to the $N = 301$ individuals observed for at least 24 months following the initial receipt of violence interruption mediation, based on OPD victim records linked to executive notifications shared by Oakland Unite. The dependent variable is a binary variable for whether the participant was the victim of one or more violent crimes in the specified month. For visual clarity, time is expressed relative to the first calendar month after the start of services ($t = 1$). For example, June 2017 is counted as month 0 for a participant receiving violence interruption services on June 18, 2017, and July 2017 is considered as month 1. The event study regression model includes person, year, and month-of-year fixed effects. Standard errors are clustered at the person level, and confidence intervals are reported at the 95 percent level.

effect size for both periods is a 0 percentage point difference against the base gun offense rate of month 1. At the same time, the absence of a post-mediation peak to the right of the red line indicates that there is not a spike in retaliatory action by co-arrestees in response to the instigating shooting. The most noticeable

Over the two years after violence interrupters

responded to a shooting incident, victims

avoided re-injury. The victimization rates of participants following violence interruption are distinctly lower than the levels observed immediately before because of the pronounced peak in month 0, as shown in Figure IV.3. Aside from that specific month, the likelihood that an individual will be a victim of a violent crime in each month subsequent to the original incident is similar to the probability in the pre-service months. We do not observe elevated revictimization rates in any time period after violence interruption occurs. In other words, these individuals were largely able to avoid re-injury over the 24 months after violence interrupters received an executive notification.

Victims of a precipitating shooting incident are not the only people who might engage in retaliatory action, which may also be undertaken by the victim's friends or associates. To examine the outcomes of victims' likely associates, we identified the individuals that victims had been previously arrested with, and for the same UCR violations, according to OPD records.

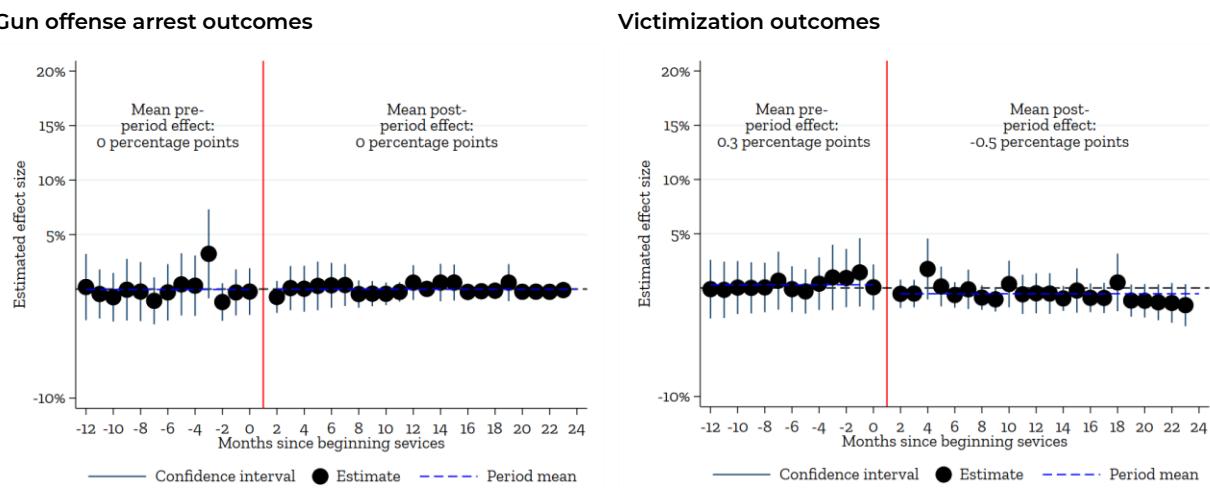
Victims' past co-offenders also avoid engaging in

retaliatory violence. The left panel of Figure IV.4 reports the monthly marginal arrest rates for gun offenses for co-arrestees relative to when the victim's shooting incident occurred. The mean

feature of this figure is a small peak in arrests for gun offenses three months before the potential mediation, which may or may not be connected to the shooting incident that led to an executive notification. However, we do not see a corroborating pattern in the event study results for co-offenders' violent crime rates in this month (see right panel of Appendix C.3). This suggests that the increase in their gun offenses is not evidence of an instigating act of violence, as a shooting would result in an arrest for both a gun offense and a violent offense. While we do not observe a change in a co-offender's likelihood of being arrested for gun offenses following a mediation, we do find a downward trend in overall arrest rates for any offense that also begins in the third month (month -3) preceding the violent incident (left panel of Appendix C.3), as well as an overall reduction in violent offenses.

Co-offenders may respond to violence interrupters' mediation activities if these included not only the victim but also the victim's peers, or if the victim shared the message of nonretaliation with peers. However, because mediations always coincide with a shooting incident, we cannot disentangle whether any observed change in a co-offender's criminal activity is driven by the violence interrupters' intervention or is due to a co-offender's peer being shot. Further, we cannot rule out the possibility that such reductions are due to these individuals spending a portion of that time in jail or prison and therefore not bring in a position to commit offenses.

Figure IV.4. Event study results for violence interruption participation on co-offenders' gun offense and victimization outcomes



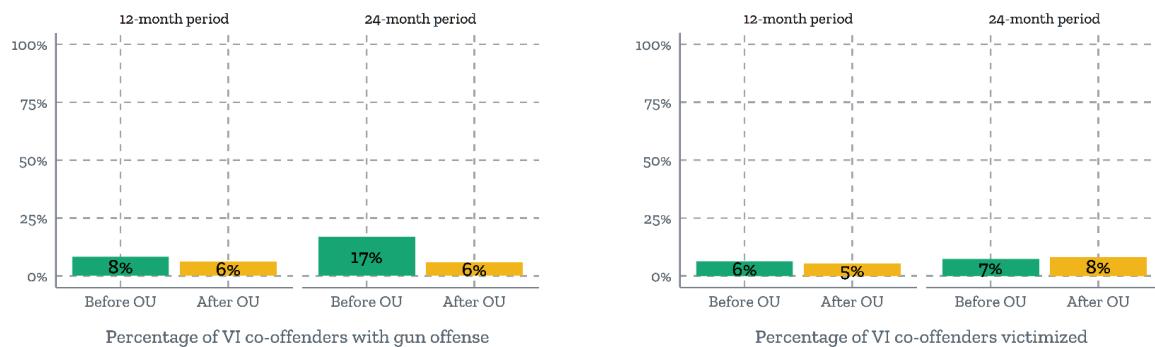
Source: Mathematica calculations using data from OPD and Oakland Unite.

Note: Values represent month-specific, estimated effect sizes from an event study regression model. The sample is restricted to $N = 136$ individuals in violence interruption participants' co-offender networks who are observed for at least 24 months following the initial receipt of violence interruption mediation, based on OPD victim records linked to executive notifications shared by Oakland Unite. The dependent variable is a binary variable for whether the individual was arrested for a gun offense (left panel) or was the victim of one or more violent crimes (right panel) in the specified month. For visual clarity, time is expressed relative to the first calendar month after the start of services ($t = 1$). For example, June 2017 is counted as month 0 for a participant receiving violence interruption services on June 18, 2017, and July 2017 is considered as month 1. The event study regression model includes person, year, and month-of-year fixed effects. Standard errors are clustered at the person level, and confidence intervals are reported at the 95 percent level.

Violence interruption appears to contribute to reductions in co-offenders' future victimization. In the right panel of Figure IV.4, we find suggestive evidence that violence interruption reduces co-offenders'

probability of being a victim of a violent crime, particularly in months 18–24 after a violence interrupter responds to a shooting incident involving a likely associate. Co-offenders have relatively low rates of victimization at baseline and continue to do so in the cumulative 24-month period following the potential mediation. Over this period, 8 percent of co-offenders were victims of violent crimes (Figure IV.5, right panel). This could occur as a result of interrupting cycles of retaliatory violence between groups.

Figure IV.5. Gun offense arrest and victimization rates among the co-offenders of violence interruption participants before and after receiving a mediation



Source: Mathematica calculations using data from Cityspan and OPD.

Note: OU = Oakland Unite, VI = violence interruption.

Actual victimization rates are likely to be higher than indicated because of underreporting of victimization incidents to the police. Time periods are based on the calendar month of a participant's initial contact with violence interruption services. The "After OU" period begins with and includes the first calendar month following initial contact. The individuals included in the 24-month period calculations are a subset of the individuals in the 12-month period sample. Since OPD data are available only through December 2019, the 12-month period sample excludes participants starting relocation support services in January 2019 or later, and the 24-month period sample analogously applies a January 2018 cutoff. The sample size included in the 12-month period is 242, and 136 for the 24-month period.

Recommendations for violence interruption services

- **Expand the breadth of preventative mediations and collaboration with community healing.** Relationships with community members are foundational to the work of violence interrupters. However, the need for their role as ambassadors to the community, mediators of conflict before and after violence occurs, and crisis responders may exceed their capacity. Multiple staff members described how violence interrupters were often called upon to mediate conflicts before they lead to violence, though it is not possible with the data available for this evaluation to quantify the level of need for this type of intervention. Additional investment in addressing conflicts before they lead to violence, and closer collaboration with Oakland Unite's community healing strategy, could allow prevention efforts to be farther reaching. For instance, expanding the staff who can mediate conflicts before they result in violence, and connecting them to the community-based violence reduction projects funded by the community healing strategy, could encourage those closest to violence to call on them to mediate before conflict leads to violence. Having newer staff shadow and work alongside violence interrupters who have developed these deep relationships in the community would enable them to develop the trust that is critical to their effectiveness in violence prevention.
- **Distribute roles and responsibilities so that key functions are shared among more than a few individuals.** Participants and stakeholders spoke positively of the sub-strategy, but they often were largely reflecting on their experiences with one individual whose history and work with violence prevention in Oakland

make his role as a mediator, case manager, and liaison to system partners outsized compared to other staff. Likewise, violence interrupters each have their own relationships and networks in their communities and are not substitutable for one another. For a sub-strategy based on relationships, history and experience are assets to the work. However, when relationships and responsibilities are consolidated under a few individuals, this can also present a risk to the implementation of the program.

- **Identify the most important elements shared in executive notification threads and systematically capture this information in a database.** The primary source of data for the evaluation of violence interruption has been executive notification emails. In 2018, email threads were decisively concluded with highlighted key information from the case, but this practice was discontinued. This practice could be reinstated and formalized outside of emails so that cases can be tracked systematically for both programmatic efforts and external evaluation. After identifying the most important elements of a case—such as the assessed risk of retaliation, whether violence interrupters were able to contact the victim, whether they worked with members of a victim's co-offending network, or whether the victim will engage in further services—violence interrupters could enter this information into a database.

Violence interrupters currently record key details about incidents and follow-up activities in an internal database, with identifying details to aid in programmatic efforts. However, tracking the key case elements in a database managed by Oakland Unite would allow these data to be used for evaluation purposes as well, while respecting program participants' confidentiality. The goal would be to track the response to each case, most likely identified by the CAD number, which is assigned by an OPD dispatcher and does not hold personally identifying information.

Similarly, the logs used to document group mediation meetings in Cityspan could be expanded. Currently, these logs include only participant counts and dates. To effectively evaluate the impact of these programs, it is necessary to track service provision and link participants and cases to other data sources.

V. Caught in the Crossfire

Overview of Caught in the Crossfire services

Caught in the Crossfire (CIC) intercepts victims of violence at a critical moment—when they are in the hospital following a gunshot, stabbing, or physical assault—and shifts their trajectory away from potential retaliation and further victimization. CIC is organized around supporting participants' emotional, mental, and social well-being through intensive outreach and case management services. The CIC program receives referrals from Highland Hospital, and less frequently from the University of California, San Francisco Benioff Children's Hospital Oakland and Eden Medical Center. As the model relies heavily on the critical moment directly following victimization, CIC staff aim to contact the victim within an hour of hospital referral and within 72 hours of the violent incident.

At the initial bedside visit, CIC intervention specialists aim to establish a degree of trust with the victim and assess the victim's immediate and long-term needs. Intervention specialists work closely with the violence interruption team at this stage to assess immediate physical safety needs, the threat of retaliation, and the potential for mediation, if relevant. Intervention specialists also partner with violence interrupters to develop a plan for victim safety following release from the hospital, which may include relocation services.

Victims who are identified as high risk and express interest in receiving services transition into case management services with an intervention specialist. Services prioritize males between ages 14 and 35. Individuals are to meet with their intervention specialist weekly, at a minimum, for the first three months of service. At the beginning of case management, participants and intervention specialists co-develop a service plan, which can include mental health services, counseling, employment support services, and, for female victims of gun violence, a support group. Intervention specialists guide participants through the various services they may receive both within Youth ALIVE! and through external partners, described below.

The impacts of CIC on re-injury and arrest outcomes have been previously evaluated, though in earlier years when the program had a narrower target population of 12- to 20-year-olds. Shibru et al. (2007) found that CIC recipients were less likely to be involved in the criminal justice system following their hospital release, relative to a control group. However, recipients' re-injury and rehospitalization rates were not distinguishable from the control group's. Becker et al. (2004) arrived at similar conclusions from monitoring outcomes for CIC participants from 1998 through 2001. A systematic review of emergency department-based violence prevention interventions offered similar conclusions. When examining evidence from programs in Chicago, Baltimore, and Milwaukee, those studies' small sample sizes and high attrition rates meant that effects on re-injury were suggestive but not conclusive (Snider and Lee 2009). Since these earlier evaluations, CIC has expanded services to older victims and gained nearly two more decades of experience, which could mean that the program's impacts today differ from those found in earlier evaluations.

There is evidence that re-injury is common for victims of violent crime—as high as 58 percent for some study populations (see Kramer et al. 2017). Re-injury rates vary dramatically in the literature, partly due to differences in how study populations are constructed. For example, 11 percent of violent injury victims treated in Florida hospitals were observed with a recurrent injury over a follow-up period of approximately two years (Kaufman et al. 2016), and Goins et al. (1992) observed prior violent injuries in 33 and 49 percent of two groups of surgical patients treated for wounds at D.C. General Hospital.

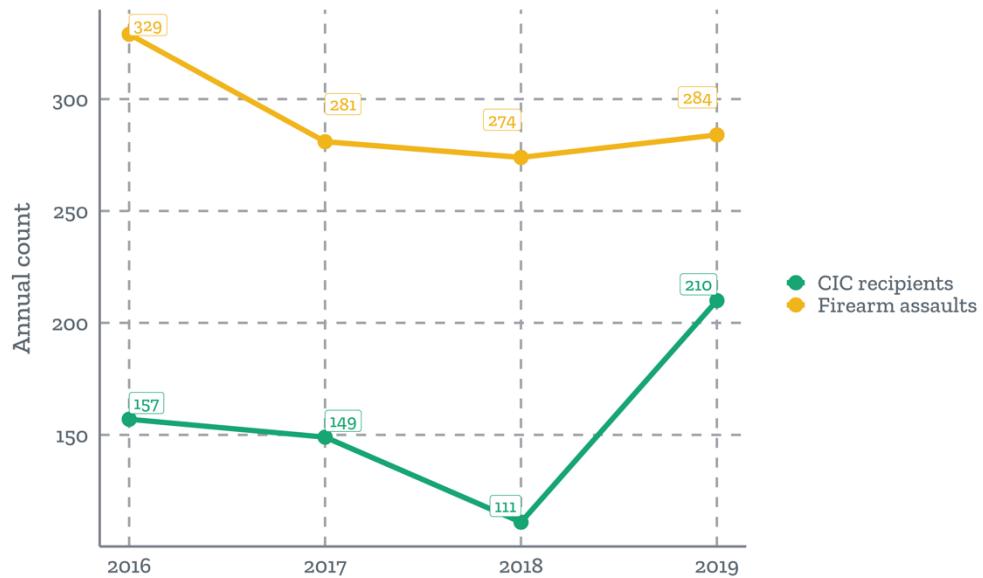
The extent to which programs like CIC—which provide violence deterrence efforts in the emergency department and are also known as hospital-based violence intervention programs (HVIPs)—reduce re-injury rates is a key determinant of their cost-effectiveness. Using injury recidivism data from CIC participants for 2005 through 2008, Chong et al. (2015) quantified the cost-effectiveness of an HVIP program by modeling the quality-adjusted life years gained by reducing re-injury; the authors conclude that HVIPs are cost-effective under most assumptions of re-injury rates and hospitalization costs. Purtle et al. (2013) reviewed the available evidence on HVIP cost-effectiveness, concluding that “hospital-based violence intervention programs save lives and money.” As these studies have primarily quantified the costs of gun violence accruing from hospitalization and health care delivery—not from the set of broader direct and indirect costs such as lost wages, psychological harm, and victims’ opportunity costs (see Waters et al. 2005)—they likely underestimate the societal benefits from subsequent violence reduction.

In the remainder of this chapter, we describe our findings from the implementation of CIC and the results of event study models examining the arrest and victimization outcomes of participants. We offer recommendations for strengthening CIC services in the last section of this chapter.

Implementation findings

The number of Caught in the Crossfire participants beginning services each year ranged from a low of 111 in 2018 to a high of 210 in 2019 (Figure V.1). Although the number of firearm assaults in Oakland was relatively stable from 2018 to 2019, the number of CIC recipients almost doubled that year.¹³

Figure V.1. Annual recipients of Caught in the Crossfire services

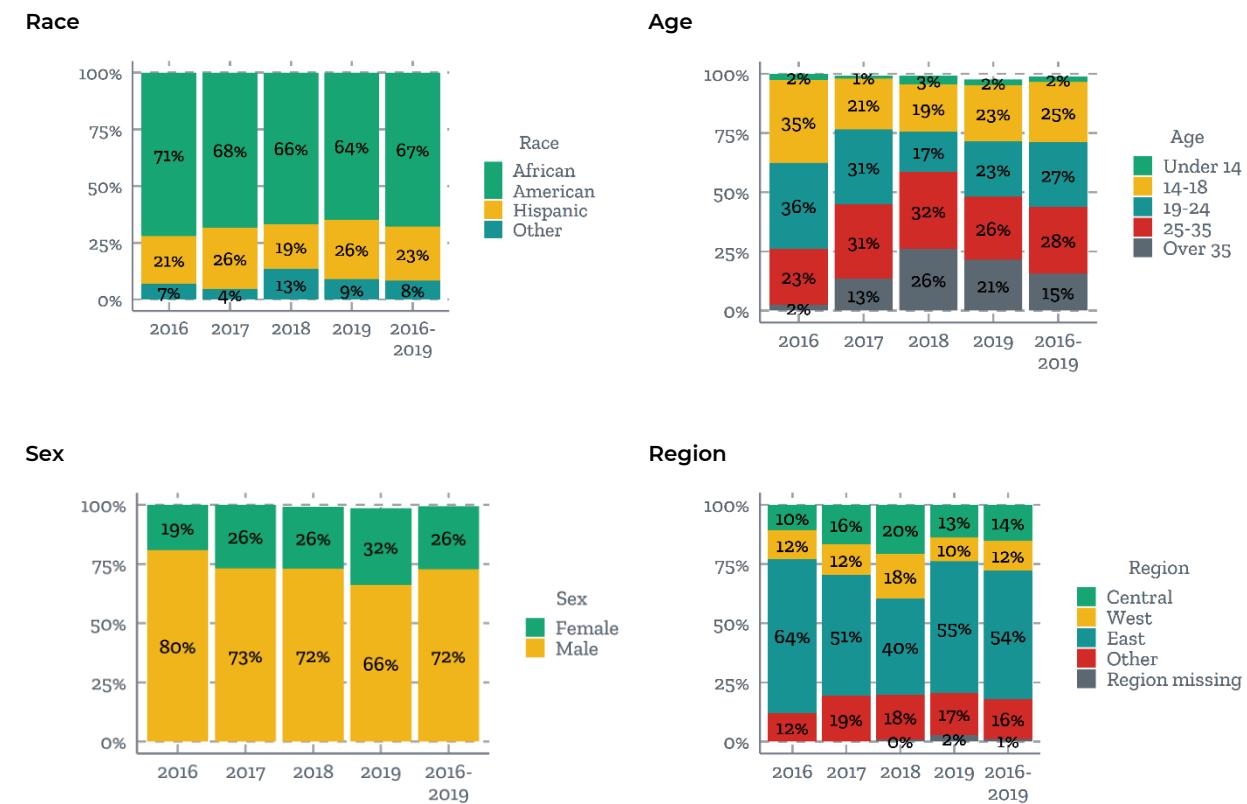


Source: Mathematica calculations using data from Cityspan and City of Oakland Department of Violence Prevention.

¹³ One potential explanation in the divergence between annual CIC recipient counts and the number of annual firearm assaults is that CIC recipients are not necessarily gunshot victims: Highland Hospital refers anyone who meets the criteria for services, which more broadly encompasses victims of violence.

Between 2016 and 2019, 68 percent of the 627 participants were African American, and 24 percent were Hispanic (Figure V.2). Individuals of other races made up a small proportion of all participants, peaking at 13 percent in 2018. Over the four-year evaluation period, 80 percent of participants were between the ages of 14 and 35 when starting CIC services, which is the targeted age range for the program. However, CIC also increasingly served older participants over time. Participants 25 and over made up one-quarter of all participants in 2016. By 2019, that share had increased to 47 percent. Participants 35 and older mostly drove this change, as their share increased from 2 to 21 percent. Although males consistently made up the overwhelming majority of service recipients, the share of female CIC participants increased each year between 2016 and 2019, from less than one-fifth in 2016 to 32 percent in 2019.

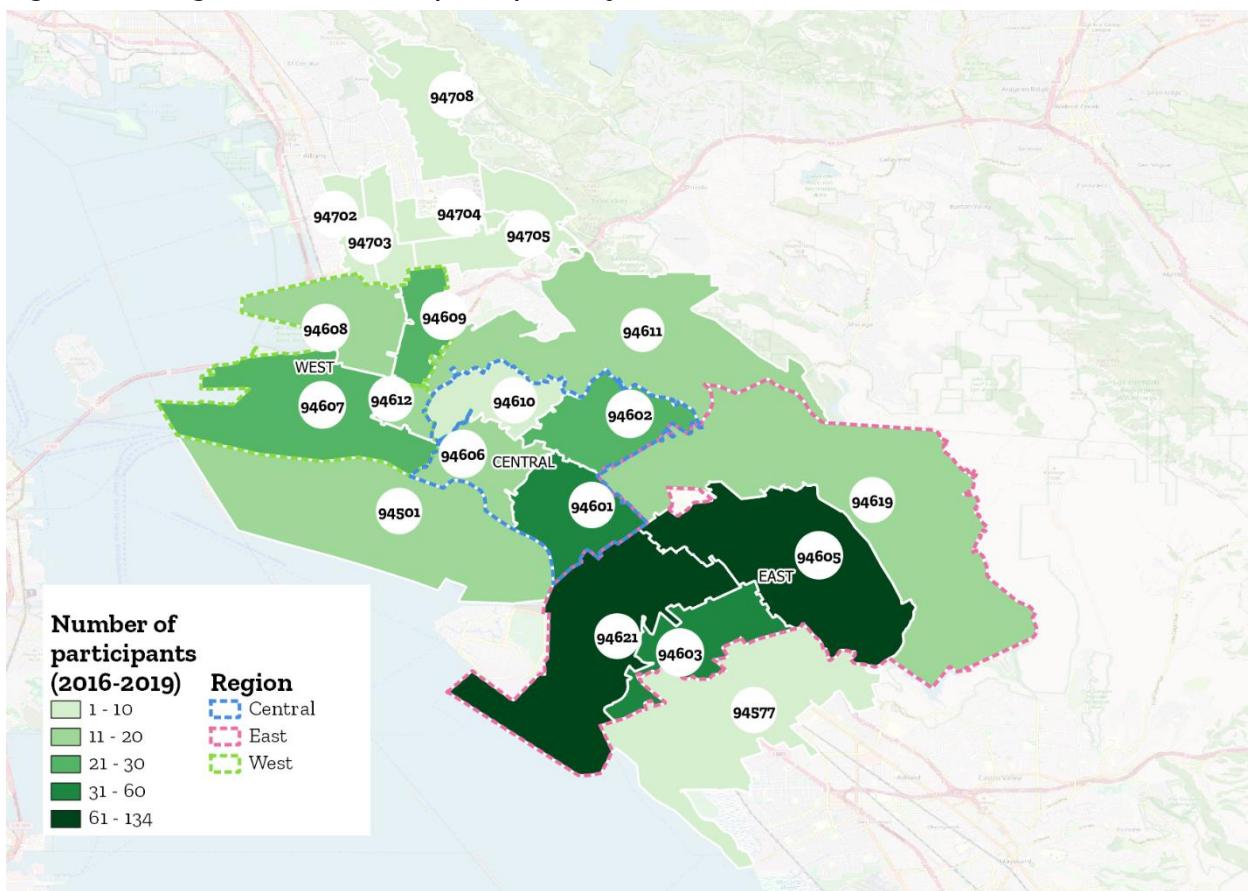
Figure V.2. Demographic characteristics of Caught in the Crossfire services recipients



Source: Mathematica calculations using data from Cityspan. Percentages may not add up to 100 percent due to rounding.

Most participants (54 percent) reported an East Oakland home residence, with Central and West Oakland accounting for 14 and 12 percent of service recipients, respectively (Figure V.2). As shown in Figure V.3, which disaggregates the number of total CIC participants by home ZIP code, the 94621 and 94605 ZIP codes alone (both located in East Oakland) accounted for 260 of the 627 total participants.

Figure V.3. Caught in the Crossfire participants by ZIP code



Source: Mathematica calculations using data from Cityspan. Spatial boundaries are from City of Oakland (2016) and U.S. Census Bureau (2019).

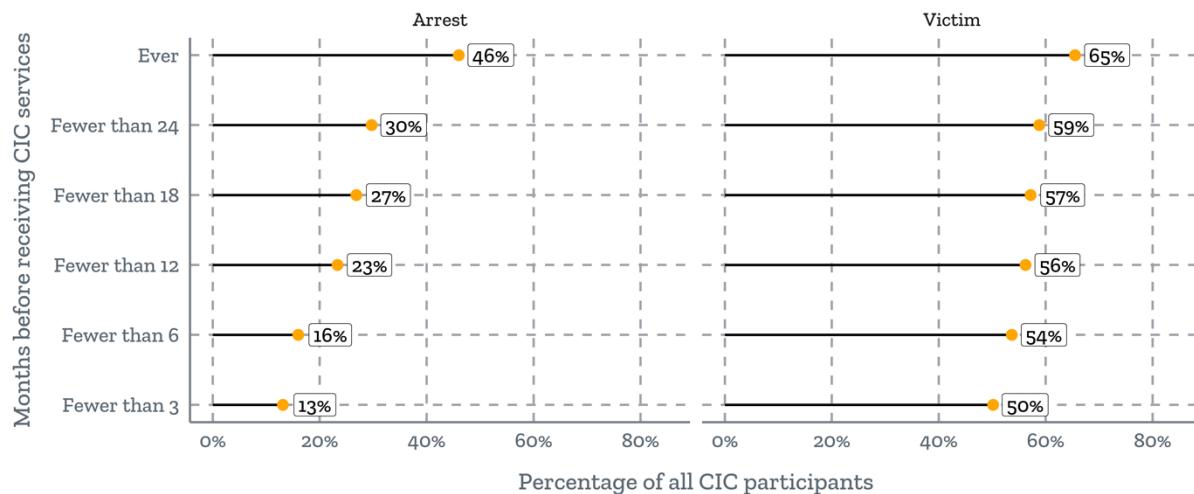
Note: Numbers denote the total count of individuals receiving CIC services between 2016 and 2019 who resided in a given ZIP code at the time that services were initiated. An additional 72 participants with home addresses outside the depicted area received services between January 1, 2016, and December 31, 2019.

Just under half (46 percent) of all CIC participants also had an arrest history prior to the start of services.

Unlike participants' victimization history, these arrests were not concentrated immediately before engaging in CIC services; only 13 percent of participants were arrested in the three months before starting services (Figure V.4). Around half of the CIC participants who were ever arrested had been arrested on a gun offense, as shown in Figure V.5. More participants were arrested for these offenses over a year before starting services than in the year leading to the start of CIC services.

Consistent with the CIC program model, most participants (65 percent) were victims of a violent crime reported to OPD before beginning services. Half of participants had a reported victimization incident in the three months preceding initial service (Figure V.4). The actual victimization rate is likely higher given that victimizations are frequently underreported to police and may also occur in other jurisdictions outside of OPD. Cityspan data reveal that 77 percent of participants were referred to CIC services through the hospital, presumably as they were recovering from a gunshot or stabbing wound.

Figure V.4. CIC recipients with arrest or victimization histories prior to start of services

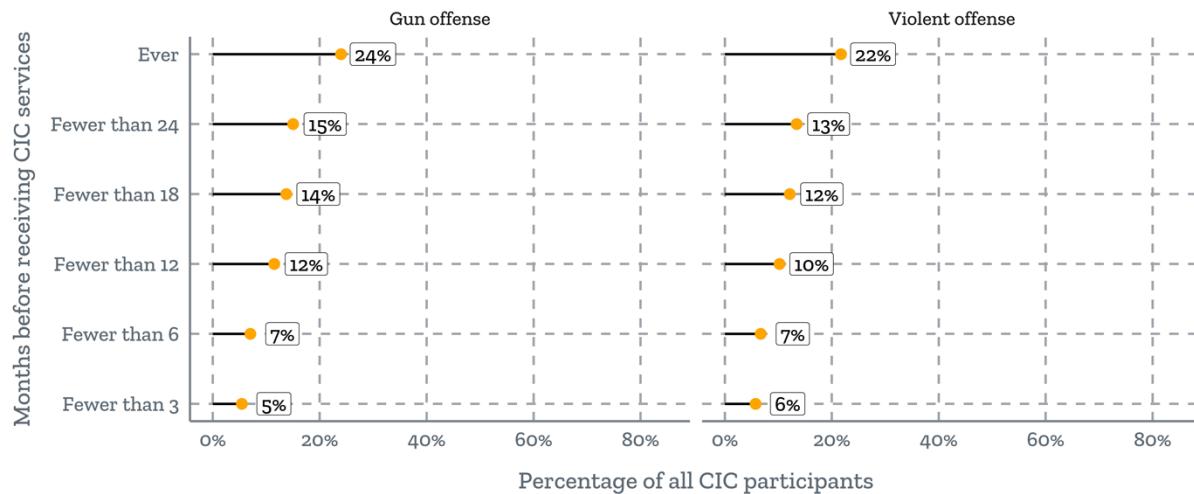


Source: Mathematica calculations using data from Cityspan and OPD.

Note: CIC = Caught in the Crossfire.

Actual victimization rates are likely to be higher than indicated because of underreporting of victimization incidents to the police. Time periods are determined according to the month and year in which the participant first had any service contact with the sub-strategy. These rates reflect data for the 50 percent of participants who consented to share personally identifiable information.

Figure V.5. CIC recipients with gun or violent offense histories prior to start of services



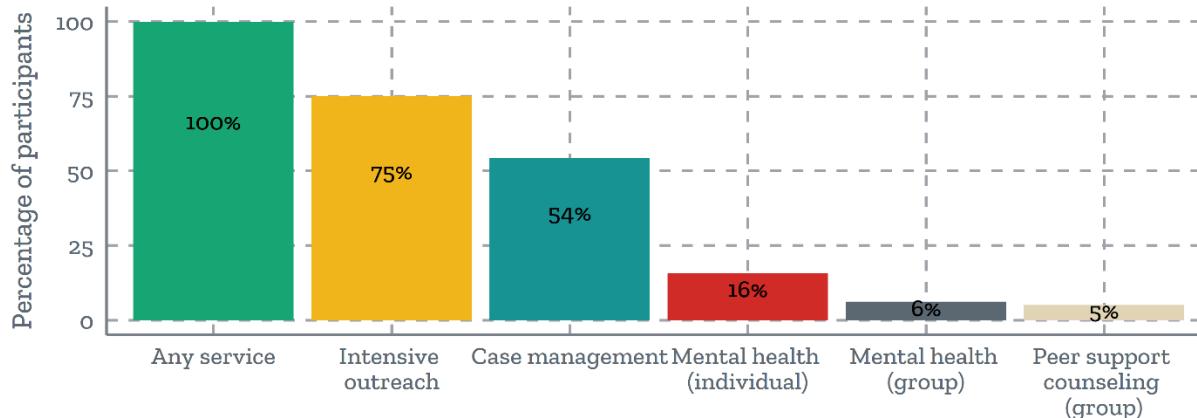
Source: Mathematica calculations using data from Cityspan and OPD.

Note: CIC = Caught in the Crossfire.

Time periods are determined according to the month and year in which the participant first had any service contact with the sub-strategy. These rates reflect data for the 50 percent of participants who consented to share personally identifiable information.

Whereas most CIC participants receive intensive outreach, only a subset receive case management and mental health supports (Figure V.6). Aside from intensive outreach, the next most common services provided were case management (54 percent) and individual mental health therapy (16 percent). Very few participants participated in group mental health therapy or peer support counseling. All participants receiving peer support counseling were women, and since women accounted for 26 percent of all CIC participants (Figure V.2), then approximately one in five women participating in CIC attended the women's support group.

Figure V.6. Percentage of participants receiving each type of service provided through CIC



Source: Mathematica calculations using data from Cityspan.

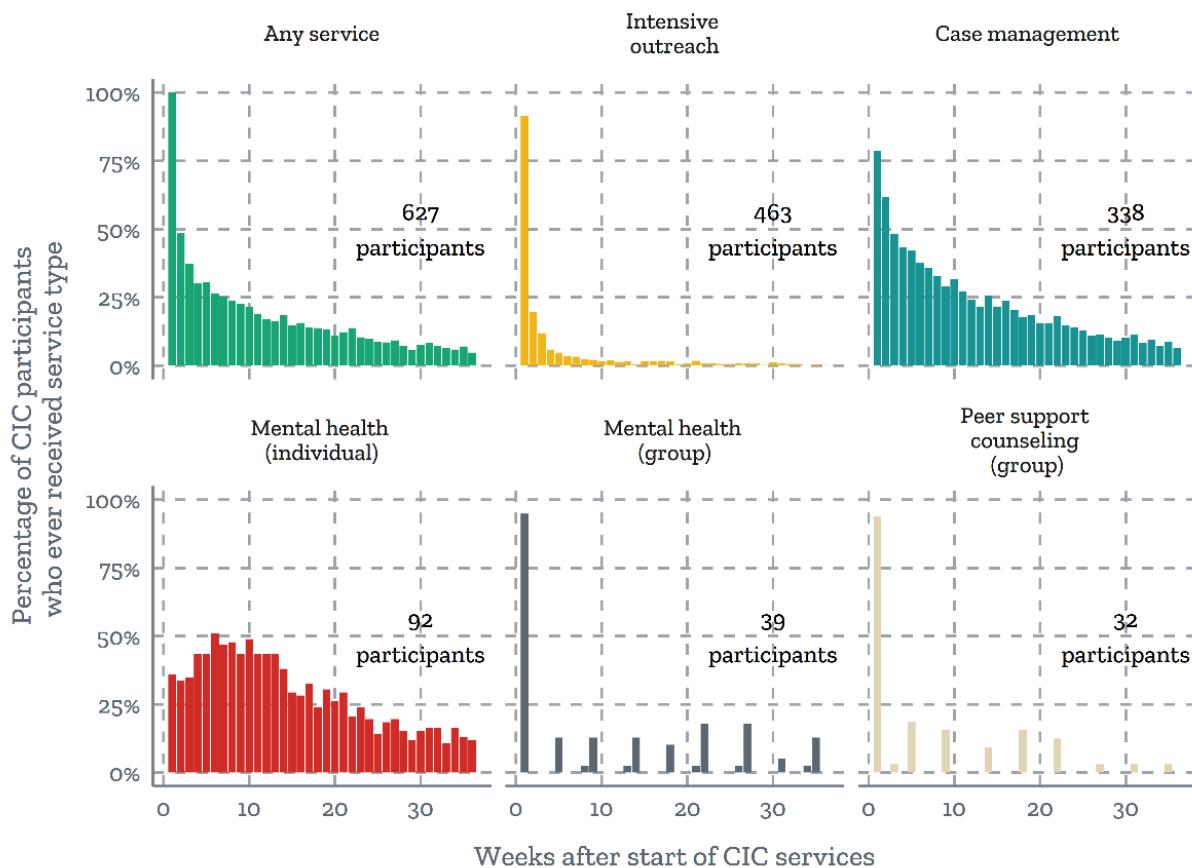
Note: Participants are designated as having received the labeled service type if they report a positive number of service contact hours under that service in the Cityspan database.

Intensive outreach services are time bound and brief by design—they occur primarily in the first week of service, and the median total service hours received per participant is less than one hour. CIC focuses on crisis stabilization, and as expected, participation in intensive outreach is highest in the initial weeks of service. As shown in Figure V.8, it is rare for a participant to receive more than four hours of intensive outreach.

Figure V.7: How to interpret

Percentage values are relative to the total number of participants with any contact with the indicated service type within the first 36 weeks of service. For example, 424 participants received intensive outreach services in their first week of involvement with Caught in the Crossfire and are therefore displayed as 92 percent (of the 463 total participants ever receiving intensive outreach) in the first yellow bar.

Figure V.7. CIC participants receiving services, by service type and week of assistance



Source: Mathematica calculations using data from Cityspan.

Note: CIC = Caught in the Crossfire.

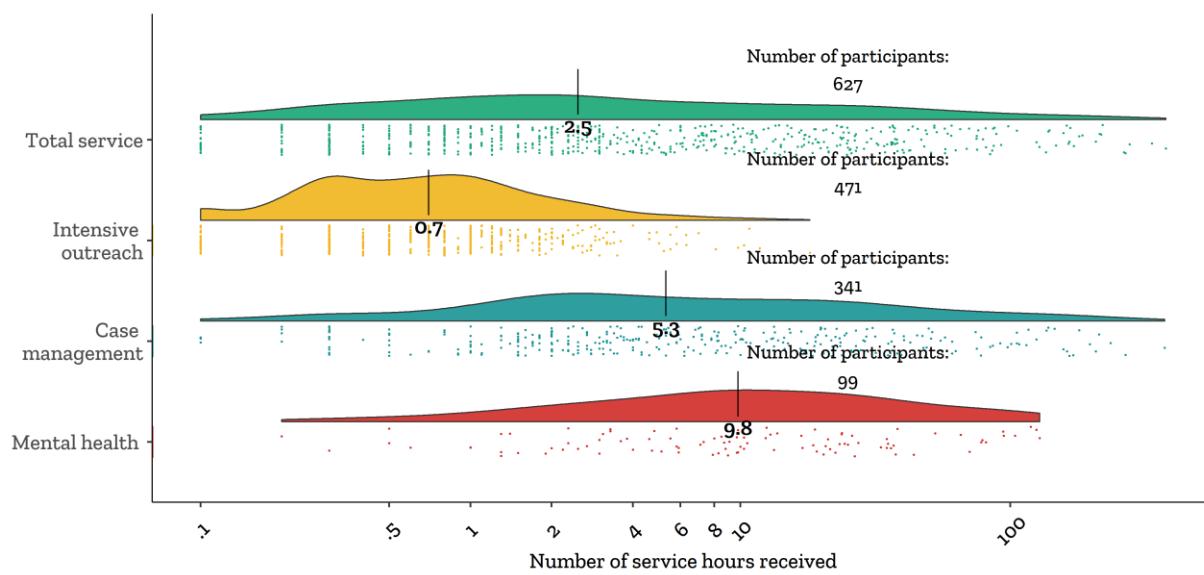
Percentage values are relative to the total number of participants with any contact with the indicated service type within the first 36 weeks of service. For example, 424 participants received intensive outreach services in their first week of involvement with Caught in the Crossfire and are therefore displayed as 92 percent (of the 463 total participants ever receiving individual outreach service) in the first bar in the "intensive outreach" subfigure.

After the intensive outreach that starts at the hospital, CIC intervention specialists visit the home after a victim's release to conduct a more in-depth needs assessment to learn about the incident, understand their life before the incident, learn about the participant's trauma, and identify his or her goals, needs, and priorities. The needs assessment process helps specialists develop a service plan and determine an appropriate length of service participation that would benefit the participant and his or her family.

Figure V.8: How to interpret

The horizontal axis represents the total number of service hours received for the specified service type and is displayed on a logarithmic scale for visual clarity. The vertical line in each row denotes the median number of hours received by a participant who had service contact with that service type. For example, the median participant who received any service contact with the case management service type engaged with those services for 5.3 hours. Participants are designated as having received the labeled service type if they reported a positive number of hours of service contact with that service in the Cityspan database. Each dot represents the total number of services hours received by a single CIC participant who received services of that type at any time between 2016 and 2019.

Figure V.8. Distribution of total number of CIC service hours, by service type



Source: Mathematica calculations using data from Cityspan.

Intervention specialists frame their clients' progress as consisting of three levels, starting with high-need and eventually moving to self-sufficiency when the participant is ready to transition out of services. In Level 1, when victims' needs are highest, they focus on stabilizing participants and aim to meet with participants twice a week. Immediate practical assistance may take the form of providing money or gift cards for things like groceries, assisting the participant in completing a Victims of Crime application, and obtaining important documents such as identification cards. For Spanish-speaking participants, this practical assistance can also involve liaising with entities such as the police. As one participant explained, "They helped me when I couldn't work. They helped me with a part of the bills, [and] with food." Levels 2 and 3 are discussed below.

Plans to support participants' longer-term needs may include therapy, help to secure housing or work, legal support, assistance for enrolling in classes or applying to schools, and offering encouragement and incentives for meeting goals, such as completing schoolwork. The needs identified in individual service plans also dictate participation in other program supports, which largely consist of case management services and, for a smaller subset of participants, mental health services. Just over half (54 percent) of participants receive case management services (Figure V.6), with a median total service amount of 5.3 hours (Figure V.8). Only 16 percent of all participants engage with individual mental health services; the median number of mental health service hours is 9.8 hours. In contrast with intensive outreach services, the quantity of case management and mental health services is dependent on the unique intermediate and long-term needs of participants. As shown by the wider and more flat distribution of total number of case management and mental health hours in Figure V.8, the total number of service hours that participants

Participants progress through three levels before transitioning out of services:

Level 1 - Client is starting services

Level 2 - Client is thriving and becoming self-sufficient

Level 3 - Client transitions out of services

received varied more than intensive outreach hours. Some participants also receive group mental health services and group peer counseling, although these are rarer, at around 5 percent each (Figure V.7).

Intervention specialists consider complete service relationships to last between 6 and 18 months; participants who complete treatment plans make gradual transitions out of services with the opportunity for reengagement when needed. When participants are at a point of self-sufficiency, they are considered to be at Level 3, where they are ready to be transitioned off the caseload. The transition from Level 2 (where a participant is beginning to stabilize) to Level 3 (where a participant is less in need and services lighten) can be seen in Figure V.9, which depicts participants' total weekly service hours by week of service. For the group in the top portion of the graph that engages with services steadily over many months, overall weekly service intensity decreases slightly over time (as indicated by lighter-colored bars), but certain weeks may be more intensive than others in response to participants' needs.

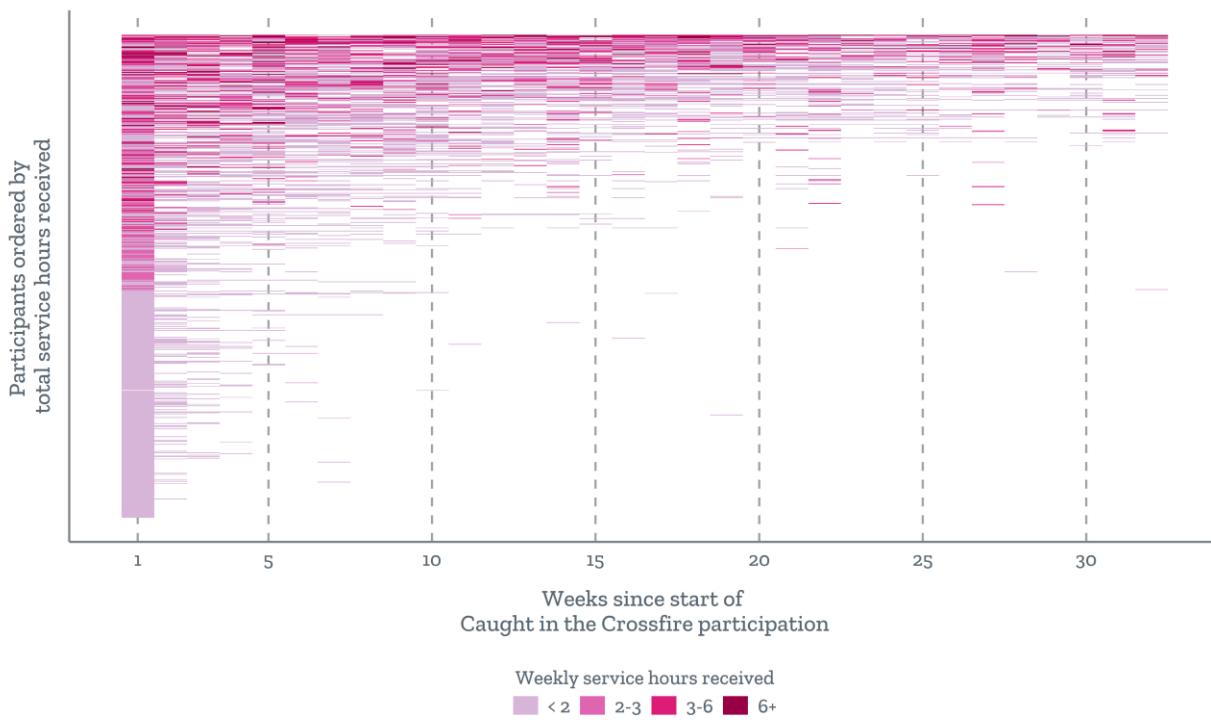
Transition out of services may be considered successful if a participant has his or her basic needs met, has an established community or support system, or simply decides he or she is done with therapy. When participants stop services, either through a planned transition or one initiated by the participant, intervention specialists assure participants that they can always return to reengage with services. Participants may reengage in services for various reasons—for example, if they "get into more trouble, or life doesn't go the way [they] expect," as one staff member described. We find that one in five participants reengages CIC services after at least one month without engagement. Of that share, 14 percent engage with services for one other distinct service period, and 6 percent have three or more service periods.

Although many participants engage with services over a sustained period of time, almost half of all participants' entire involvement with CIC ends after two weeks or less. Many individuals (those located in the bottom of Figure V.9) engage with services for a few weeks only, and their weekly service hours during that period are mostly under two hours. If participants decide not to engage in services after the initial contact, staff provide them with other resources to which they can connect. Staff will also attempt to check in with participants who received program services but disengaged, to make sure their needs are met.

Figure V.9: How to interpret

Each row represents the number of hours of CIC services received by a single participant involved in the sub-strategy between 2016 and 2019. Participants are ordered according to the total number of service hours received across any service type over the duration of their participation. Participants receiving the fewest hours are positioned at the bottom; participants with the greatest number of total service contact hours are positioned at the top.

Figure V.9. Intensity of services received by CIC participants



Source: Mathematica calculations using data from Cityspan.

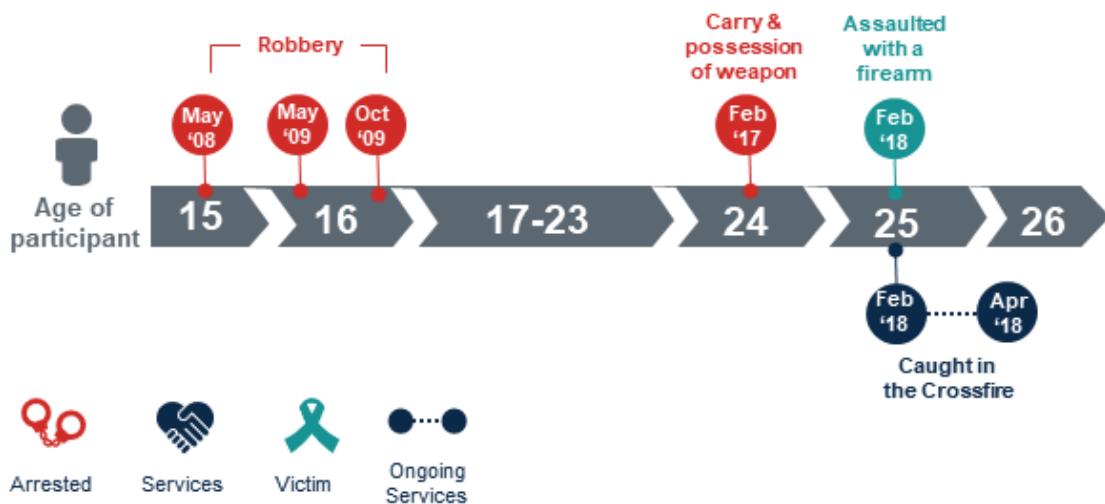
The drop-off in participation is echoed in the “Any service” panel of Figure V.7. As noted in the overview of CIC, not all individuals who receive intensive outreach services following a shooting incident are identified for longer-term services. Therefore, it is expected that many individuals’ documented services will not extend beyond a couple of weeks and will consist solely of intensive outreach hours. However, there is also a large initial drop in retention among those who receive case management services following the first two weeks (Figure V.7). Almost four of five participants (79 percent) who receive case management services do so in the first week, but by the third week of services, less than half continue to receive case management services. One potential explanation, which a staff member noted as a challenge to engagement is that as participants start to feel better, they lose interest in services and are less likely to respond to calls and meet with their intervention specialist. In contrast, participants who take part in individual mental health services often sustain their participation over a longer period of time. Furthermore, the decline in their retention is less steady, suggesting participants may return to mental health services over time as needed.

Given that a primary goal of CIC is to stabilize victims of violence, it is expected that the greatest intensity of services occurs in the first two weeks, when participants’ needs are greatest. As Figure V.9 shows, the share of participants receiving services in each week declines incrementally, and for the most part steadily, following the third week. This likely reflects a combination of the leveled, gradual transition out of services described by intervention specialists, as well as individuals who elect to disengage on their own. However, the service data are insufficient to determine whether those who do not continue engagement are those who have no need for additional services, are characterized by other circumstances that would not allow them to

continue participating in services (e.g., relocating to another city), or are those who choose not to participate for other reasons such as conflicts with their work hours.

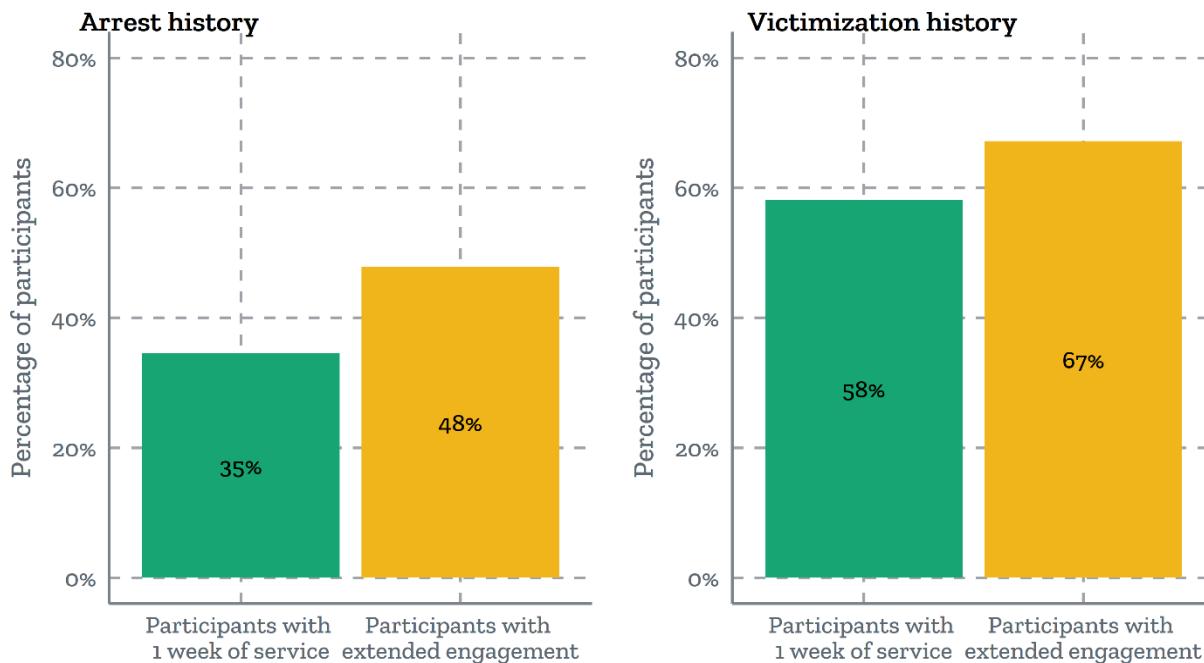
Personal timeline of one Caught in the Crossfire recipient

The timeline below provides an illustrative chronology of one Oakland Unite participant who received Caught in the Crossfire services. This individual's involvement with the criminal justice system before receiving Oakland Unite services began at a young age. He was arrested for robbery three times before age 17: once with a firearm at age 15 and twice for strong-arm robbery at age 16. Between ages 17 and 23, he had no new incidents, but he was arrested again at age 24 for possessing a weapon, larceny theft, and a drug abuse violation. A year later, in February 2018, he was assaulted with a firearm and began Caught in the Crossfire services. He engaged with Caught in the Crossfire for a period spanning three months, ending in April 2018. Since then, he has had no further incidents recorded in OPD data, either as a victim or as an arrestee, and has not been involved in additional services through Oakland Unite.



Relative to participants who engaged CIC services for only one week, participants who sustained their engagement were younger and more likely to have been previously arrested and/or victimized. To understand the factors that inform the drop in retention after the first weeks of service, we examined differences in baseline characteristics between those who engage in services over an extended period of time and those who only engage in one week of services. Individuals 25 and older account for a smaller share of participants with extended engagement than short-term participants, at 30 and 52 percent, accordingly. Nearly half of participants with extended CIC involvement had been arrested before receiving services, compared to 35 percent of individuals who received no more than one week of services (Figure V.10). Two-thirds of participants with extended engagement had been a victim of a violent incident reported to OPD, compared to 58 percent of those who only engaged for one week. There were no notable differences along sex, prior education, and race between participants with extended engagement compared to short-term participants.

Figure V.10. Arrest and victimization frequencies prior to starting CIC services by participant type



Source: Mathematica calculations using data from Cityspan and OPD.

Note: Actual victimization rates are likely to be higher than indicated because of underreporting of victimization incidents to the police. Values represent the percentage of participants for the designated category who were arrested or were a victim of a violent crime at any time before starting CIC services. Participants who received service in five or more weeks are categorized in the “extended engagement” category and represent the top 35 percent of participants as measured by the total number of weeks in which a participant received service. These rates reflect data for the 50 percent of participants who consented to share personally identifiable information.

Following the start of CIC services, 22 percent of participants eventually connected to other Oakland Unite-supported programs, with life coaching being the most common. As Table V.1 indicates, 20 percent (64 individuals) of CIC participants received life coaching services beginning the same date or after CIC services. Of those 64 individuals, three-quarters (48 people) received life coaching beginning at the same time as starting CIC services. CIC participants whose linkages to life coaching occurred after starting CIC may have been connected for reasons unrelated to CIC given the elapsed time. For example, the gap between CIC and life coaching start dates was in excess of 100 days for 65 percent of participants connected to life coaching after CIC (not shown). Ultimately, 22 percent of CIC participants are linked to other Oakland Unite services, but those linkages are primarily made at the time of starting CIC services, not later.

Table V.1. CIC participants receiving other Oakland Unite services after engaging Youth ALIVE!

Oakland Unite service	Service coincided with start of CIC		Service followed start of CIC		Total	
	Number	Percentage	Number	Percentage	Number	Percentage
Life coaching	48	15%	26	8%	64	20%
Education and economic self-sufficiency	0	0%	8	3%	8	3%
Relocation	0	0%	2	<1%	2	<1%
Other	0	0%	7	2%	7	2%
Any non-CIC Oakland Unite service	48	15%	35	11%	69	22%
Sample	313					

Source: Mathematica calculations using data from Cityspan.

Note: CIC = Caught in the Crossfire.

Percentages are based on the 313 individuals receiving CIC services in the 2016–2019 evaluation period that consented to share personally identifiable information. “Other” includes any services in the Community Asset Building & Innovation, Street Outreach, and Commercially Sexually Exploited Children Intervention programs. Participants may receive services from different providers and therefore result in “total” values that are less than the row sum.

Participants trust intervention specialists and appreciate their attentiveness, responsiveness, and ease of access.

Participants and their family members indicated that they felt supported and safe with CIC staff in undergoing the difficult process of recovery from trauma. This can contrast with their interactions with other entities following victimization. For example, one participant described feeling like “just another case” to the police. Intervention specialists remain in regular contact with participants, with one staff member indicating that they check in with participants at least once a week, doing so more frequently for high-risk participants. One participant’s family member noted that their intervention specialist “texts, calls … [for] anything we need, she’s just there,” adding that there is value in “having someone to call and check in … it meant a lot for someone to even care.” Participants said CIC staff helped them with words of encouragement and helped them realize that their reactions to trauma are normal. One participant noted, “[the specialist] would meet up where I was, and they had a lot of things for me to do to keep my mind off of what happened.” While building rapport and helping to address practical needs, intervention specialists can also be the ones to broach the topic of therapy with victims. Participants explained that the care and concern they experienced through CIC encouraged them to engage.

“[My child’s intervention specialist] has been very compassionate, understanding, and dedicated to the well-being of my child who has suffered PTSD as a result of this.”

-Relative of a participant

Intervention specialists attempt to engage family members in services to “reframe the negative experience they’ve had,” but family involvement is dependent on individual choice. The parent of one minor participant decided to engage in services because they “needed a shoulder to lean on, someone to help me work through this with my daughter.” This parent appreciated the practical assistance they received from the intervention specialist, such as navigating confusing hospital transfers and walking through the

Victims of Crime compensation application. The parent also indicated that this assistance helped them understand their daughter's situation.

However, participants' family members may not be ready to take part in services. Some participants interviewed were informed of services available for their families, but their family members did not choose to participate. Regarding therapy services, one participant noted that his or her parent would not be comfortable talking to a stranger about these problems. Nonetheless, participants mentioned that family involvement in services is important because "anything one is exposed to impacts family," and having family members involved in services would help them understand the effects of the traumatic experience.

Participants' need for mental health therapy at times may exceed what CIC is able to provide. Participants who are referred to mental health therapy can engage in services for several weeks. One participant noted that therapy "was the most helpful part ... this program [helped] me understand [what I went through]. Sometimes I'm anxious and all I have to do is text my therapist and [they] know what to do for what I need." One parent additionally noted the benefit of having a therapist at the same site as the intervention specialist, and of therapy being available at no charge so they don't have to struggle with lack of coverage from insurance.

"It was all about the subtle things they told me ... I had a whole bunch of breakdowns but ... I felt like they were there for me ... At first, I didn't want to leave my house [and they told] me it was fine, that when [recovery] first starts off you're going to feel that way, it's normal."

-Participant

However, one staff member noted that sometimes it is a "challenge to meet demand," and at times there is a waitlist for mental health services. As noted earlier, the share of participants receiving mental health services is highest between weeks 5 and 15 of services (Figure V.5). Although this lag could reflect the time needed for the initial needs assessment carried out by intervention specialists and time for physical recovery, it may also indicate that individuals with mental health needs do not have access to therapy immediately after beginning services. At the same time, there are some participants who may need therapy but feel they cannot engage due to more urgent needs or priorities, such as putting "food on the table" or, as one participant expressed, because scheduling an appointment would conflict with work.

The limitations of victim information shared between Youth ALIVE! and Highland Hospital can hinder coordination of care and follow-up. Highland Hospital transmits referrals to Youth ALIVE! through a database compliant with Health Insurance Portability and Accountability Act (HIPAA) requirements, as agreed upon in a memorandum of understanding between the Alameda County Health System and Youth ALIVE!. Having this system in place was a necessary step for Highland Hospital and Youth ALIVE! to securely communicate about patients, and the hospital has been passing referrals through the database for several years. After the referral, Youth ALIVE! is tasked with following up with the patient and documenting progress notes in the database.

In the earlier years of the collaboration between Highland Hospital and Youth ALIVE!, Highland Hospital had a more prominent role in the response after a violent incident, participating in the weekly shooting and homicide response meetings and summarizing cases. Over time, Highland Hospital's ability to contribute in these meetings declined. With greater concern for protecting patient privacy, Highland Hospital now provides only a limited amount of information about a victim in the referral, such as phone numbers and injuries sustained. At the same time, the weekly meetings shifted in their focus to broader discussions of the

types of intervention that might be warranted, likelihood of retaliation, and what was happening in the community. When victim referrals are lost to follow-up, Highland Hospital cannot share information that might help Youth ALIVE! meet with the individual in person, such as when their next medical visit is scheduled. Conversely, sparse progress notes about attempts to contact victims and interactions with them can leave Highland Hospital staff without information about the victim's context, when they may still be providing follow-up care. With more knowledge about the individual's situation, hospital medical staff and social workers could better support that victim's safety and recovery.

Staff and participants expressed a need for resources beyond what CIC is designed to provide, including housing, jobs for youth and young adults, and community activities. Staff noted that lack of financial resources is often a challenge for victims, a sentiment that was echoed by a participant who was worried about bills: "If you don't work, you are practically on the street." Staff elaborated that financial need is especially pronounced for undocumented participants, who cannot access some available resources. Other needs that staff and participants identified included housing, education, and jobs; staff noted additionally that substance abuse treatment was an important need among participants.

Some participants also pointed to the need for community-based services that focus on youth before they become involved in violence. For example, the parent of a youth receiving services noted that offering free enrichment activities for youth could possibly divert some from involvement in harmful behaviors. A young adult receiving services stated that "there's a lot of children [...] who play with guns and think it's cool or that it's fun to rob people," and they need adults in their lives to keep them on the right path. The participant expressed a desire for a place youth could go to, "but not just for victims—if these kids talked about it more, not just shut it out, some of this violence would die down."

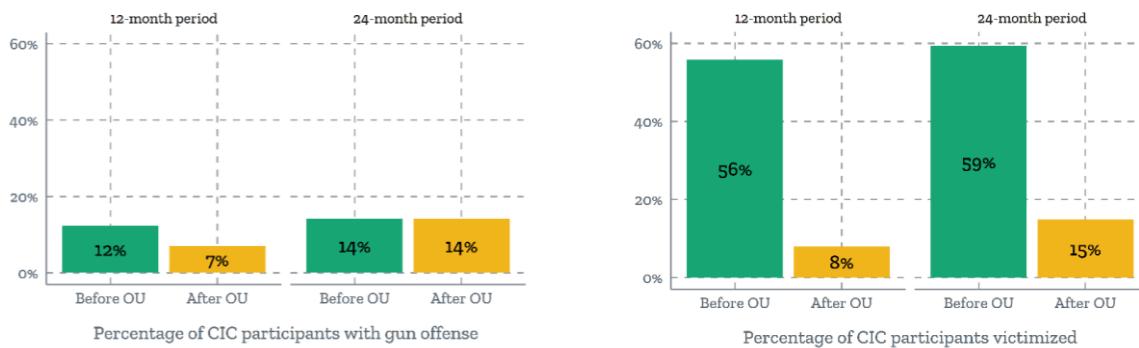
Outcome findings

The CIC program aims to contribute to Oakland Unite's goal of reducing gun violence by providing shooting victims with immediate and longer-term support to discourage retaliatory violence and avoid re-injury. Although the absence of a control group of similar individuals who did not receive services prevents us from being able to estimate the program's impacts, we can still observe participants' arrest and victimization outcomes before and after starting CIC services to understand whether their overall risk levels decrease over time, as would be expected from program participation.¹⁴

Using OPD arrests and victimization data, we find that participants' rates of arrest for gun offenses after CIC are similar to levels beforehand, whereas their victimization rates are dramatically lower (Figure V.11). Although the gun offense rate in the year following CIC is lower than in the preceding year, over a two-year period the rate returns to the baseline of 14 percent of participants. In contrast, victimization rates are substantially lower after CIC services, decreasing from 59 to 15 percent in the 24 months before and after. As mentioned previously, raw victimization rates pre-CIC are much lower than 100 percent, even though the program serves victims of gun shootings, stabbings, and physical assault; this is likely due in large part to underreporting to OPD. However, it is unlikely that the observed reduction in re-injury is an artefact of a change in participants' crime reporting practices.

¹⁴ So that we can observe outcome data over a 24-month follow-up period, the analysis focuses on individuals who (1) began CIC services before January 2018 and (2) consented to share their personally identifying information.

Figure V.11. Gun offense and violent victimization rates before and after CIC



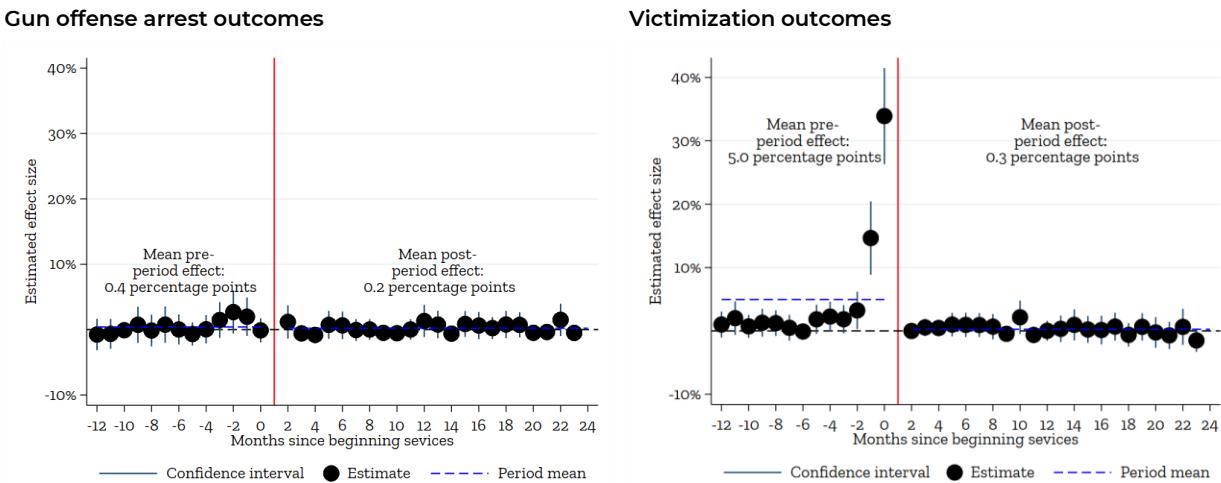
Source: Mathematica calculations using data from Cityspan and OPD.

Note: CIC = Caught in the Crossfire; OU = Oakland Unite.

Actual victimization rates are likely to be higher than indicated because of underreporting of victimization incidents to the police. In all figures, the "After OU" period begins the first calendar month after initial contact with Oakland Unite. Since OPD data are available only through December 2019, the 12-month period sample excludes participants starting CIC services in January 2019 or later, and the 24-month period sample analogously applies a January 2018 cutoff. The sample size included in the 12-month period is 226, and 155 for the 24-month period.

The raw percentages reported in Figure V.11 do not provide insight into the specific month when events occur relative to the start of CIC services, and they weight all participants equally regardless of the number of outcomes experienced over the designated time period. To provide more granular results that also adjust for differences across participants in their baseline levels of arrest and victimization and account for seasonal and long-term crime trends, we employ an event study regression framework as described in Chapter III. In Figure V.12, we plot the monthly average likelihood of being arrested for a gun offense (left panel) or being a victim of a violent crime (right panel) from event study models. All estimates are relative to the first month after beginning CIC services, which serves as the reference point ("base rate") and takes the value of 0. These estimates can be interpreted as the percentage point changes in the probability that a participant will experience the indicated outcome relative to month 0. Thus, if the program was effective in reducing participants' likelihood of engaging in or becoming a victim of violence, we would expect the points to the right of the red line to be negative and statistically significant. On the other hand, if participants were to engage in retaliatory violence, we would expect to see a spike in their relative likelihood of being arrested for gun or violent offenses in the months immediately following the precipitating incident. In other words, the points to the right of the red line would be positive and statistically significant.

Figure V.12. Event study results for CIC participation on gun offense and victimization outcomes



Source: Mathematica calculations using data from Cityspan and OPD.

Note: Values represent month-specific estimated effect sizes from an event study regression model. The sample is restricted to the $N = 155$ individuals who received support services from CIC between 2016 and 2018. The dependent variable is a binary variable for whether the participant was arrested for a gun offense (left panel) or reported being the victim of one or more violent crimes (right panel) in the specified month. Time is expressed relative to the first calendar month after the start of CIC services ($t = 1$). For example, June 2017 is counted as month 0 for a participant with services beginning on June 18, 2017, and July 2017 is considered month 1. The event study regression model includes person, year, and month-of-year fixed effects. Standard errors are clustered at the person level, and confidence intervals are reported at the 95 percent level.

After receiving CIC services, victims avoided retaliation over the following two-year period. As shown in the left panel of Figure V.12, the estimated effect sizes on the monthly likelihood of being arrested for an offense involving a gun are similar in the 24 months after starting CIC services compared to the levels observed in the pre-period, with the exception of the immediate three months preceding service start. Those slightly positive effects suggest some participants were involved in criminal activities shortly before the victimization incident that brought them into contact with CIC. Results on the likelihood of being arrested for any offense or for a violent offense showed a similar pattern to those for gun offenses, showing no long-term or cyclical changes in the likelihood of arrest after the start of CIC (Appendix C.6). Although CIC services do not appear to contribute to changes in arrests for gun offenses, these results suggest that participants did not engage in retaliatory violence in the months following their victimization.

Over the two years after starting CIC services, participants avoided re-injury. The right panel in Figure V.12 reports that participants had a 34 percentage point higher likelihood of being a victim of a violent crime in the month of starting CIC services relative to the subsequent month. The large positive effect sizes in both the month preceding and the month of starting CIC services confirm that CIC services immediately follow victimization incidents. All of the months in the two-year period following the start of CIC services—all points to the right of the red vertical line—straddle an effect size of 0, which translates to no increased likelihood of victimization relative to an individual's "base rate." In brief, participants were able to avoid re-injury, returning to the low levels of victimization they experienced in the 6- to 12-month period before the incident that led them to CIC services.

Recommendations for CIC services

- **Encourage closer collaboration between crisis response from CIC and other Oakland Unite sub-strategies, such as employment and education support services and community healing.** Participants and family members noted the need for wide-reaching, community-based strategies to prevent violence and provide opportunities for young people. These desires are aligned with some of Oakland Unite's existing programs, such as employment and education supports for high-risk youth and community-led events promoting violence prevention. Strengthening connections from crisis response to these other programs, whether through referral for employment supports or by encouraging participation in community healing events in participants' neighborhoods, could be a way to continue engaging those affected by violence in prevention after their personal recovery needs have receded.
- **Identify common barriers to participation and reasons for exit to refine program processes and facilitate evaluation.** It is not clear from the data available for this evaluation what proportion of participants take part in a planned transition out of services, as opposed to choosing to disengage despite having additional needs. Tracking the reasons for non-engagement (or disengagement) could help the program identify barriers and refine processes. For example, holding a job during regular business hours may prevent some participants from taking part in therapy or case management services even if they wish to. If this type of barrier is commonplace, grantees and Oakland Unite could consider different staffing models to better meet participants' needs. Additionally, tracking basic information about participant outcomes in the Cityspan database, such as whether they obtained a job or returned to school, and if their exit from the program was a planned transition, would enable evaluators to develop a fuller description of how services are connected to successful program completion.
- **Strengthen feedback to hospital partners after victims are referred.** Although there are limits on the personal information Highland Hospital can share with CIC, social workers and medical staff still have opportunities to interact with victims when they return for follow-up services after discharge from the hospital. These are instances where hospital staff have an opportunity to encourage an individual to connect with CIC if the individual is no longer taking part. Providing information about follow-up attempts and activities to Highland Hospital could enable hospital staff to be stronger partners in promoting participation in community-based services and supporting the victim's recovery.

VI. Relocation support services

Overview of relocation services

The purpose of relocation support services is to provide emergency temporary relocation to participants and their families who are at immediate risk of injury or death. Referrals may be made through law enforcement partners, violence interrupters, or life coaches through Oakland Unite's life coaching program, or shooting and homicide response system partners. To be eligible for relocation services, at least two of the three referral sources must confirm need, in addition to the participant's self-report of imminent danger. Program funds are prioritized for Oakland residents who are recent victims of gun violence, are aged 18 to 35 years old, and may not be eligible for Victims of Crime financial assistance through the California Victim Compensation Board (CalVCB) due to previous involvement with the justice system.

CYO and Youth ALIVE! collaborate to address the immediate and short-term need for relocation to a safe place. After receiving a referral, a violence reduction coordinator from CYO assesses needs and starts the process of temporary relocation; they can use up to \$500 per case to address emergency requests at their discretion. If subsequent relocation services are needed, the intervention director at Youth ALIVE! convenes a relocation committee made up of relocation staff as well as representatives from Oakland Unite, Highland Hospital, and CCEB. Clients may receive support for a motel or hotel stay, rental assistance, travel or moving costs, and other supports as necessary to relocate out of Oakland. The level of support each participant receives varies based on need, with the program expecting to disburse an average of \$2,000 to \$2,500 per participant.

Although relocation support is now a common feature of many state crime victim compensation programs, there is very limited research on relocation efforts for people at risk of retaliatory violence. In 2016, the United States Department of Justice's Office for Victims of Crime allowed states to "support transitional housing and relocation expenses" using funds from the Victims of Crime Act of 1984 and expanded eligibility for relocation assistance beyond victims of assault, domestic violence, or trafficking (Federal Register 2016). In California, CalVCB supports victims of violent crime with relocation expenses of up to \$2,000 per household, with more available for dire circumstances. The state requires proof of relocation need for either personal safety or emotional well-being (CalVCB 2019). Furthermore, not everyone qualifies for these benefits, such as individuals who were involved in or committed a felony that may have precipitated the crime for which relocation is sought.

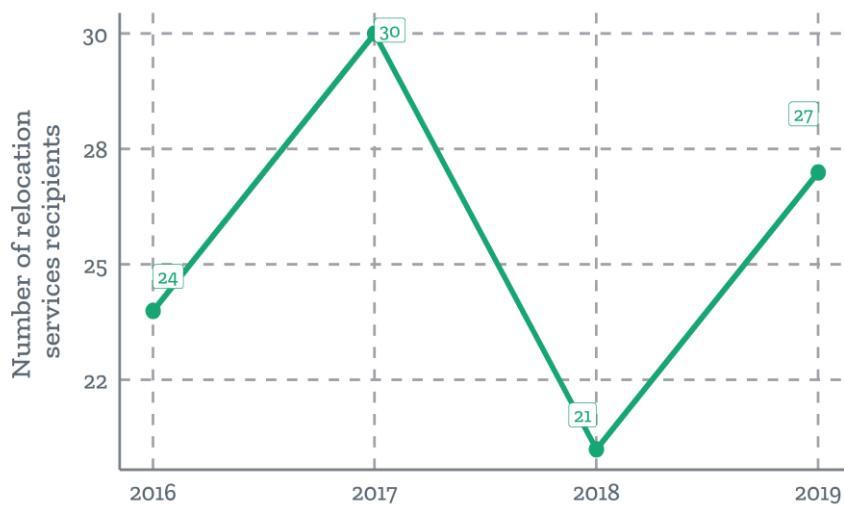
Outside of victim compensation programs, relocation can be part of individuals' response to the threat of violence. For example, there is evidence that youth and families in Oakland choose to move within the city as a "violence management strategy" (Dill 2016). In one study, young Black male victims of violence reported handling the threat of retaliation by avoiding the streets or moving in with family elsewhere, rather than relying on police assistance (Rich 2005). The young men interviewed expressed the belief that the criminal justice system did not offer ways to protect them and felt they had to seek other options for safety. Additional research is needed to understand the relocation needs of victims of violence and the impact of relocation support programs on their safety and well-being.

In the remainder of this chapter, we describe our findings from the implementation of relocation services and the results of event study models examining the arrest and victimization outcomes of participants. We offer recommendations for strengthening relocation services in the last section of this chapter.

Implementation findings

Between 2016 and 2019, 102 individuals received relocation services, though the number served varied across years. Over the four-year evaluation period, CYO served a high of 30 participants in 2017 and a low of 21 participants in 2018 (Figure VI.1). The time trend for annual individuals served does not mirror the time trend for citywide shooting incidents. Firearm assaults, for example, were highest in 2016, which was also the year with the highest number of homicides over the evaluation period. Annual firearm assaults from 2017 through 2019 were flat and approximately 15 percent lower than the total for 2016 (see Figure I.1). In contrast, the number of service recipients in 2016 was the second-lowest annual total.

Figure VI.1. Annual recipients of relocation services

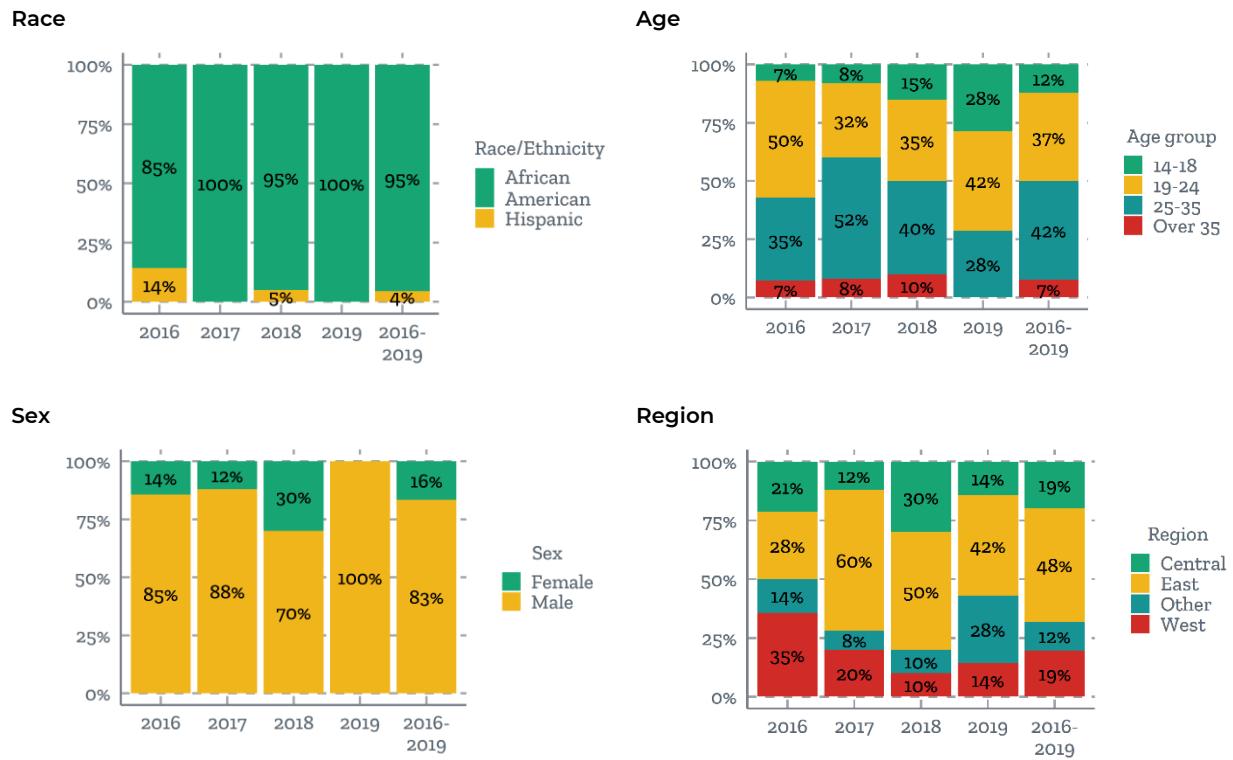


Source: Mathematica calculations using data from Cityspan Progress Reports.

The demographic composition of participants also varied significantly across years. The changes in participant characteristics are shown in the various bar charts in Figure VI.2, and owe partly to the small number of participants each year. The program primarily served African American residents, who accounted for 96 percent of all participants in the four-year period. While most recipients were between the ages of 19 and 35, the adolescent (aged 14-18) share of participants grew over time, from 7 percent in 2016 to 28 percent in 2019. Men and boys were the majority of recipients across all years (83 percent), but the share of women and girls ranged from 30 percent in 2018 to 0 percent in 2019. East Oakland was the region with the largest number of participants, at 48 percent, and nearly one in five participants reported not residing in Oakland at the time they began services.¹⁵ At a more distilled level, the three ZIP codes of 94601, 94605, and 94621 were home to the largest number of participants over the evaluation period (Figure VI.3).

¹⁵ Given the threat of violence that individuals in this group faced at the time of starting services, an unknown percentage of participants may have reported a relative's address or ZIP code, rather than their own address, out of an abundance of caution. As a result, the share of participants who resided in Oakland at the time of starting services would be higher than what we report.

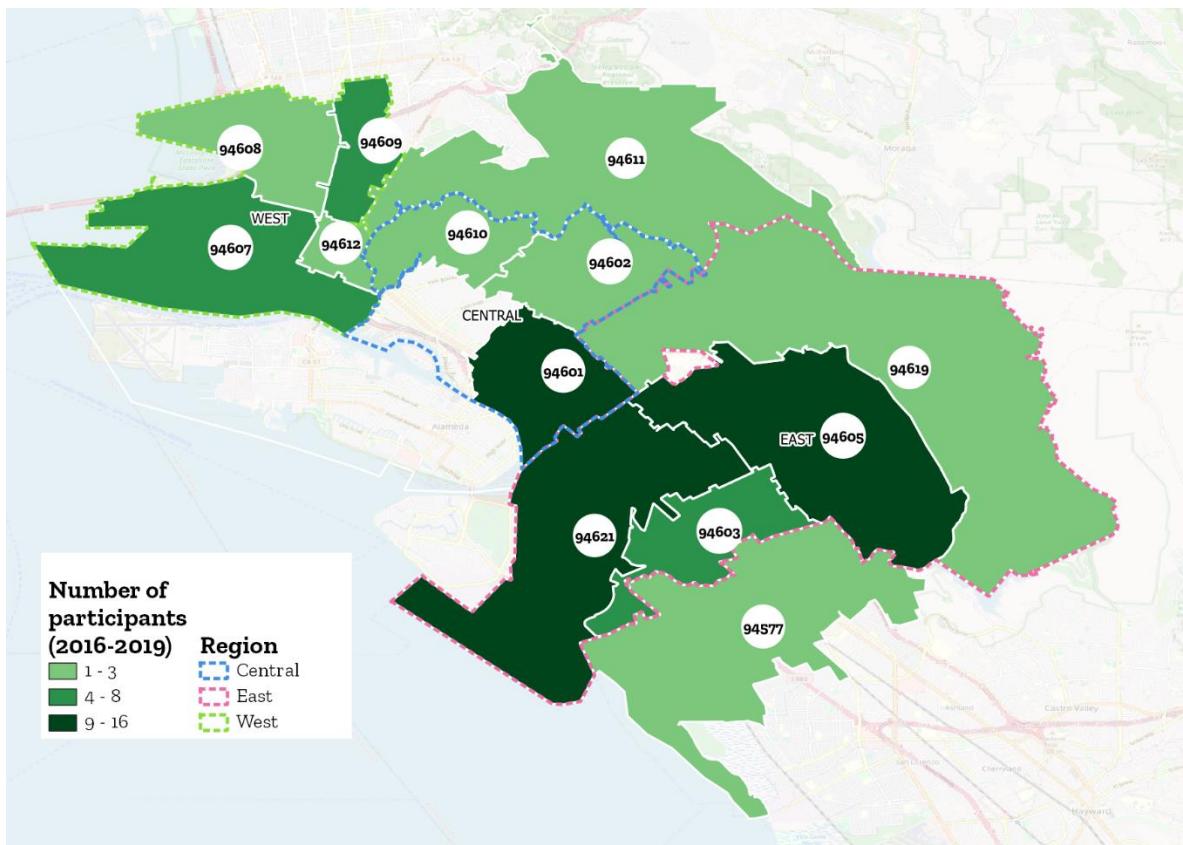
Figure VI.2. Demographic characteristics of relocation services recipients



Source: Mathematica calculations using data from Cityspan. Percentages may not add up to 100 percent because of rounding.

Note: The 'Other' category in the region subfigure encompasses ZIP codes outside of Oakland.

Figure VI.3. Relocation services participants by ZIP code

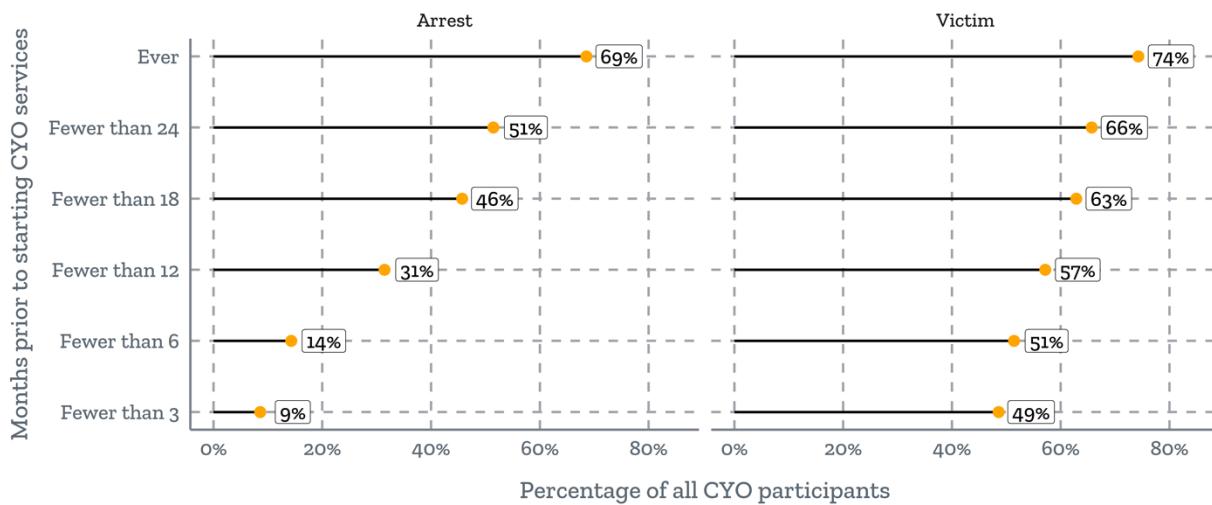


Source: Mathematica calculations using data from Cityspan. Spatial boundaries are from City of Oakland (2016) and US Census Bureau (2019).

Note: Numbers denote the total count of individuals receiving CYO relocation services between 2016 and 2019 who resided in a given ZIP code at the time that services were initiated. An additional 6 participants with home addresses outside the depicted area received services between January 1, 2016 and December 31, 2019. The numbers displayed correspond to records available through Cityspan's person-level data, which lists fewer people than the total participant count indicated in Figure VI.1.

At the time of starting relocation support services, most participants had either a prior arrest and/or previously been the victim of a violent crime reported to OPD. The majority of participants with arrest records had most recently been arrested in the last two years before receiving CYO services, as seen in the left panel of Figure VI.4. While 69 percent of participants had ever been arrested, 31 percent were arrested in the 12-month period preceding the start of services. Participants' victimization histories are less variable across time periods, with 49 percent reporting being the victim of a violent crime to OPD in the immediate 3-month period before engaging with CYO. Prior victimization is not a necessary requirement for receiving relocation support so long as there is a credible threat to an individual's safety in the immediate aftermath of a violent incident.

Figure VI.4. Relocation services recipients with arrest or victimization histories prior to start of services



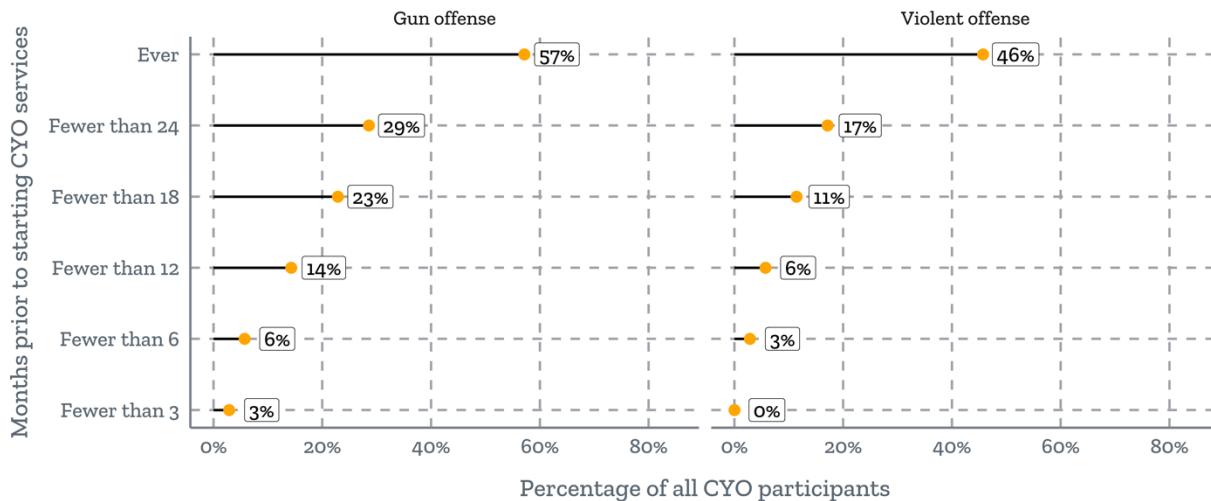
Source: Mathematica calculations using data from Cityspan and OPD.

Note: CYO = Community & Youth Outreach.

Actual victimization rates are likely to be higher than indicated because of underreporting of victimization incidents to the police. Time periods are determined according to the month and year in which the participant first had any service contact with the relocation program.

When examining arrest outcomes by relevant arrest types, approximately half of all participants had a gun offense or violent offense on record at the time of starting services (Figure VI.5). However, for the majority of participants these offenses dated back two or more years earlier. As seen in the left panel, six percent of participants had a gun-related arrest in the six months preceding services, while three percent had been arrested for a violent offense over the same time period.

Figure VI.5. Relocation services recipients with gun or violent offense histories prior to start of services



Source: Mathematica calculations using data from Cityspan and OPD.

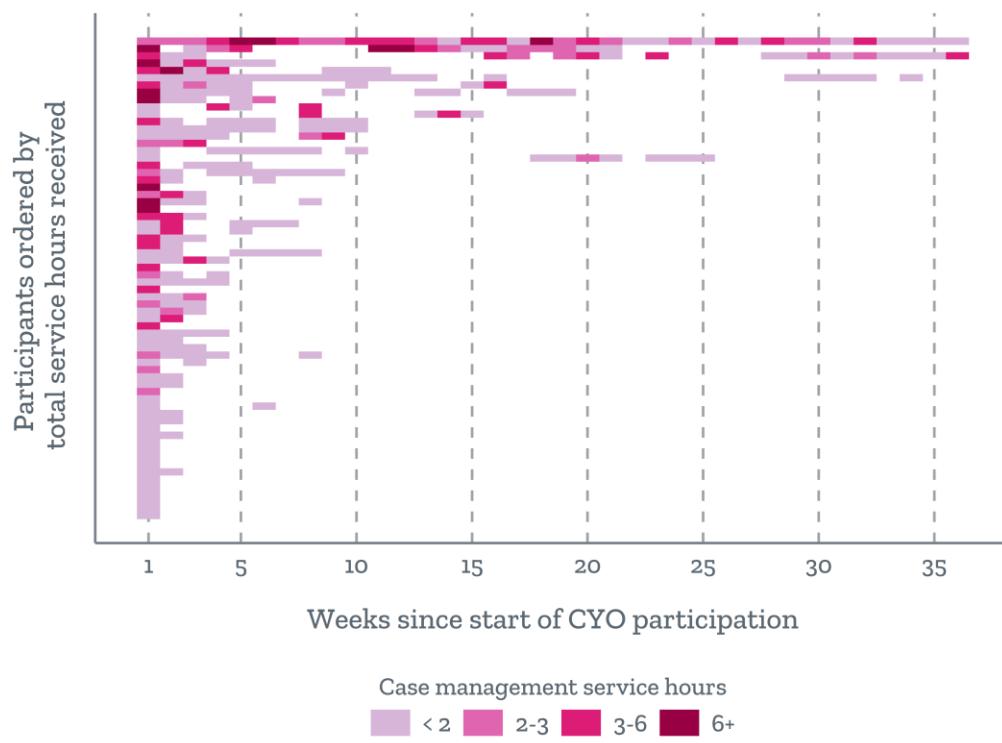
Note: CYO = Community & Youth Outreach.

Time periods are determined according to the month and year in which the participant first had any service contact with the relocation program.

Almost two thirds of participants receive case management to relocate lasting five weeks or less. Referrals for relocation can result from a violence interrupter's safety assessment in the hospital following a shooting incident or violent crime, and can also originate from the Alameda County Probation Department, and through collaboration with Youth ALIVE!, Oakland Unite, and CCEB. In the instances where violence interrupters make a safety assessment in the hospital, they consider whether the individual is in imminent danger of being shot or shooting someone, and whether they are open to relocation. When a referral originates from a source other than the bedside visit, either a violence interrupter from Youth ALIVE! or violence reduction coordinator from CYO will conduct the safety assessment.

If the individual is in immediate danger living in their current residence, CYO will typically help plan for an emergency relocation to a safe place, such as a relative's home or a hotel outside of Oakland. Plans are set in motion quickly, often within a day. Many participants receive short-term support over a period of several weeks, as seen in Figure VI.6, which plots participants' service contact hours by week. For example, 42 percent of participants engaged CYO for no more than two weeks of service, while 65 percent of participants had some amount of service contact over the first five weeks and then did not engage CYO any further (based on data depicted in Figure VI.6). If the \$500 emergency funds are insufficient to ensuring a participant's safety, agency staff develop longer-term plans. Some participants re-engage with relocation services several weeks later, or even several months later, as seen for participants towards the top of the plot with lengthy periods in between service contacts.

Figure VI.6. Timing and intensity of service delivery for relocation services recipients



Source: Mathematica calculations using data from Cityspan.

Note: CYO = Community & Youth Outreach.

Youth ALIVE! leads the development of plans requiring more resources than CYO provides. These plans are customized for the individual's situation. For example, if an individual is willing to move out of Oakland, the relocation funds could be used to offset the cost of transportation or pay for a deposit on a new residence. Long-term plans also account for factors influencing an individual's capacity to move, such as the ability to sustain rent payments after relocation, approval for transferring a Section 8 housing voucher to a new location, and coordination with any other ongoing case management service providers. A relocation panel, comprised of representatives of Youth ALIVE!, Highland Hospital, CCEB, CYO, and Oakland Unite, discusses the plans and approves the release of funds for relocation. The representatives of these agencies use their combined knowledge about the individual, family, and context to ensure that the plan is appropriate.

After individuals are relocated outside of Oakland, they do not take part in further services as part of the program. Once individuals or families are relocated and staff have ascertained that they are safe, there is no formal follow-up. Staff mentioned that they would check that the individuals or families reached their destination and try to connect them to other resources in their area. When individuals and families agree to relocation, they receive one-time support to relocate, and are asked to sign a form agreeing to not return to the Oakland area. However, the form is not legally-binding, and some participants have returned. Staff ask relocated individuals to reach out if they do return, so that the staff can assess for safety. However, since the responsibility for this contact rests on those who were relocated, staff may not be aware of their return unless they are associated with a future incident.

A guy stole marijuana from some guys who all steal from each other, but they shot him [over 10] times and they shot his girlfriend who was a bystander. This was something they wouldn't let go. We relocated the guy out of state, who was shot straight from the hospital, because these guys were trying to finish him. The guys told me the girlfriend could go back home because she wasn't involved. We stayed in contact with both parties momentarily, [relocated] the victim out of state, and let that case go. The streets told us he couldn't come back.

—Relocation staff

The relocation support model has evolved substantially since 2015 when it was the subject of a formative evaluation (RDA 2015b). During that first year, a different set of grantees provided services to relocation participants, and victims who were hospitalized due to violent crime were referred to relocation services. The program model now enables staff to address the potential for others, like perpetrators and associates of the victim, to also become targets of retaliatory violence.

One of the original program goals was for individuals to take part in case management, such as developing employment and education goals, in addition to relocation. However, once individuals were relocated to different cities, and potentially out of the Bay Area altogether, RDA's evaluation identified that maintaining participation in case management services would require developing relationships with organizations offering support services in other cities. Given the number of areas to which participants relocate, and the varied types of supports they need, developing these relationships would require a significant undertaking. The director of Boston's Victim and Witness Protection Program explained that "challenges faced by clients prior to becoming a violent crime victim will likely continue to exist after their relocation" and recommended realistic expectations for the relocation program given its resources (RDA 2015b). Boston's program considered harm reduction, meaning a reduction in violence and improved safety of participants, as program success, even when participants were still facing challenges in other areas of their lives. The current relocation program in Oakland now aligns with this singular objective of relocating individuals to prevent violence, without the focus on case management.

Not everyone with safety needs is willing to relocate, and not everyone who is interested in relocation finds the available relocation supports sufficient. Those who receive relocation assistance must be both in danger of violence and willing to relocate, and at times one or the other of those conditions is not met. One participant interviewed for the study described how he received relocation assistance covering a month-long hotel stay, as well as other types of support such as gift cards to pay for food. He received this assistance because his attacker knew where he lived, and thus program staff determined that his return home would be unsafe. While staff also discussed with him the possibility of moving outside of Oakland, he declined: "I would not like to leave Oakland. I've been in Oakland for a long time. My family is here, and my work connections are here too." Conversely, another participant described how unsafe she felt living in the same place after her daughter, a minor, became the victim of a violent crime about six months prior. She was afraid of retaliation and wanted to relocate because the offender had not been caught and might know where they live. As a victim of a violent crime, her daughter had received Victims of Crime compensation from CalVCB, but she noted that it was insufficient to cover the costs of moving, especially in a challenging housing market during the COVID-19 pandemic. One comment she made, "It's not like they have an apartment complex to put us up in," was reminiscent of a comment a relocation staff member had made

expressing a desire to have more temporary housing options for individuals who need immediate relocation. The staff member felt that a "local safehouse" would be preferable to a hotel stay, since program staff would then be able to provide extra supports or services to participants.

Following the start of services, 54 percent of participants were eventually linked to other Oakland Unite-supported programs and primarily to life coaching. Of the 35 participants who consented to share their personally identifiable information, 19 became involved in at least one other Oakland Unite program either at the same time as beginning work with CYO, or afterwards. Among these participants, life coaching was the most common linkage, as seen in Table VI.1. Of the 17 people who received life coaching services, 13 (or 76 percent) made the service linkage at the same time they started engaging with CYO. An additional two participants began life coaching within 32 days of initiating relocation services (not shown). According to one staff member, individuals who are referred to life coaching are in a "contemplative" stage of change, where they are beginning to consider changing their behavior.¹⁶ Recent victims would have instead received case management from CIC. More than 400 days elapsed for the remaining two participants which suggests that their life coaching linkages were not primarily due to engaging relocation services (not shown). Similarly, two of the three participants linked to CIC accessed those services approximately three years after engaging relocation, suggesting a subsequent threat of violence occurring later in their lives.

Table VI.1. Relocation participants receiving other Oakland Unite services after relocation

Oakland Unite service	Service coincided with start of relocation		Service followed start of relocation		Total	
	Number	Percentage	Number	Percentage	Number	Percentage
Caught in the Crossfire	0	0%	3	9%	3	9%
Education and economic self-sufficiency	0	0%	1	3%	1	3%
Life coaching	13	37%	4	11%	17	49%
Any non-CIC Oakland Unite service	13	37%	7	20%	19	54%
Sample	35					

Source: Mathematica calculations using data from Cityspan.

Note: CIC = Caught in the Crossfire.

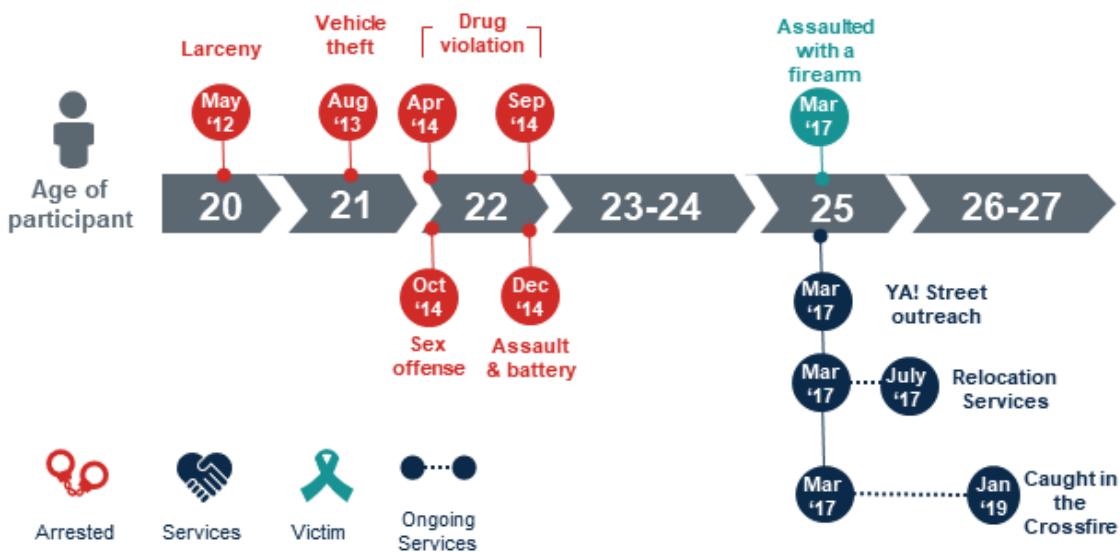
Percentages are based on the 35 individuals receiving CYO services in the 2016–2019 evaluation period that consented to share personally identifiable information. Participants may receive services from different providers and therefore result in "total" values that are less than the row sum.

¹⁶ In the Stages of Change model, individuals move in a cycle through pre-contemplation, contemplation, preparation, action, maintenance, relapse, and back to pre-contemplation.

Personal timeline of one relocation services recipient

The timeline below provides an illustrative chronology of one Oakland Unite participant who received relocation services. Prior to his first contact with Oakland Unite in 2017, this individual had repeated exposure to the criminal justice system starting from the age of 20. Following his first offense, a larceny theft, the severity of offenses he was arrested for escalated. At age 21, he was arrested for motor vehicle theft and evading a peace officer. He faced a string of arrests the following year for a range of crimes, including drug abuse violations for the possession and sale of marijuana, a sex offense for involvement with a minor more than three years his junior, and simple assault and battery.

He was assaulted with a firearm about two and a half years after the assault charge, at the age of 25, and began engaging Oakland Unite's shooting response services in the same month. He received services from Youth ALIVE! street outreach, relocation, and CIC, all beginning in March 2017. His involvement with relocation services spanned five months, with his last documented contact occurring in July 2017. His longest engagement with Oakland Unite services was through CIC, which he participated in for almost two years, ending services in January 2019. He is now 27 and has had no incidents, either as a victim or an arrestee, since the shooting incident that initiated his engagement with Oakland Unite in 2017.



Outcome findings

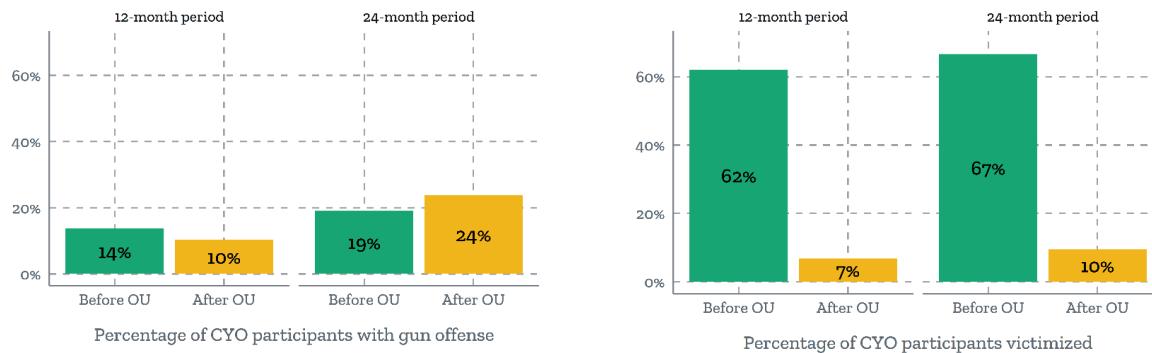
The relocation program is focused on removing individuals from situations where they are at immediate risk of violence. To understand whether the program was successful, we examined participants' likelihood of being arrested or being the victim of a violent crime, as reported to OPD, in the two-year period before and after the month in which they began receiving relocation services. These analyses include all 21 relocation recipients who began services before January 2018 and who consented to share their personally identifiable information with evaluators. As a result, we encourage caution with interpreting these results. With this sample size, were a single individual to be arrested or victimized in the post-services period, the group-wise average would increase by 4.8 percentage points. Therefore, actions by a relatively small number of participants will translate into large differences in percentage values. Furthermore, the small sample size results in wider confidence intervals than would be estimated for a larger population, thereby decreasing the

likelihood of detecting an effect magnitude that is credibly different from zero. Thus, the results should be interpreted with caution.

Participants' arrest rates before and after accessing relocation support are comparable, though participants were significantly less likely to be victimized. Among participants who initiated services prior to January 2018, 19 percent had been arrested for a gun offense in the two years preceding relocation participation, while 24 percent were arrested in the two subsequent years (Figure VI.7). Victimization rates, on the other hand, are dramatically lower in the period following relocation support services. While two-thirds of participants were the victim of a violent crime in the 24 months preceding their engagement with CYO, 10 percent were in the 24-month period afterwards.

The decrease in victimization rates is unlikely to be exclusively driven by participant relocation away from Oakland. While such an explanation is plausible, since living outside Oakland reduces the opportunity of being a victim in the city, longer-term relocation should also have the effect of reducing arrest rates in the post-period. As the left panel of Figure VI.8 displays, however, arrest rates for gun offenses are stable over the same time period. Unfortunately, data are not available on how long a relocation participant is away from Oakland. By including months spent outside of Oakland in the period following relocation services, arrest and victimization rates could be lower than their true levels.

Figure VI.7. Comparison of relocation participants' arrest and violent victimization rates before and after starting relocation services



Source: Mathematica calculations using data from Cityspan and OPD.

Note: CYO = Community & Youth Outreach; OU = Oakland Unite.

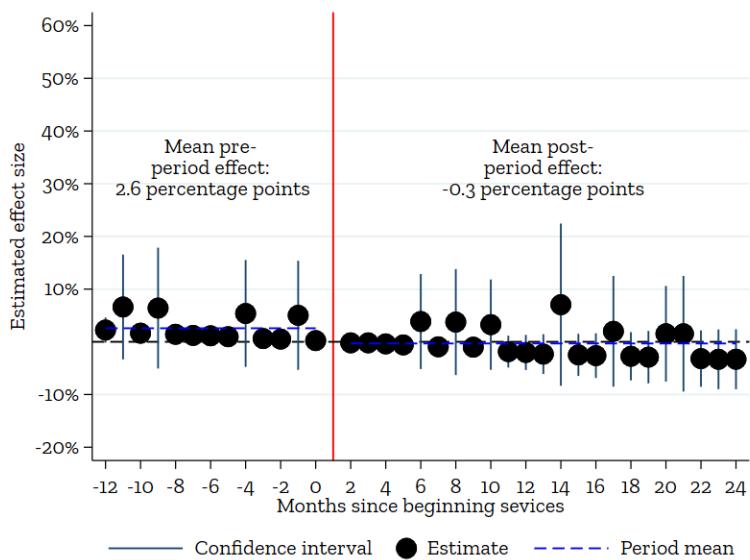
Actual victimization rates are likely to be higher than indicated because of underreporting of victimization incidents to the police. Time periods are based on the calendar month in which a participant first receives contact with relocation support services. In all figures, the "After OU" period begins the first calendar month after initial contact with Oakland Unite. Since OPD data is available only through December 2019, the 12-month period sample excludes participants starting relocation support services in January 2019 or later, and the 24-month period sample analogously applies a January 2018 cutoff.

The raw percentages reported in Figure VI.7 do not provide insight as to the specific month when events occur relative to the start of relocation services, and they weight all participants equally regardless of the number of outcomes experienced over the designated time period. To provide more granular results that also adjust for differences across participants in their baseline levels of arrest and victimization and account for seasonal and long-term crime trends, we employ an event study regression framework as described in Chapter III. We plot the monthly average likelihood of being arrested for a gun offense (Figure VI.8) or being a victim of a violent crime (Figure VI.9) from event study models. All estimates are relative to the first month

after beginning relocation services, which serves as the reference point ("base rate") and takes the value of 0. These estimates can be interpreted as the percentage point changes in the probability that a participant will experience the indicated outcome relative to month 0. Thus, if the program was effective in reducing participants' likelihood of engaging in or becoming a victim of violence, we would expect the points to the right of the red line to be negative and statistically significant. On the other hand, if participants were to engage in retaliatory violence, we would expect to see a spike in their relative likelihood of being arrested for gun or violent offenses in the months immediately following the precipitating incident. In other words, the points to the right of the red line would be positive and statistically significant.

The monthly likelihood that a participant is arrested for a gun offense after first receiving relocation services follows a slight, gradual decline. Monthly arrest rates immediately preceding the start of services exceed the average of gun offense rates in the post-services period (Figure VI.8). We note an uptick in gun offense activity in the 14th month, which is driven by two individuals out of a total sample of 21 participants. This small sample size means that large effects would be observed when just two or three people engage in a gun offense and is a key reason why confidence intervals for all estimates straddle zero. Overall, the data suggest relocation contributes a slight reduction in participants' likelihood of being arrested on gun-related charges and that participants avoid retaliatory violence. Offense rate reductions happen nearly two years after initiating relocation assistance and are not statistically significantly different from zero. We used this same framework to examine participants' total arrests and engagement in violent offenses (not shown) and find a flat response—post-services rates for both outcomes were similar to pre-service rates.

Figure VI.8. Event study results for relocation on participant gun offense rates



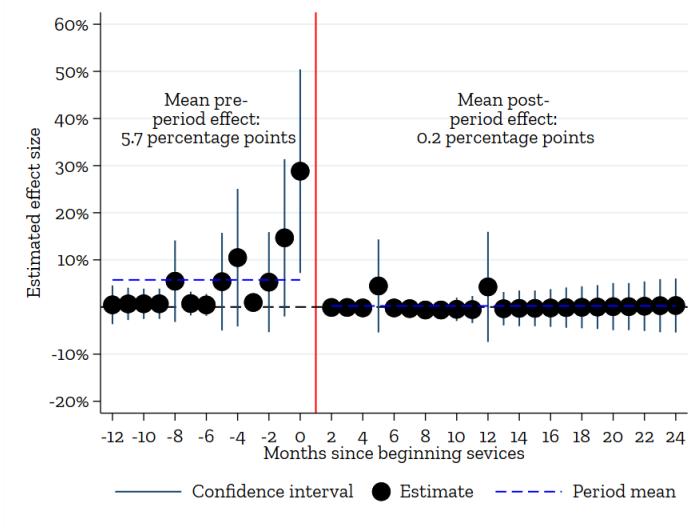
Source: Mathematica calculations using data from Cityspan and OPD.

Note: The dependent variable is a binary variable for whether the participant was arrested in the specified month on gun-related charges. Time is expressed relative to the calendar month in which the CYO relocation support services recipient began receiving services. For example, June 2017 is counted as month 0 for a participant whose CYO assistance began on June 18, 2017, and July 2017 is considered as month 1. The sample is restricted to only those N=21 individuals who received relocation support services from CYO between 2016 and 2018 and are observed for at least 24 months following the initial receipt of CYO services as per participation data recorded in Cityspan. The event study regression model includes person and year fixed effects. Standard errors are clustered at the person-level and confidence intervals are reported at the 95 percent level.

Recipients of relocation support are less likely to experience violent re-injury after beginning these services. Monthly victimization rates over the two-year period following the start of services are low relative to pre-service levels. The 24-month post-period window offers a longer period to observe outcomes which is especially important for this program since the duration of participants' relocation outside of Oakland is not logged. Over this period, we see a consistent absence of victimization and no indication that victimization patterns follow any temporal pattern. We observe similar effects when restricting the post-period window to 12 months, which expands the sample to include participants who received CYO services in 2018. These results suggest relocation helps reduce future exposure to violence.

Since the program prioritizes individuals who are at risk of being a victim, the share of participants recorded as having personally experienced a violent crime right before engaging with CYO may be lower than for participants of the CIC and violence interruption programs. The highest victimization rates in the pre-period occur in the month in which a participant initiates relocation services, and in the preceding month. The coefficients on earlier months are positive and relatively large, indicating the possibility that some participants are victimized multiple times in a six-month period, or that some participants wait several months after filing a victim report with OPD before engaging CYO for relocation support.

Figure VI.9. Event study results for relocation on participant violent victimization rates



Source: Mathematica calculations using data from Cityspan and OPD.

Note: The dependent variable is a binary variable for whether the participant was the victim of one or more violent crimes in the specified month. Time is expressed relative to the calendar month in which the CYO relocation support services recipient began receiving any services under the relocation support sub-strategy. For example, June 2017 is counted as month 0 for a participant with CYO assistance beginning on June 18, 2017, and July 2017 is considered as month 1. The sample is restricted to only those N=21 individuals who received relocation support services from CYO between 2016 and 2018 and are observed for at least 24 months following the initial receipt of CYO services as per participation data recorded in Cityspan. The event study regression model includes person and year fixed effects. Standard errors are clustered at the person-level and confidence intervals are reported at the 95 percent level.

Recommendations for relocation support services

Consider tracking more detailed information about relocated individuals. Relocation can be a powerful tool to prevent imminent violence, but whether there are differences in arrest and victimization depending on the relocation service outcomes cannot be discerned from the available data. For example, individuals may be relocated out of state, or they may move to nearby cities that do not fully remove them from the circumstances that can lead to subsequent arrest or victimization. It may be that individuals who permanently relocate or move farther from Oakland have lower rates of arrest, but data on service hours, arrests, and victimizations alone cannot distinguish this nuance. Additional information such as the length of the relocation period and whether the individual remained in Oakland or moved to a nearby city or out of state would be useful to making more nuanced comparisons of arrest and victimization outcomes after receiving services.

VII. Homicide support services

Overview of homicide support services

Homicide support services were designed to be available to family members, friends, classmates, and others affected by a homicide in Oakland. Family and friends are referred to these services by OPD, Victims of Crime Compensation Program, Oakland Unite, school personnel, community leaders, partner organizations, and word-of-mouth. Youth ALIVE!'s Khadafy Washington Project (KWP) coordinates service delivery, which includes initial outreach and crisis response to support families and others affected by the victims. These support services include planning and financial assistance with funerals or vigils, referrals to other stabilizing services such as housing and healthcare, assistance with Victims of Crime benefits application, and assessing for potential relocation needs. CCEB's trained mental health professionals provide trauma-informed mental health services to help participants transition from crisis to stability. Services are based on participants' needs, and therefore continue for as long or as briefly as they prefer.

Support services are crucial in serving the needs of relatives of homicide victims, also referred to as co-victims or survivors. The Center for Victim Research (2019) suggests there is a particular need for "wrap-around services tailored to vulnerable populations" because Black and Latinx communities experience higher rates of homicide, yet supports for co-victims are "frequently not readily available or accessible". Mental health interventions for co-victims are particularly important due to the trauma and secondary victimization of handling the after-effects of homicide. Connolly and Gordon (2015) describe survivor support groups and family therapy as common interventions that encourage family members to find meaning, cope with the stress, and build a new future for themselves.

According to the Center for Victim Research (2019), individual and group counseling and psychotherapy for co-victims have demonstrated advantages, but co-victims still experience limitations to accessing psychotherapy, including: 1) not enough clinicians trained in understanding grief and trauma, 2) community stigmas about mental health, and 3) complicated insurance requirements. For African American families of victims, Sharpe (2008) found that "respondents identified distrust of clinical and research institutions, fear of stigmatization, and level of comfort with clinicians, as potential barriers to seeking support."

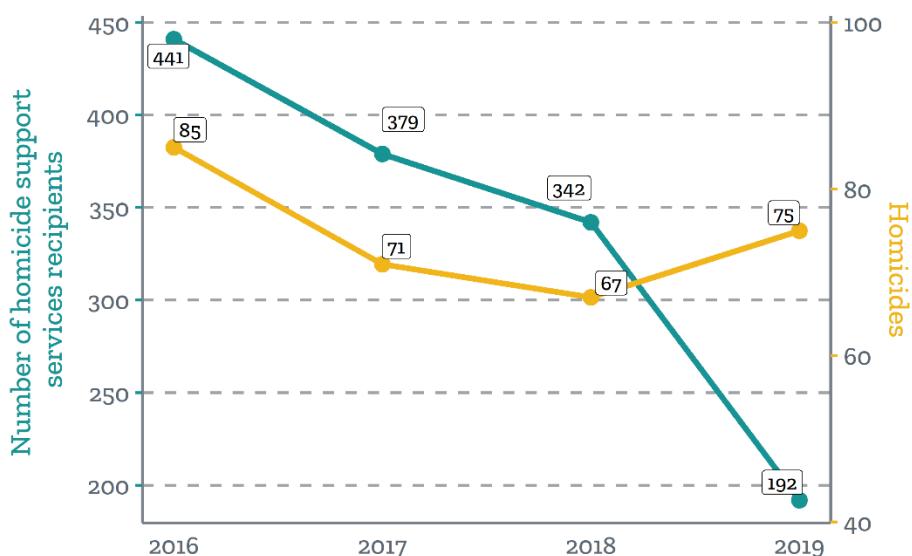
There is promising work toward building evidence-based interventions for homicide survivors. The Center for Victim Research (2019) cites one comprehensive wrap-around intervention called "Restorative Retelling and Criminal Death Support Group," which "offers trauma support, addresses psychological needs, provides training on handling media and criminal justice, and discusses other aspects of violent death." Vincent et al. (2015) review 20 intervention programs and recommend that counseling and therapy be coupled with assisting survivors in establishing a long-term support system, laying out a program model for survivors that includes early intervention, long-term support, advocacy, case management, linkage to a survivor community, and a hotline or website to connect to other services.

CCEB, together with Youth ALIVE!, are responsible for providing homicide support services to survivors of shooting victims in Oakland. In the rest of this chapter, we share findings on the implementation of these services and offer recommendations for service improvement.

Implementation findings

The number of people receiving homicide support services from CCEB has varied each year, from a high of 441 in 2016 to a low of 192 participants in 2019. The number of participants annually has decreased over time, mirroring the annual homicide count trend over the same period aside from 2019, when the homicide total increased but the number of service recipients sharply decreased (Figure VII.1). As the number of homicides in Oakland has fallen, so have the number of funeral and memorial services supported by KWP, albeit at a faster rate. In 2016, KWP supported 90 funeral and memorial services; this number decreased to 35 in 2018, the last year when this information was recorded. Approximately half of all families receiving funeral support services receive support for more than one event to commemorate their loved ones, which are typically held on consecutive days.

Figure VII.1. Annual recipients of homicide support services

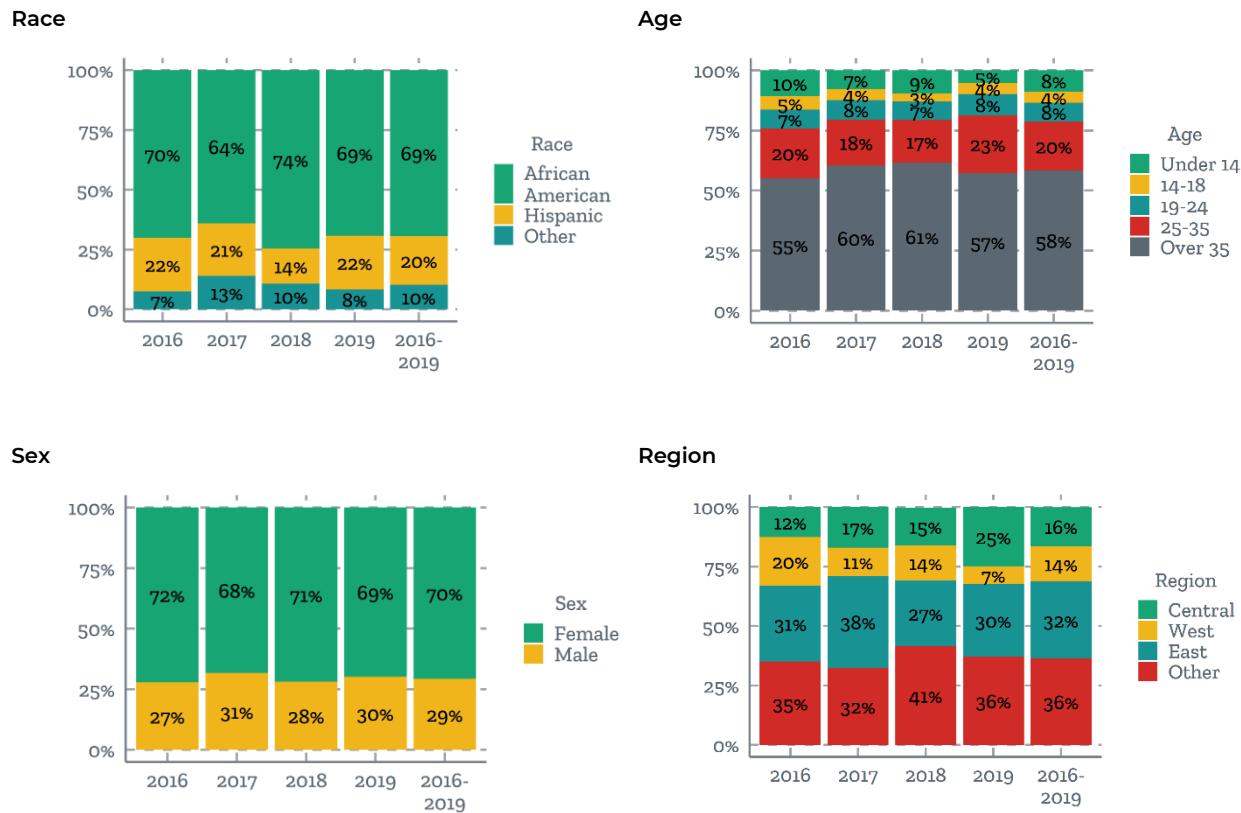


Source: Mathematica calculations using data from Cityspan and City of Oakland Human Services Department.

The majority of participants are African American, adult women in East Oakland. At 69 percent, African American participants represented the largest group by race/ethnicity, followed by Hispanic participants at 20 percent (Figure VII.2). All other races/ethnicities combined accounted for the remaining 10 percent. The majority of CCEB service recipients were 25 years old or older (78 percent), though more than 13 percent of participants were 18 or younger. Women were the overwhelming majority of service recipients at 71 percent. Within Oakland, the majority of service recipients lived in East Oakland, coinciding with the large share of homicide victims who were East Oakland residents. Between 2016 and 2019, 32 percent of homicide support participants were residents of East Oakland, where 46 percent of Oakland's homicides occurred over the same period.¹⁷ Figure VII.3 shows that the 94601, 94603, 94605, and 94621 ZIP codes had the highest number of participants, which accords with the maps for CIC and relocation participants.

¹⁷ We use homicide data from the City of Oakland's Human Services Department homicide tracking tool which records the location of homicide incident and not the home address of the victims.

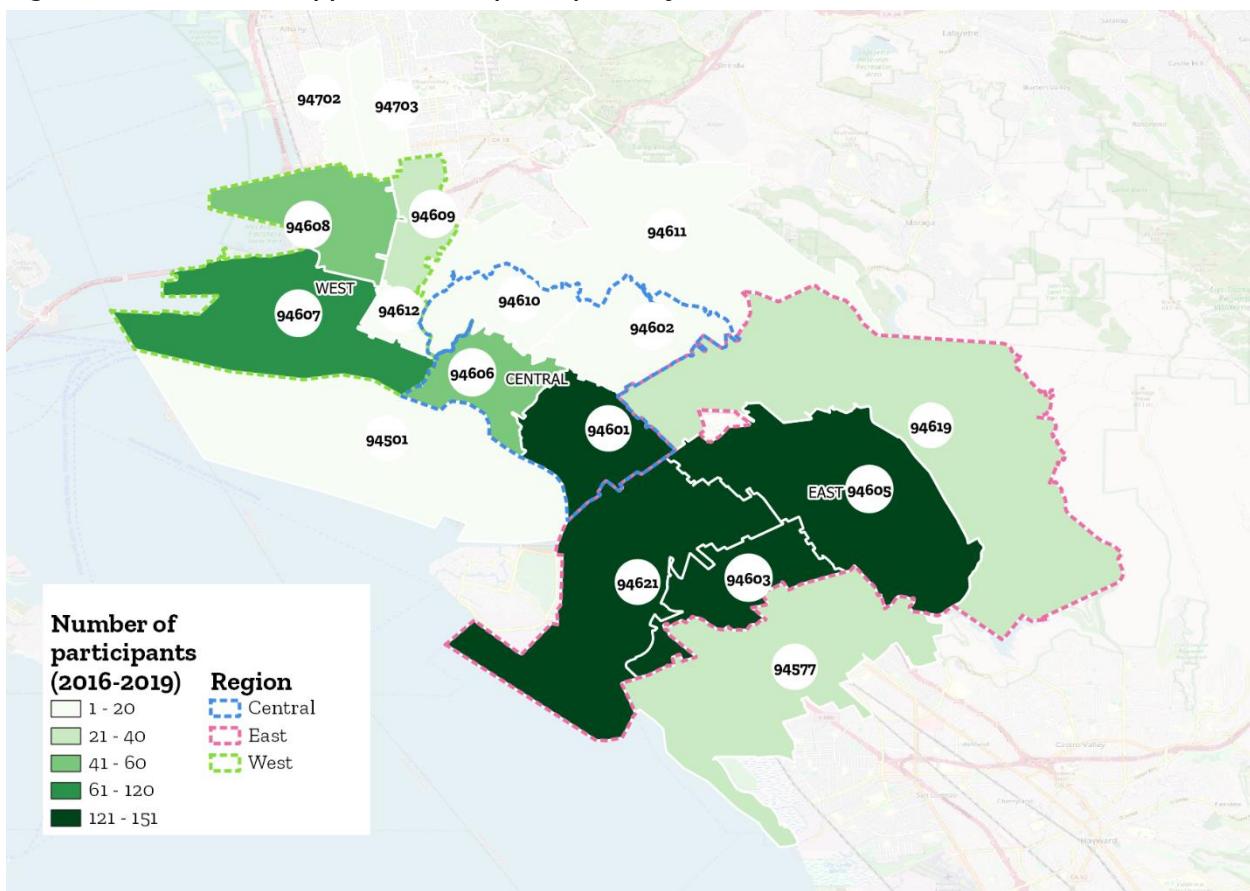
Figure VII.2. Demographic composition of homicide support services participants



Source: Mathematica calculations using data from Cityspan. Percentages may not add up to 100 percent due to rounding.

Note: The 'Other' group in the race/ethnicity plot consists of all individuals identified in Cityspan as Asian/Pacific Islander, Native American, White, Multi-ethnic, Other, or who lacked information on race/ethnicity. The 'Other' group in the region plot consists of individuals who either lived in North Oakland or outside of Oakland. Percentages may not add to 100 percent because of rounding.

Figure VII.3. Homicide support services participants by ZIP code

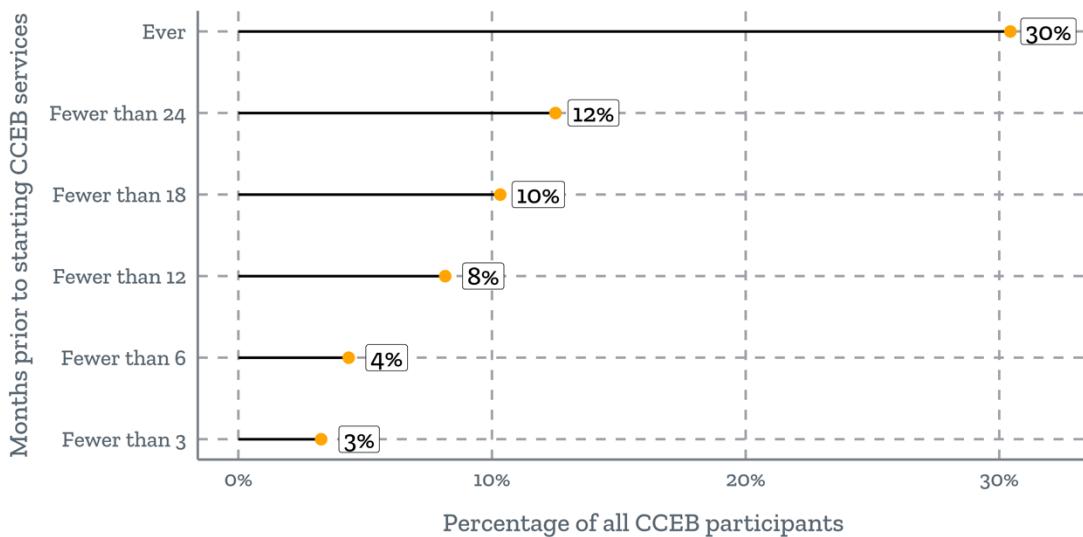


Source: Mathematica calculations using data from Cityspan. Spatial boundaries are from City of Oakland (2016) and US Census Bureau (2019).

Note: The ZIP code corresponding to each feature appears as black text in the white circle. Numbers denote the total count of individuals receiving homicide support services between 2016 and 2019 who resided in a given ZIP code at the time that services were initiated. An additional 409 participants with home addresses outside the depicted area received services between January 1, 2016 and December 31, 2019.

Thirty percent of homicide support participants were themselves the victim of a violent crime at some point in their lives, as seen in Figure VII.4. For the majority of participants who have been victimized, incidents occurred several years before receiving homicide support for the loss of a family member or loved one. Twelve percent of participants had been victimized in the two-year period before receiving homicide support services, and 18 percent had been most recently the victim of a violent incident more than two years before receiving services. In the 12-month period before receiving homicide support services, eight percent of participants had been victimized.

Figure VII.4. Percentage of homicide support services participants with victimization history prior to start of services



Source: Mathematica calculations using data from Cityspan.

Note: CCEB = Catholic Charities of the East Bay.

Actual victimization rates are likely to be higher than indicated because of underreporting of victimization incidents to the police. Time periods are determined according to the month and year in which the participant first had any service contact with the sub-strategy.

Homicide support services connect grieving families with immediate, practical assistance, including applying for Victims of Crime support and planning for funeral and memorial services. After Youth ALIVE! KWP receives next-of-kin information, they reach out to the family within 48 hours to assess needs and offer services. In this initial interaction with the next-of-kin, the crisis responder learns about any safety concerns, plans for the funeral, and asks how family members are faring mentally. They walk the family through next steps, such as making an appointment to apply for Victims of Crime financial assistance from the California Victim Compensation Program, recommend a mortuary, and help with funeral arrangements. As one staff member expressed, "there's no script to this," and so having these conversations requires specialized communication skills. For instance, a family may wish to hold a funeral for their loved one that costs more than the financial assistance can accommodate, which leaves staff in the difficult position of having to reason with them about costs when they are also grieving.

A stakeholder expressed a similar need for specialized communication skills from OPD's Homicide Unit. Because victims' survivors are dealing with "myriad emotions that officers are not well-equipped to deal with," this stakeholder suggested that a "victim advocate," from within the Homicide Unit or an external agency, would benefit the investigation of a homicide. In interviews conducted in 2017 with shooting victims and family members of homicide victims, they similarly described how officers investigating the crime could sometimes seem uncaring, brusque, and insensitive, such as joking or laughing or leaving a homicide victim's body out for a long time (Janetta et al. 2019). A lack of rapport between investigator and those being questioned thus hampers the exchange of information that could be used to help solve a crime. Having a person specially trained to deal with trauma and grief could navigate responding to loved ones' emotions

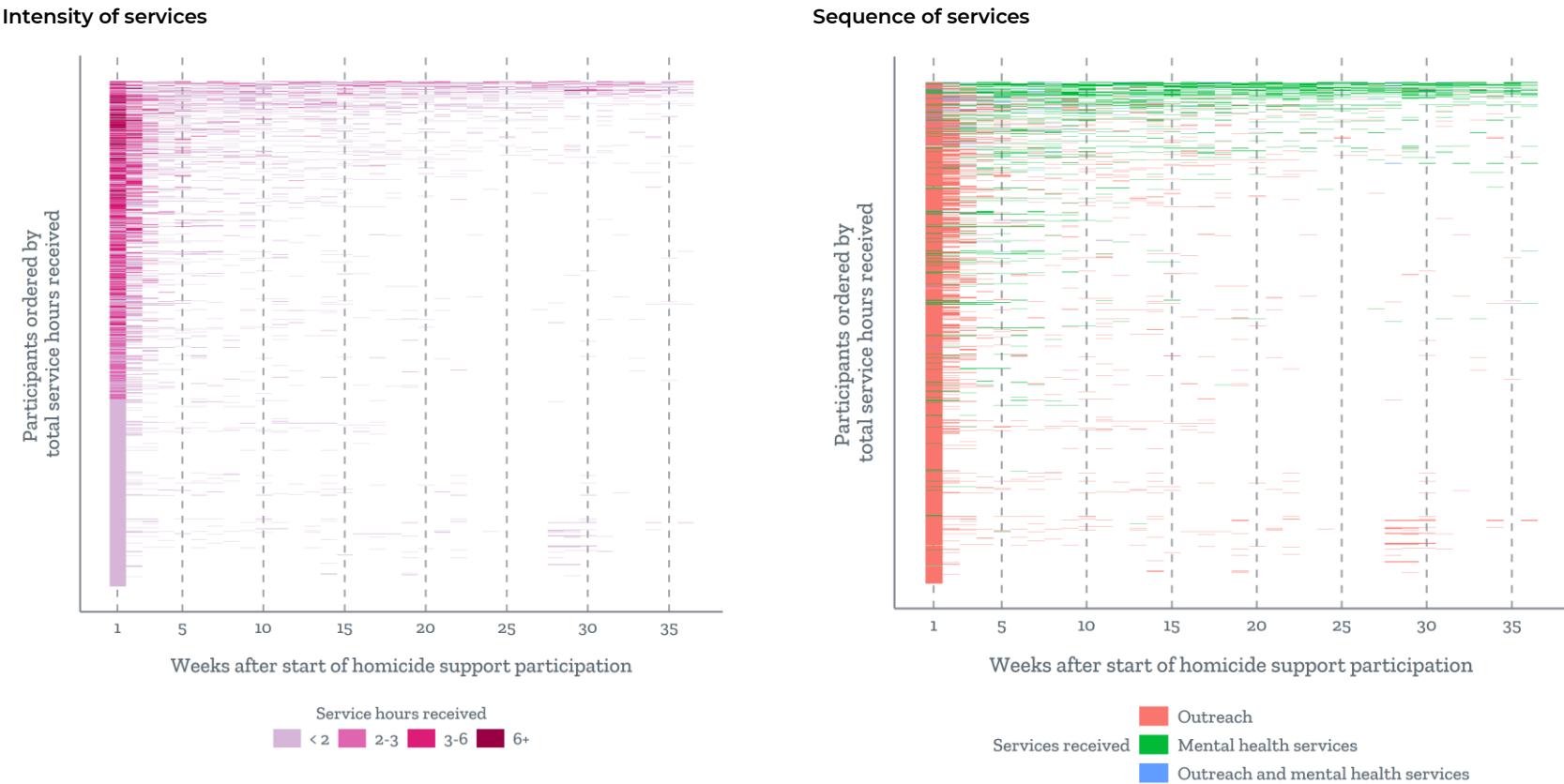
and negative tensions, to both support families and provide assistance in solving the crime, which would offer further closure.

With the emphasis on crisis stabilization, the initial week of service provision consists exclusively of intensive outreach and forty percent of homicide support services recipients received services for no more than one week. For the majority of participants, the first week of service is the most intensive one. As seen in the left panel of Figure VII.5, the first week of service is usually the one in which the participant has the greatest number of hours of service contact. For participants whose involvement with homicide support services extends beyond one week, the number of weekly contact hours tends to decline over time and from week three onwards remain stable at fewer than two hours weekly. For individuals who receive services over multiple weeks, it is common for several weeks without services to pass before resuming additional service contact.

Not shown in the figure is that 28 percent of service recipients experienced at least one period of a four-week gap in service before resuming service, and for 17 percent of participants there was at least one eight-week period without service before contact with homicide support resumed. Furthermore, an individual may have multiple periods without continuous contact. We separately find that nine percent of participants experienced two or more four-week periods without contact prior to service resumption (not shown). This is consistent with how homicide support services were designed, with recipients remaining engaged for as long as they wish. One staff person from Youth ALIVE! explained that "once we get a referral, we never close the door on our clients." Youth ALIVE! takes steps to maintain contact with family members through activities like hosting events, follow up communication, and getting letters from the mayor written to them.

Some participants who receive homicide support services over the period of multiple months will only ever engage in intensive outreach services, as seen by the frequency of orange-colored cells in the "Sequence of services" subplot of Figure VII.5. Two distinct groups emerge in examining the types of services that participants receive over time. The first group receives either only or predominantly outreach services. Many such participants are involved with homicide support for a couple of weeks and may have intermittent contact in subsequent months. The second group of recipients maintains more-or-less continuous contact and quickly after their intake transition to receiving mental health services from CCEB. This group of individuals is smaller in number than the first group, and visible in the upper portion of the plot where recipients engaging in homicide support services in the greatest amount of overall time are located. With few exceptions, service provision focuses on a single type of service in a given week; it is rare for a participant to concurrently receive outreach and mental health services, as indicated by the relative absence of blue-shaded cells.

Figure VII.5. Intensity and sequence of services received by homicide support services participants

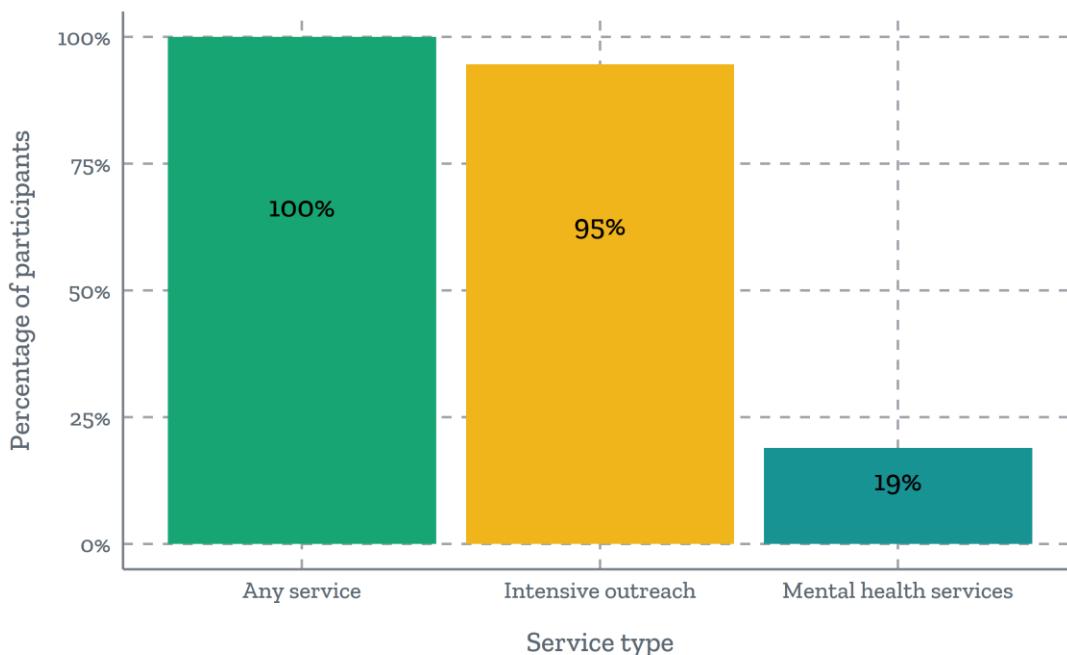


Source: Mathematica calculations using data from Cityspan.

Note: Each row represents the homicide support services received by a single participant involved in the sub-strategy between 2016 and 2019. Participants are ordered according to the total number of service hours received across any service type over the duration of their participation. Participants receiving the fewest hours are positioned at the bottom while participants with the greatest number of total service contact hours are positioned at the top.

While nearly all recipients receive some amount of intensive outreach, as shown in Figure VII.6, less than 20 percent of participants receive mental health services from CCEB. After helping the grieving family through the time of their loved one's funeral, Youth ALIVE! staff then transition to focus on their longer-term mental health and therapy needs. Through KWP, Youth ALIVE! offers a "Circle of Care" support group for family members and siblings of the homicide victim, which includes planned activities to help families support each other in their grief. Staff also gauge readiness for individual mental health services from CCEB, for which not everyone is interested. One staff member described how family members may be resistant to mental health services because of stigmatization concerns. A mother described how KWP staff had reached out to offer counseling to her and her two young adult children after her son's homicide, but her children did not take part in counseling.

Figure VII.6. Percentage of homicide support services participants by service type



Source: Mathematica calculations using data from Cityspan.

Mental health services focus specifically on the grief associated with the traumatic loss of a loved one. However, individuals can have a pre-existing mental health diagnosis or bring up other stressors that affect their mental health. These other issues may not be addressed through the therapy offered by this sub-strategy, unless they relate to the homicide. Agency staff described how individuals may consistently attend sessions to manage their grief, and then drop off, but return when something happens in their life to bring back the memory of their loss. These instances, like the anniversary of the death, birthdays, holidays, or another death in the family can propel family members to reach back out to one of the agencies that helped them in the past. Thus, as seen in the "Sequence of services" plot in Figure VII.6, periods of participation in mental health therapy can be interspersed with gaps in service participation.

The homicide support services program is able to leverage connections to the community to provide timely and valued services to families affected by homicide. With the urgency of reaching out to the family as quickly as possible after a homicide, Youth ALIVE! KWP may alternately receive next-of-kin information

from violence interrupters if the information from OPD is not immediately available. Due to their presence in the community, and knowledge of its members, these violence interrupters are able to connect with families and help them access needed services. For example, Youth ALIVE! collaborates with the Alameda County District Attorney's Office Victim-Witness Assistance Program, which provides a variety of services for victims of crime and their families. When this office encounters challenges in reaching the family, Youth ALIVE! assists with contacting them in real-time. One stakeholder noted that "families benefit a lot from the support of Youth ALIVE!, [compared to] other families who don't have these services. Youth ALIVE! people show up on scene and start talking with them there. Or they'll go to their homes."

The goals of mental health therapy are to strengthen families by helping them through the grieving process. Agency staff explained that the plan for CCEB to provide mental health support for families of homicide victims was originally designed as a peer support model. Support evolved to a clinical case management model with masters-level clinicians, once it was evident that the level of trauma and the impact on families required a much higher level of support. Clinicians work with individuals to develop a service plan that centers on helping them have a healthy grieving process, which may include also dealing with depression and anxiety. They work to help individuals avoid complicated grief, where grieving interferes with their ability to function in their daily life.

CCEB works with family members of all ages to help parents, children, and siblings address the grief of losing a loved one. With parents, agency staff described how clinicians assess their ability and competence around parenting and are equipped to help mothers and families manage complicated grief. This allows parents to provide for their children's socio-emotional well-being as well as their own. Clinicians can also give parents the tools to help children who are dealing with their own grief. This may include teaching them to have a conversation with their child or leading a conversation with the child when the parent is also present. Older children (eight and older) often participate in individual therapy as well.

Clinicians see the goals of therapy as strengthening families so that participants will have a healthy support system, the skills to cope when something happens to trigger a memory of the homicide, and the ability to regulate emotions so they can still meet the responsibilities of caring for children or keeping a job. Outwardly, these positive outcomes can be seen as attending therapy or groups, since it can be challenging even to leave home, acknowledging and expressing feelings, and taking part in additional services. However, we do not observe participants of homicide support services accessing other Oakland Unite programs, like life coaching; of the 1,354 participants receiving homicide support services between 2016 and 2019, only one person received additional Oakland Unite services. Since participants tend to drop out of receiving services when they believe the crisis has stabilized, there are no additional opportunities to track their outcomes or monitor their progress. Similarly, participants who receive services outside of Oakland Unite would not have their participation or outcomes data available to grantees involved with Oakland Unite. At the same time, agency staff noted a lack of clarity as to whether this goal of family-strengthening is aligned with the goals of the Human Services Department and its violence prevention strategies.

Youth ALIVE! and CCEB collaborate to leverage each agency's organizational strengths, wealth of experience, and reputation in the community to provide comprehensive wrap-around services to families impacted by homicide. Youth ALIVE! and CCEB have developed a strong working relationship to best serve the short- and longer-term needs of families that have lost a loved one to homicide. One staff person noted that services from Youth ALIVE! are some of the only ones that are "felt by the community to be

trustworthy, since there's a lot of hesitation around receiving services." Because of Youth ALIVE!'s role as first responders when there is an incident of violence, family members of a homicide victim become more open to participating in services from Youth ALIVE!, and by association from CCEB. Beyond Youth ALIVE!'s role in meeting families' immediate needs after a homicide, CCEB brings a "second level of care," providing free therapy to help traumatized family members recover after the crisis. Staff from the two organizations have been collaborating for long enough that they have established effective ways for leadership to communicate, an understanding of the role that each other plays, and collective recognition that "we all have the same mission."

However, differences in perspective about what an appropriate response is to an urgent mental health referral pose a challenge to collaboration among service providers. In their role as crisis responders, Youth ALIVE! staff encounter family members who are experiencing and possibly exhibiting strong negative emotions and may perceive their grief as needing urgent attention from a mental health provider. In contrast, agency staff from CCEB noted that this grief is normal following the violent death of a loved one. There can be tension between the two organizations about what constitutes an urgent mental health need and the appropriate respond to those needs. While crisis responders are accustomed to being available to provide immediate support to family members at any time, mental health providers are only available during typical business hours. Balancing responsiveness with the number of cases that a clinician can handle remains a challenge for CCEB with the current model of funding mental health clinicians. For example, the greatest demand for services occurs shortly after a homicide. Thus, if several occur in a short period of time, one clinician described how they might not be able to accept former clients who want to re-engage and simultaneously address the therapy needs of those affected by recent violence.

Agency staff suggested that better communication and information-sharing among frontline providers would promote seamless services at the case level. Staff suggested several ways to further strengthen the collaboration between Youth ALIVE! and CCEB. Multiple staff noted the value of intentional efforts to build the partnership and would like to see these efforts continue. For example, earlier in the collaboration, the agencies had an external facilitator help the two agencies work through their differences, and before COVID-19 had also provided opportunities for staff to get to know each other and their roles in the work. They also indicated that communication between CCEB and Youth ALIVE! could be more streamlined, though this has been improving. For example, sharing of information between agencies can be insufficient at the case level. Youth ALIVE! provides a "warm hand-off" to CCEB when individuals express an interest in services, providing information to CCEB on who wants to be contacted, and informing the family of this. However, sometimes the referrals lack details that would have helped the mental health provider when they first interact with the individual, such as when an urgent referral is made without an explanation of why it is urgent. Staff from CCEB can reach back out to Youth ALIVE! to help fill in gaps, but this creates an interruption in seamless services for the family members, who are already in a vulnerable and emotional state. Additionally, individuals may still interact with Youth ALIVE! even after starting services with CCEB, which can create a situation where the two agencies are not fully aware of what the other is doing for the client. One staff member suggested that more direct communication between frontline staff at Youth ALIVE! and CCEB could help them provide more appropriate outreach and timely services to participants, rather than having communications funneled through leadership.

Recommendations for homicide support services

- **Continue to clarify communication pathways and process between agencies to facilitate services for participants.** Agency staff indicated that Youth ALIVE! and CCEB are already taking steps to more clearly define roles and boundaries in the work that each agency is responsible for, so each one is aware of the services participants receive from the other when clients are concurrently receiving therapy as well as support from Youth ALIVE! Developing a clear process and expectations for what information should be shared, and how to share this information among providers from the two agencies, can enhance coordination of services for participants and prevent miscommunications that can interrupt those services.
- **Clarify the logic connecting homicide response and violence prevention goals.** Beyond providing necessary crisis support, the relationships that develop with families through this sub-strategy may also promote participation in services to prevent further violence. For instance, agency staff see mental health therapy as playing a role in strengthening families in their recovery from the trauma of their loved one's death. Parents' mental health is a correlate of youth violence (Moore et al. 2015), and so supporting parents' mental health as they grieve is one way that the program might positively influence upstream factors in violence prevention. Clarifying the purpose of the services offered through the sub-strategy can help with defining desired outcomes linked to these services.
- **Strengthen capacity of crisis responders from the shooting and homicide response sub-strategy to communicate with grieving families and respond to immediate emotional needs.** Crisis responders encounter family members at an emotional time and need to be able to quickly connect with them and navigate conversations about services. Beyond the offer of practical assistance, these crisis responders also need to be able to appropriately respond to strong emotions and be sensitive to the culture and desires of the family at an emotionally charged time. Providing additional training to the shooting and homicide response staff who have these difficult conversations could help them better manage these conversations and address normal expressions of grief in the days following a homicide when they are providing intensive outreach.

VIII. Conclusion and recommendations

We close by summarizing the key findings from our analyses of each program, sharing recommendations for the shooting and homicide response sub-strategy based on these findings, and identifying promising areas for further research.

Key findings

The evaluation's key findings, summarized below, suggest that the shooting and homicide response sub-strategy offers needed supports to victims of violence and contributes to reducing re-injury and retaliation following a violent incident. Each year, the sub-strategy provides \$1.4 million in grants to community-based organizations that in turn offer services to hundreds of individuals. This investment has the potential to save the city considerable spending in the long run. For example, a single shooting injury can cost the city more than \$1 million including medical, police, court, and prison costs (Muhammad 2018). The costs to society can be even higher: at least \$6 million for each death caused by gun violence.

Effective violence interrupters demonstrate a unique combination of skills and experiences, including a deep history with their community, "street smarts," and consistent follow through. As members of the communities they serve, violence interrupters are relatable, understand why violence occurs, and have the credibility to help resolve it. Violence interrupters treat their work as more than a job, and as a result of consistent follow through in their interactions with the community have developed the trust and respect needed to successfully help resolve conflicts among community members.

After a shooting incident was referred to violence interrupters, victims largely avoided violent re-injury and retaliation over the following two-year period. Victims' likelihood of reporting being a victim of violence decreased dramatically after the precipitating incident, returning to its baseline low levels. Victimization rates decreased from 100 to 13 percent in the 24 months before and after. Victims' likelihood of being arrested for a gun offense did not peak in the months after the initial shooting incident, suggesting that they did not engage in retaliatory violence. Similarly, victims' past co-offenders did not appear more likely to engage in violence in the months after the precipitating shooting incident occurred.

CIC intervention specialists supported participants using their knowledge of what victims need to recover following violent trauma. The services provided varied based on the needs of the individual participant. Although many CIC participants engaged with services over a sustained period of time, almost half ended their involvement with CIC after two weeks or less. Following initial intensive outreach, intervention specialists focus on longer term needs, including case management (provided to 54 percent of participants) and mental health therapy (provided to 16 percent).

Over the two years after starting CIC services, participants largely avoided reinjury. Victims' likelihood of reporting being a victim of violence decreased dramatically after the precipitating incident, returning to their baseline low levels. Victimization rates decreased from 59 to 15 percent in the 24 months before and after. We find no evidence that participants' arrest rate for gun-related crimes (14 percent) changed after receiving CIC services, suggesting there was no pattern of retaliation.

Relocation support staff assess short and long-term safety needs for relocation, and most participants receive short-term support to relocate. Program staff help victims plan for emergency relocation to a safe

place, such as a relative's home or a hotel outside of Oakland. Plans are set in motion quickly, often within a day. In rare cases when the \$500 emergency funds are insufficient to ensure a participant's safety, staff develop longer-term plans customized to the individual's situation.

Over the two years after receiving relocation support, participants largely avoided reinjury. Victims' likelihood of reporting being a victim of violence decreases dramatically after the precipitating incident, returning to their baseline low levels. Victimization rates are substantially lower after CIC services, decreasing from 67 to 10 percent in the 24 months before and after. The decrease in victimization rates is unlikely to be exclusively driven by long-term relocation out of Oakland, as participants' arrest rate for gun offenses remained similar after relocation.

Homicide support services connected grieving families with immediate, practical assistance, including applying for Victims of Crime support and planning for funeral and memorial services. In the week after a homicide, program staff conducted intensive outreach to grieving families, filling a role that police officers might not be well-equipped to fill. Forty percent of participants received services for no more than one week. The remaining 60 percent intermittently engaged in services over a more than six-month period. Additional supports are available on an as-needed basis. For example, staff gauge willingness to be referred to mental health therapy to manage grief. Less than 20 percent of participants received mental health services.

Programmatic recommendations

Identify data fields most likely to create value for program improvement and evaluation and formally codify their collection—particularly for the violence interruption program. Data collection procedures across the sub-strategy are often influenced by single individuals instead of formalized procedures. As a result, best practices for providing comprehensive and consistent data records are often lost with staffing changes. For example, the strategy weekly meeting logs contain more information in some years than others about a shooting victim's status and the interventions undertaken by agency staff. Inconsistent data collection has implications for evaluability and potentially reduces the scope for answering relevant research questions on measuring program impacts and effectiveness.

While Caught in the Crossfire, relocation, and homicide support services could each benefit from systematically collecting additional information on services and participants, the violence interruption program in particular stands to benefit from formalizing its data collection procedures. Executive notification email threads were the primary source of data on violence interrupters' responses, but information about the mediations they provided are not systematically recorded. If mediation details were recorded in a codified fashion, future evaluation efforts would be able to answer additional questions, such as how often violence interrupters are correct in their retaliatory risk assessment and how their responses differ across these risk levels. To construct a database that is more robust for monitoring, evaluation, and learning, we propose collecting the following information: whether an in-person/telephone meeting took place, the victim's self-reported retaliation likelihood, the violence interrupter's assessment of retaliation likelihood, and whether the violence interrupter conducted a formal mediation.

Although the violence interruption team's objective in the moment is providing immediate crisis response, there may be some low-effort changes that allow for essential information to be collected. While the current system of logging information by email is not ideal from a data management standpoint, a short table template could be included in all email conversations to standardize the information recorded. If data

continue to be shared by email instead of an app or other alternative, all executive notifications and responses should also be CC:ed to a dedicated email address to ensure that all notifications can be retrieved easily.

Across the shooting and homicide response sub-strategy, some providers collect program data that could facilitate evaluation and program improvement but are not required to share this data with Oakland Unite or their independent evaluators. In such cases, restrictions in data sharing are often driven by concern for participants' confidentiality. We recommend that Oakland Unite review the contents of such datasets to determine which offer the greatest value for evaluating the effectiveness of violence prevention programs, and to institutionalize data sharing agreements that extend access to evaluators while also ensuring that confidential data protections are in place and followed. The sharing of data collected by hospitals would be especially useful, as evaluations currently rely on OPD victimization data which offers a limited view into the causes and consequences of victimhood. Additional collection and sharing of participant data by grantees may require more funding and support from Oakland Unite. If amendments to Measure Z or the general fund are made that would increase funding for violence prevention programs, we propose that some of those increases cover the cost of more comprehensive data collection.

Distribute roles and responsibilities in the sub-strategy to ensure that services would continue uninterrupted if key individuals leave or are unavailable. A recurring theme in our interviews was the importance of single individuals in violence interruption, and the niche role they play because of their credibility. That credibility often rests on years of experience and trust-building, which cannot be immediately replaced by new staff in the event that these individuals leave or become unavailable. We recommend that Oakland Unite support staffing models that promote continuity for the sub-strategy. These plans might entail hiring staff to take on the role of mediating conflicts that have not yet led to violence, leaving violence interrupters the responsibility of crisis response. Newer staff could shadow some of these anchor members, like the violence interrupters and the violence reduction coordinator, growing their community relationships and simultaneously expanding the sub-strategy's current capabilities. Such an approach would provide newer staff with more community contact and opportunity to build trust.

Engage grantees and system partners in the violence prevention strategy. Staff and stakeholders identified the potential for greater synergy among organizations working toward the same goals of preventing violence and helping those who have been affected by it. Speaking as an entity with years of experience in violence prevention, one agency staff member expressed a desire that they would be seen as "a thought partner" with Oakland Unite, beyond carrying out their contracted work, and two stakeholders expressed feeling that their voice and perspective has not been taken into account sufficiently. In particular, some partners expressed interest in co-creating future redesigns of the sub-strategy with Oakland Unite, and said they would value a stronger advisory presence with respect to funding decisions. Stakeholders wanted more opportunities to channel their lived experience and identify the key pressure points they see as most constraining to achieving violence reduction goals. Developing shared goals would also be a foundational step to improving data collection and sharing and determining how to assess program effectiveness.

Consider an advocate role to bridge the gap between OPD and victims and their families. As staff, stakeholders, and participants pointed out, community members' distrust in OPD makes those in the communities unwilling to interact with anyone who is perceived to have a connection to police. However,

the intentional distance maintained between OPD and non-police entities like Oakland Unite grantees means there is limited coordination in what they could accomplish collectively to prevent violence. One stakeholder suggested the value of a "victim advocate" role who could bridge the gap between the need to understand police procedures and the negative emotions and mistrust that homicide victims' families may be dealing with. While the suggestion was specific to homicide cases, it is possible that such a role could also benefit surviving victims. Crisis responders could refer the individuals they work with to the advocate to facilitate communication with OPD without themselves being seen as collaborators with police. Solving crimes ultimately provides closure, and also removes offenders from the community and prevents their ability to re-offend and continue the cycle of violence.

Continue to foster efforts to address root causes of violence in communities most impacted. Staff and participants recognized that the needs for violence prevention are chronic and must involve the community at large. While the shooting and homicide response sub-strategy is focused on acute crisis response, other Oakland Unite sub-strategies focus on some of these chronic needs. Strengthening the collaboration between crisis response and other programs is one way to promote a holistic approach to violence prevention. For example, through the community healing sub-strategy, Oakland Unite has begun supporting community-based violence reduction projects that engage community members in violence prevention. Oakland Unite also supports other services, including life coaching and employment and education support for high-risk adults and youth. However, staff and participants said there is a need to engage youth more broadly than just targeting those who have been justice-involved. They cited housing, substance abuse treatment, mental health (both the availability of services and the stigma associated with them), and job opportunities for youth and young adults as needs within the community.

Areas for future research

This evaluation presents promising findings showing that victims who participate in shooting and homicide response services largely avoid revictimization and retaliation. However, these results could reflect the influence of these support services as well as the traumatic incident itself. Without a comparison group, we cannot estimate the exclusive impact of Oakland Unite services on participants' outcomes. As noted above, limitations in the program data collected meant there was important information that was not available for analysis. Of note, we were only able to examine outcomes for victims associated with executive notifications sent to violence interrupters, even though these individuals likely received varying levels of communication and mediation. We also did not have information on assessed risks of retaliation, or the length or type of relocation victims received.

These limitations leave open several areas for future research, including understanding whether these supports are targeted to individuals who are indeed at highest risk of reinjury or retaliation and how successful they are in impacting these outcomes. Future research may focus on relocation and violence interruption services in particular, as there is relatively less research to date on these types of programs. However, collecting additional data and forming a valid comparison group are both inherently challenging in this context, where all individuals are offered immediate support. Future research could study whether there are victims with similar risk profiles who do not receive mediation or relocation services. With improved data collection, researchers and program leaders could collaborate to identify opportunities for more rigorous evaluation.

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Appendix A.

Additional Information on Shooting and Homicide Response Sub-strategy and Evaluation Design

The shooting and homicide response sub-strategy consists of several preventive and response-focused activities, some of which are carried out through multiple programs. Table A.1 summarizes the sub-strategy's key intended activities, and for each indicates which program(s) is(are) involved. Given differences in the scope of activities encompassed under each program, the evaluation's research questions are specific to individual programs. Table A.2 lists the research questions, and the set of research methods used to answer them, for each sub-strategy program.

Table A.1. Overview of shooting and homicide response activities

Key intended activities	Program			
	VI	CIC	RS	HS
Community relationships				X
<ul style="list-style-type: none"> Regularly communicate with individuals and networks at high-risk of violence. Maintain presence and visibility in communities and neighborhoods most impacted by violence. Offer presentations on mission, activities, and goals of the work at community and institutional events. 				
Incident response			X	X
<ul style="list-style-type: none"> Respond immediately to every shooting incident involving specified target population within service hours. Coordinate with Oakland Unite regarding appropriate response. If homicide, provide stabilization, including applying for Victim Compensation Board (VCB) benefits, funeral planning. 				
Initial bedside visit for shooting victims		X	X	
<ul style="list-style-type: none"> Conduct initial bedside assessment within 24 hours of shooting to assess safety issues/concerns, assess risk of repeat victimization, likelihood of cooperation with investigation, and receptivity to services. Conduct at bedside or home visit if victim has been released. Begin steps towards possible mediation or warm hand off/referral. Provide financial and logistical support to individuals and families deemed high-risk as targets of violence in Oakland. 				
Bedside follow-up and linkage to services	X		X	
<ul style="list-style-type: none"> Conduct additional bedside visits as needed to identify appropriate referral and broker services to address safety needs and other concerns. May occur through home visit if patient is released. Complete VCB application as needed. Conduct additional assessment of family and networks who may be impacted by the incident. Based on assessment, refer to and coordinate with other programs, including Relocation, CIC, Victims Services, Life Coaching, Employment Support. Coordinate with Oakland Unite on status of referrals. Facilitate weekly case conferencing 				
Violence interruptions and mediations	X			
<ul style="list-style-type: none"> Conduct mediations and strategic interventions to interrupt future violence. Attend bi-monthly strategic deployment meetings with Oakland Unite. 				
Temporary emergency relocation support	X			
<ul style="list-style-type: none"> Assess need and qualification for temporary emergency relocation support. Establish family, institutional, and community support needed to facilitate the temporary relocation. Provide limited financial assistance along with support with logistical planning, transportation, memorialized agreements, etc. 				

Key intended activities	Program			
	VI	CIC	RS	HS
Grief counseling and mental health support				X
<ul style="list-style-type: none"> • Individual grief counseling and mental health therapy • Group grief counseling and mental health therapy • Healing circles • Counseling services provided to family members of homicide victims 				X

Source: Mathematica review of program documentation shared by Oakland Unite.

Note: CIC = Caught in the Crossfire; HS = Homicide support; RS = Relocation support; VI = Violence interruption.

Table A.2 Overview of evaluation design

Research question	Research Method		
	Qualitative analysis	Descriptive quantitative analysis	Event Study
Violence interruption			
• How is the violence interruption program being implemented?	X		
• How do violence interrupters (VIs) collaborate with other partners and stakeholders?	X		
• What have VIs, participants, and law enforcement found to be the most effective elements of the program? What are the key characteristics of effective VIs?	X		
• What are the most significant challenges (e.g., logistical, technical, personnel, financial, etc.) facing the program?	X		
• What percentage of Oakland shooting incidents do VIs respond to?	X		
• What are the characteristics of these incidents and the individuals involved?	X	X	
• What percentage of individuals involved in violence interruption-mediated incidents are subsequently involved in a violent incident? How long after a mediation do they participate in or experience a violent incident?	X	X	X
Caught in the Crossfire (CIC)			
• How is the CIC program being implemented?	X		
• How does Youth ALIVE! collaborate with other partners and stakeholders?	X		
• What successes and challenges has Youth ALIVE! experienced in implementing this program?	X		
• What are the characteristics of individuals who receive CIC services?	X	X	
• What is the extent of services they have received?	X	X	
• What percentage of individuals served by CIC are subsequently involved in a violent incident? How long after receiving services do they participate in or experience a violent incident?	X	X	X
Relocation support			
• How is the relocation program being implemented? How are relocation support decisions made?	X		
• What successes and challenges has Community & Youth Outreach experienced in implementing this program?	X		
• What are the characteristics of relocation support recipients?	X		
• What is the extent of relocation support participants have received?	X	X	
• What percentage of relocation support requests are fulfilled?	X		
• What percentage of individuals who receive relocation support are subsequently involved in a violent incident? How long after relocation do they participate in or experience a violent incident?	X	X	X
Homicide support			
• How is the homicide support program being implemented?	X		
• How do CCEB and Youth ALIVE! collaborate with other partners and stakeholders?	X		

Appendix A. Additional Information on Shooting and Homicide Response Sub-strategy and Evaluation Design

Research question	Qualitative analysis	Descriptive quantitative analysis	Event Study
• What types of outreach efforts does CCEB/Youth ALIVE! believe have been most effective at promoting healing and coping skills?	X		
• What successes and challenges has CCEB/Youth ALIVE! experienced in implementing this program?	X		
• What types of support services have been provided?	X	X	
• What are the characteristics of people who have received individual support?	X	X	

Note: CCEB = Catholic Charities of the East Bay; CIC = Caught in the Crossfire; VI = Violence interrupter.

Appendix B.

Additional Information on Data Sources and Research Methods

This report is based on qualitative and quantitative analyses of multiple data sources. We discuss both the qualitative and administrative data sources in this appendix. All data collection procedures were reviewed and approved by the Health Media Lab Institutional Review Board.

Qualitative data

The qualitative component of this report included primary data collection through interviews with grantee staff and stakeholders, interviews with program participants, and a review of materials provided by Oakland Unite, including statements of work, quarterly reports, and sub-strategy description.

Although the qualitative data provided rich information about the grantees and the Oakland Unite sub-strategy, this evaluation approach has some limitations. As with all data from interviews, particularly those including sensitive topics, a potential for social desirability bias exists, as staff may provide responses that reflect favorably upon themselves. Although we specifically informed each informant that their answers would be kept confidential and would have no impact on their employment or the grantee's participation in Oakland Unite, they may still have felt that negative responses could have repercussions. Due to COVID-19, interviews with grantee staff, stakeholders, and program participants did not take place during in-person site visits as originally planned, but instead were completed by videoconference or phone. We interviewed a small number of program participants who received services from one or more programs within the sub-strategy, and the challenges of interviewing them about a sensitive topic remotely make it likely that those who took part were among those most engaged with the sub-strategy. The combination of high engagement and few interviews suggests that their experiences may not represent that of typical program participants.

Interviews with grantee staff and stakeholders

The purpose of the interviews was to gather information about implementation of the Oakland Unite shooting and homicide response sub-strategy from grantee staff. The general topics of study included program implementation, collaborations and referrals, program progress and tracking, and successes and challenges. Interviews were completed by phone or videoconference between June and August 2020.

Mathematica staff interviewed grantee staff members, including managers and frontline staff, as well as stakeholders from Oakland Unite shooting and homicide response leadership, Oakland Police Department, Alameda County District Attorney's Office, and Highland Hospital. Nineteen grantee staff and stakeholders participated in these interviews, which lasted from 30 to 60 minutes long. One additional stakeholder did not participate in an interview, but instead provided written input for the evaluation.

Interview protocols included a set of topics, with questions varying depending on which type of respondent was interviewed. Protocols for program managers included topics such as program performance and staffing, while those for frontline staff focused on service provision and participant engagement. Protocols for stakeholders were tailored to each informant, based on their interactions with the sub-strategy, and included topics such as referral and collaboration processes and perspectives on citywide violence prevention. The interviews were semi-structured, meaning the evaluation team asked the same questions during each interview, as applicable, but responses were open-ended and the interviewer had flexibility to probe for details and clarification in the responses.

Interviews with program participants

The purpose of interviews with program participants was to obtain feedback about the experiences they had with the shooting and homicide response sub-strategy. The general topics discussed in the interviews included referrals, case management, family involvement, and opinions of the services received. Oakland Unite and grantee staff identified program participants who would be willing to take part in an interview, and Mathematica staff scheduled phone interviews with participants. The participants identified represented the range of services offered through the sub-strategy, so at least one participant interviewed received services from each of the four programs within shooting and homicide response. Six program participants took part in an interview in August 2020, which lasted approximately 30 minutes. Each one also received a \$25 gift card by mail as a thank you.

Qualitative analysis

During the interviews, a note taker recorded responses, linking the feedback to specific interview questions. The evaluation team then coded responses across informants, by specific program within the sub-strategy, as well as general feedback about the sub-strategy. This allowed us to group responses and identify key themes about the implementation of each program, as well as themes for shooting and homicide response overall.

Quantitative data

The quantitative findings presented in this report are derived from three administrative data sources: Oakland Unite's Cityspan database, the Oakland Police Department (OPD), and the Alameda County Probation Department (ACPD). Table B.1 presents the total number of individual records retrieved from each of these data sources and the date ranges covered.

Table B.1. Administrative data sources

Data source	Total number of individual-level records retrieved	Date range
Alameda County Probation Department	30,570	January 1, 2010 to December 31, 2019
Oakland Unite Agency Data	10,896	January 1, 2016 to December 31, 2019
Oakland Police Department		
Arrest incidents	79,480	January 1, 2006 to December 31, 2019
Victimization incidents	423,958	January 1, 2006 to December 31, 2019

Oakland Unite data

All Oakland Unite agencies are required to maintain administrative records in a common database managed by Cityspan. Agencies use the database to record service contacts and hours, milestones reached, incentives received, referral sources, and demographic and risk information about each participant. The data extract we received from Cityspan included participants who received services between January 1, 2016, and December 31, 2019.

Table B.2 shows the percentage of Oakland Unite participants in the data extract who consented to share their personal information for evaluation purposes.

Table B.2. Participant consent rates

Program	Number of participants	Consent rate (%)
Shooting/homicide response	2,047	26
Catholic Charities of the East Bay	1,354	14
Community & Youth Outreach	66	53
Youth ALIVE!	627	50

Source: Oakland Unite administrative data.

OPD data

OPD provided data on arrests and victimization incidents that occurred between January 1, 2006, and December 31, 2019. The arrest data included information about each arrest incident, including its location, statute code, and UCR statute category code, as well as information about the arrestee, including name, date of birth, address, and demographics. The victimization data included similar information for each incident involving a victim of a crime. We used the UCR statute categories and statute codes to determine each arrest or victimization incident's type, as detailed in Table B.3. For arrest or victimization incidents with multiple offenses, we used the most serious offense to determine the severity.

Table B.3. Definition of outcome variables

Outcome	Definition
Victim of violence	Any incident in the OPD victimization records associated with one or more of the following UCR statute code categories: <ul style="list-style-type: none"> • Criminal homicide • Forcible rape • Robbery with a firearm, knife or cutting instrument, or other dangerous weapon • Assault with a firearm, knife or cutting instrument, or other dangerous weapon • Assault and aggravated injury • Assault, simply not aggravated • Prostitution and commercialized vice • Sex offenses • Offenses against the family and children
Gun offense	Any incident in the OPD arrest records associated with one or more of the following UCR statute code categories: <ul style="list-style-type: none"> • Robbery with a firearm, knife or cutting instrument, or other dangerous weapon • Strong-arm robbery • Assault with a firearm • Any other UCR statute code violation that includes the words "handgun", "firearm", "machine gun", "shotgun", and/or "zip gun."
Violent offense	Any incident in the OPD arrest records associated with one or more of the following UCR statute code categories: <ul style="list-style-type: none"> • Criminal homicide • Forcible rape • Robbery with a firearm, knife or cutting instrument, or other dangerous weapon • Strong-arm robbery • Assault with a firearm, knife or cutting instrument, or other dangerous weapon
Arrests	Any incident in the OPD arrest records

ACPD data

ACPD provided data on state and local Criminal Offender Record Information for individuals age 13 and older served through the Juvenile Division between 2010 and 2019, and records for individuals age 18 to 40 served through the Adult Division, including realigned populations, between 2010 and 2019. The Juvenile Division data files include arrest date and arrested offenses, sustained offenses, disposition, and facility information. These files include juveniles arrested throughout Alameda County, including the City of Oakland. The Adult Division file includes only information on sustained offenses for individuals who are on formal probation. The ACPD data was matched to the other data sources using first and last name, date of birth, race and ethnicity, and gender. Mathematica conducted the match onsite at ACPD and removed identifying information from the matched file before conducting the analysis.

Executive notifications data

To create the violence interrupter sample, the study team needed to link individuals from the executive notification threads to our administrative OPD and ACPD records. The main mechanism to do this was to translate Computer Assisted Dispatch (CAD) numbers shared in the executive notifications to the case numbers in OPD victimization and arrest records. The process involved multiple key steps which are laid out, with counts of the number of records at each step by year, in Table B.4.

The first step was to extract unique incidents, as determined by unique CAD numbers, from the executive notification PDFs shared with the study team. As the drop in number shown in Table B.4 from column one to column two indicates, each unique incident had on average around two PDFs associated with it. However, there was significant variety in the number, and some higher risk incidents had more than five related PDFs. In the next step, the study team shared the 947 unique CAD numbers with the Oakland Police Department, which used a matching technique to return 807 associated case numbers, a match rate of 85 percent. The study team then matched these records to our OPD victimization and arrest records, and were able to match 89 percent of records, for 717 case numbers. The next step was to identify individuals associated with a victimization record case number, 1190 total. Finally, the study team excluded individuals who were killed in the shooting incident. At the end of this process, the violence interruption sample included 906 unique individuals.

Table B.4. Violence interrupter sample size at key points

Year	Executive notification PDFs	Unique CAD numbers	Case numbers from OPD	Case numbers matched to internal OPD records	Individuals tied to internal OPD victimization records ^{a,b}	Final sample
2016	307	211	167	150	291	204
2017	115	107	97	79	124	97
2018	768	317	257	234	372	293
2019	679	312	283	254	403	312
All	1,869	947	804	717	1,190	906

Note: ^aWe identified 23 individuals who were matched to multiple incidents that received violence interruption. For the purposes of this table and all analyses tied to this sample, the study team limited analysis to an individual's initial appearance in the data.

^b If individuals were not associated with victimization records through the case number, they were dropped from the sample. This rule resulted in dropping 214 individuals from our original sample. his rule.

Data matching

To conduct the analyses, we needed to link individuals within and across datasets. To conduct these matches, we used an algorithm to assign individuals a unique identifier both within and across datasets. The algorithm used consenting individuals' identifying information, including their first and last name, date of birth, gender, and address, to perform matches. All data points did not have to be available or match exactly for records to be matched. Instead, the algorithm was designed to consider the likelihood that two or more records represented the same person, even if there were minor differences across records (such as in the spelling of the name). The algorithm placed the most weight on name and date of birth, but also used gender and address if available. These weights were carefully calibrated to avoid erroneous matches while still allowing flexibility.

Event study methodology

Our main regression specification for the event study models is shown in Equation 1. In our setup, all individuals in the sample began receiving services at some person-specific time E_i . Time is standardized relative to E_i ; all time periods t are converted to person-specific values of j based on relative distance to E_i . For example, for a participant who began Caught in the Crossfire services in July 2018, June 2018 is denoted as $j = -1$, while September 2018 is denoted $j = 2$. ψ_i is the person fixed effect and absorbs variation in the outcome variable associated with an individual's time-invariant characteristics, such as their education level, propensity to commit crime, and race. In all regression models that were run for the violence interruption and Caught in the Crossfire programs, the time fixed effects, ρ_t , includes both year and month of year fixed effects. These fixed effects absorb seasonal and long-term temporal variation in factors that would potentially influence arrest and victimization rates, such as changes in OPD policing strategies and resources, and economic shocks, positive or negative, affecting Oakland as a whole. Given the small sample size of relocation service participants, we used only year fixed effects in modeling the outcomes of those participants. ϵ_{it} is the error term and is clustered by participant.

$$y_{it} = \sum_{j=-24}^{24} \beta_j \mathbb{1}\{t - E_i = j\} + \psi_i + \rho_t + \epsilon_{it} \quad (1)$$

Data security

Mathematica exercises due care to protect all data provided for this evaluation from unauthorized physical and electronic access. Per our current data sharing agreements, we do not share identifiable data with Oakland Unite or any other entity. All data are stored in an encrypted project-specific folder in a secure server. Access to this folder is restricted to authorized users through access control lists that require approval from the evaluation's project director. Only staff members needed to complete the evaluation objectives were granted access to the restricted data folder. These staff members have all completed data security training and background checks and are up to date on Mathematica's data storage and security policies.

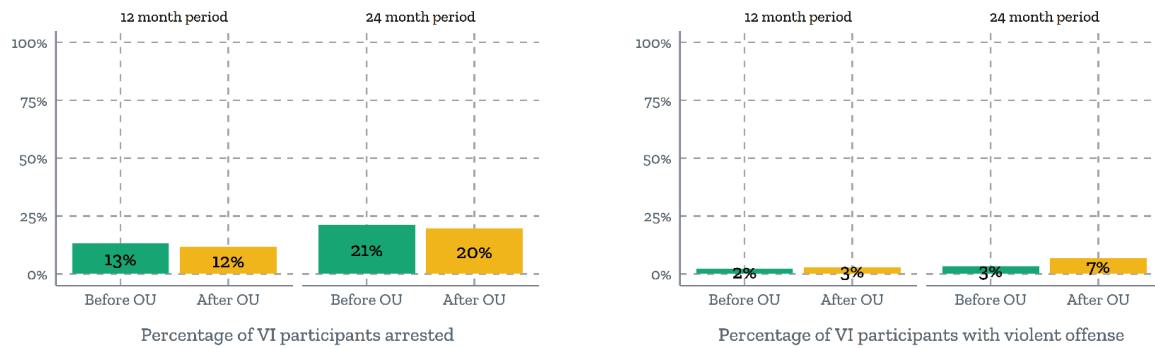
Appendix C.

Supplemental Outcome Findings Results

Appendix C. Supplemental Outcome Findings Results

In this appendix, we include additional results not reported in the main report. Figures C.1 through C.6 depict the raw data summary statistics on arrest and violent offense rates of violence interruption participants, their co-arrestees, CIC participants, and the co-arrestees of CIC participants. This appendix also includes event study model results for the same outcomes and participant samples.

Figure C.1. Any arrest and violent offense rates before and after violence interruption

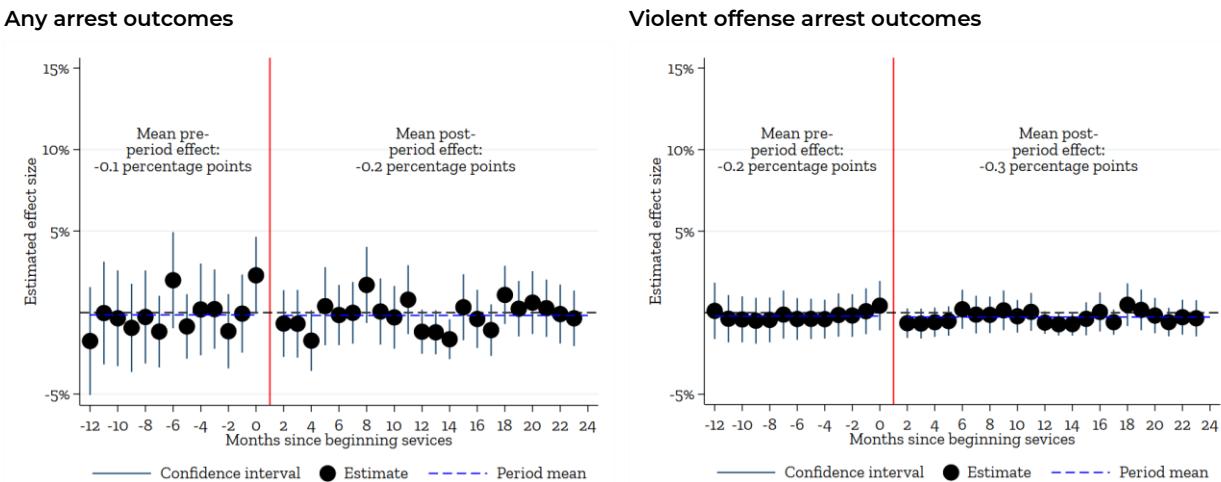


Source: Mathematica calculations using data from CitySpan and OPD.

Note: OU = Oakland Unite; VI = violence interruption.

In all figures, the “After OU” period begins the first calendar month after initial contact with Oakland Unite. Since OPD data are available only through December 2019, the 12-month period sample excludes participants starting violence interruption services in January 2019 or later, and the 24-month period sample analogously applies a January 2018 cutoff. The sample size included in the 12-month period is 786, and 414 for the 24-month period.

Figure C.2. Event study results for violence interruption participation on any arrest and violent offense outcomes



Source: Mathematica calculations using data from OPD and Oakland Unite.

Note: Values represent month-specific, estimated effect sizes from an event study regression model. The sample is restricted to the $N = 414$ individuals observed for at least 24 months following the initial receipt of violence interruption mediation based on OPD victim records linked to executive notifications shared by Oakland Unite. The dependent variable is a binary variable for whether the participant was arrested for any offense (left panel) or for a violent offense (right panel) in the specified month. For visual clarity, time is expressed relative to the first calendar month after the start of violence interruption services ($t = 1$). For example, June 2017 is counted as month 0 for a participant receiving violence interruption services on June 18, 2017, and July 2017 is considered as month 1. The event study regression model includes person, year, and month-of-year fixed effects. Standard errors are clustered at the person-level and confidence intervals are reported at the 95 percent level.

Figure C.3. Gun offense arrest and victimization rates among the co-offenders of violence interruption participants before and after receiving a mediation

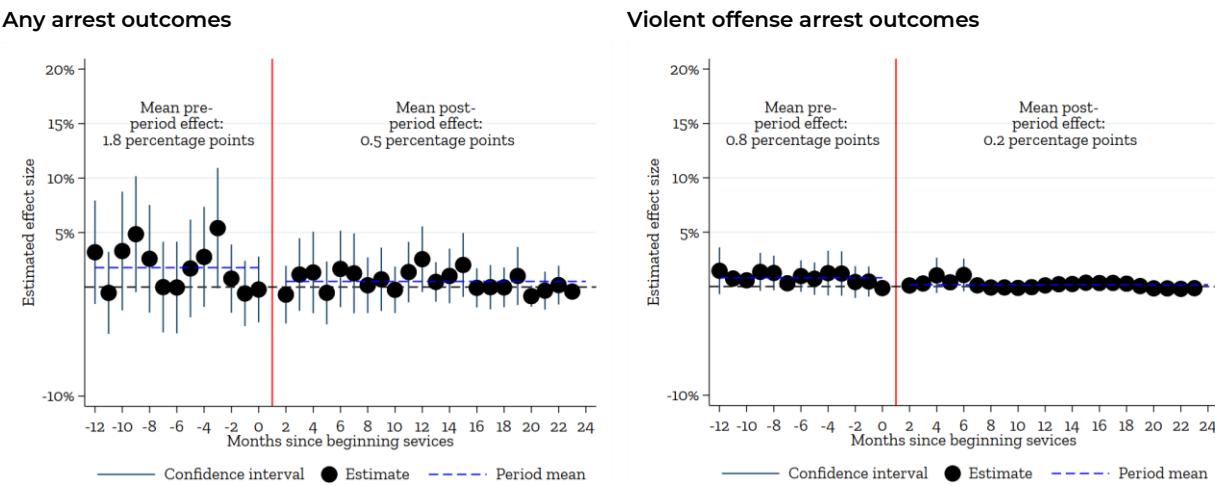


Source: Mathematica calculations using data from CitySpan and OPD.

Note: OU = Oakland Unite; VI = violence interruption.

Time periods are based on the calendar month of a participant's initial contact with violence interruption services. The "After OU" period begins with and includes the first calendar month following initial contact. The individuals included in the 24-month period calculations are a subset of the individuals in the 12-month period sample. Since OPD data is available only through December 2019, the 12-month period sample excludes participants starting violence interruption services in January 2019 or later, and the 24-month period sample analogously applies a January 2018 cutoff. The sample size included in the 12-month period is 256, and 143 for the 24-month period.

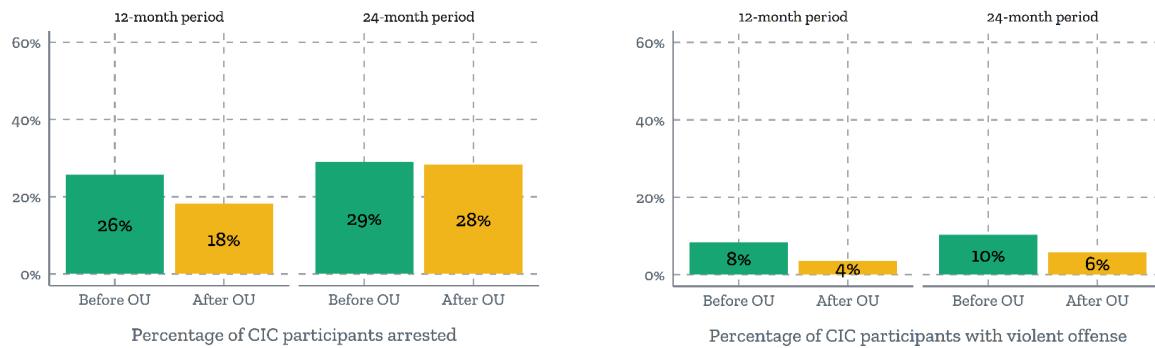
Figure C.4. Event study results for violence interruption participation on co-offenders' any arrest and violent offense outcomes



Source: Mathematica calculations using data from OPD and Oakland Unite.

Note: Values represent month-specific, estimated effect sizes from an event study regression model. The sample is restricted to N = 143 individuals in violence interruption participants' co-offender networks who are observed for at least 24 months following the initial receipt of violence interruption mediation based on OPD victim records linked to executive notifications shared by Oakland Unite. The dependent variable is a binary variable for whether the individual was arrested for any crime (left panel) or arrested for a violent offense (right panel) in the specified month. For visual clarity, time is expressed relative to the first calendar month after the start of violence interruption services (t = 1). For example, June 2017 is counted as month 0 for a participant receiving violence interruption services on June 18, 2017, and July 2017 is considered as month 1. The event study regression model includes person, year, and month-of-year fixed effects. Standard errors are clustered at the person-level and confidence intervals are reported at the 95 percent level.

Figure C.5. Any arrest and violent offense rates before and after CIC

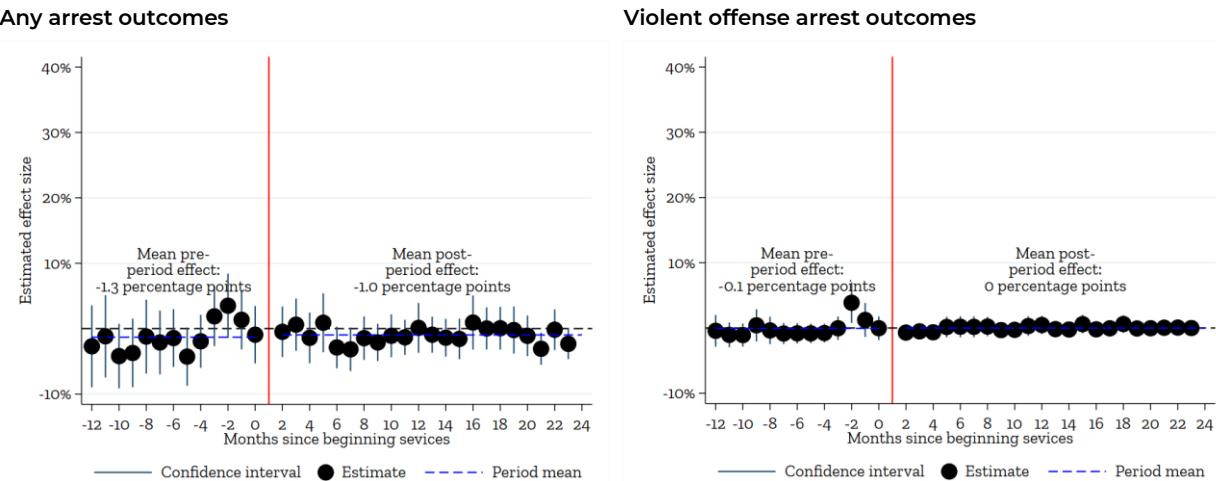


Source: Mathematica calculations using data from Cityspan and OPD.

Note: CIC =Caught in the Crossfire; OU = Oakland Unite.

Time periods are based on the calendar month of a participant's initial contact with CIC services. The "After OU" period begins with and includes the first calendar month following initial contact. The individuals included in the 24-month period calculations are a subset of the individuals in the 12-month period sample. Since OPD data is available only through December 2019, the 12-month period sample excludes participants starting CIC services in January 2019 or later, and the 24-month period sample analogously applies a January 2018 cutoff. The sample size included in the 12-month period is 242, and 136 for the 24-month period.

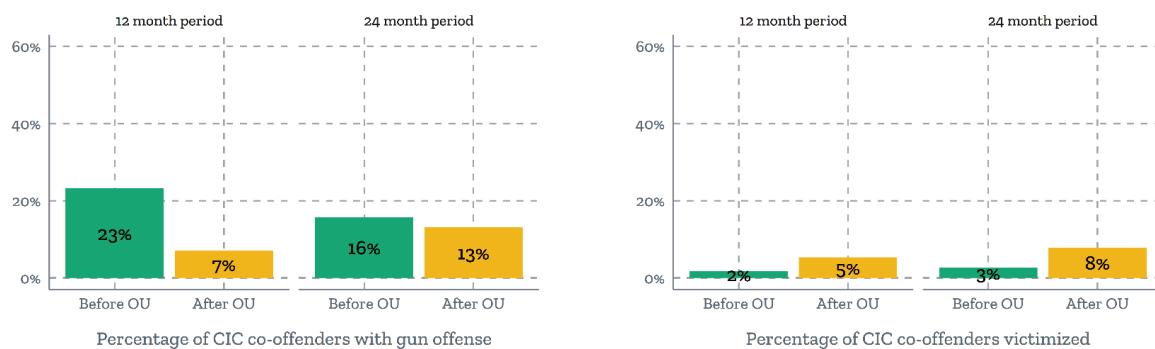
Figure C.6. Event study results for CIC participation on gun offense and victimization outcomes



Source: Mathematica calculations using data from Cityspan and OPD.

Note: Values represent month-specific estimated effect sizes from an event study regression model. The sample is restricted to the $N = 155$ individuals who received support services from CIC between 2016 and 2018. The dependent variable is a binary variable for whether the participant was arrested (left panel) or arrested specifically for at least one violent offense (right panel) in the specified month. Time is expressed relative to the first calendar month after the start of CIC services ($t = 1$). For example, June 2017 is counted as month 0 for a participant with services beginning on June 18, 2017, and July 2017 is considered month 1. The event study regression model includes person, year, and month-of-year fixed effects. Standard errors are clustered at the person level, and confidence intervals are reported at the 95 percent level.

Figure C.7. Gun offense arrest and victimization rates among the co-offenders of CIC participants before and after starting CIC services

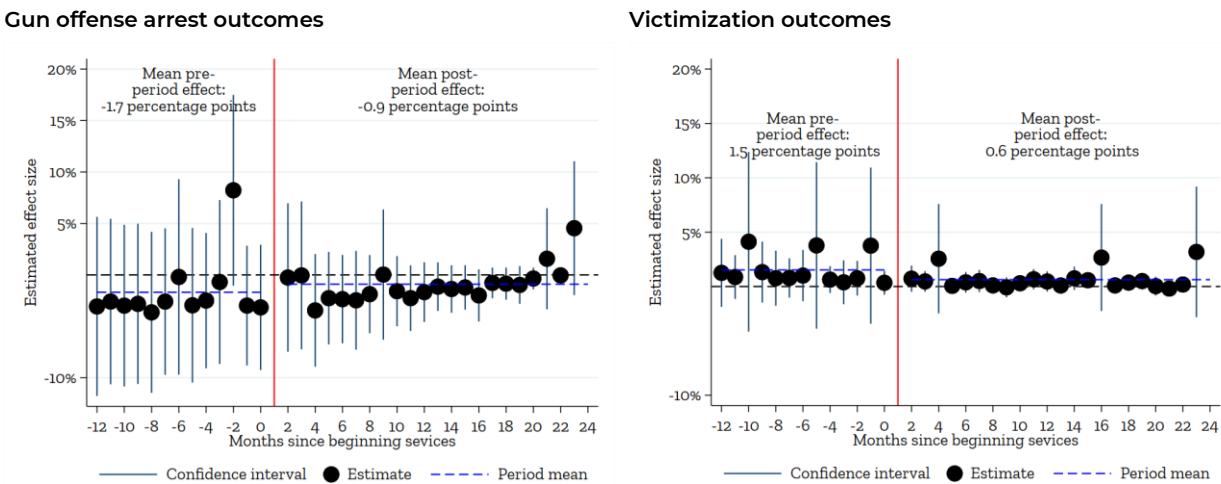


Source: Mathematica calculations using data from CitySpan and OPD.

Note: CIC =Caught in the Crossfire OU = Oakland Unite.

Time periods are based on the calendar month of a participant's initial contact with CIC services. The "After OU" period begins with and includes the first calendar month following initial contact. The individuals included in the 24-month period calculations are a subset of the individuals in the 12-month period sample. Since OPD data is available only through December 2019, the 12-month period sample excludes participants starting CIC services in January 2019 or later, and the 24-month period sample analogously applies a January 2018 cutoff. The sample size included in the 12-month period is 242, and 136 for the 24-month period.

Figure C.8. Event study results for CIC participation on co-offenders' gun offense and victimization outcomes



Source: Mathematica calculations using data from OPD and Oakland Unite.

Note: Values represent month-specific, estimated effect sizes from an event study regression model. The sample is restricted to $N = 136$ individuals in CIC participants' co-offender networks who are observed for at least 24 months following the initial receipt of CIC services. The dependent variable is a binary variable for whether the individual was arrested for a gun offense (left panel) or the victim of a violent incident (right panel) in the specified month. For visual clarity, time is expressed relative to the first calendar month after the start of CIC services ($t = 1$). For example, June 2017 is counted as month 0 for a participant receiving violence interruption services on June 18, 2017, and July 2017 is considered as month 1. The event study regression model includes person, year, and month-of-year fixed effects. Standard errors are clustered at the person-level and confidence intervals are reported at the 95 percent level.

Figure C.9. Any arrest and violent offense arrest rates among the co-offenders of CIC participants before and after starting CIC services

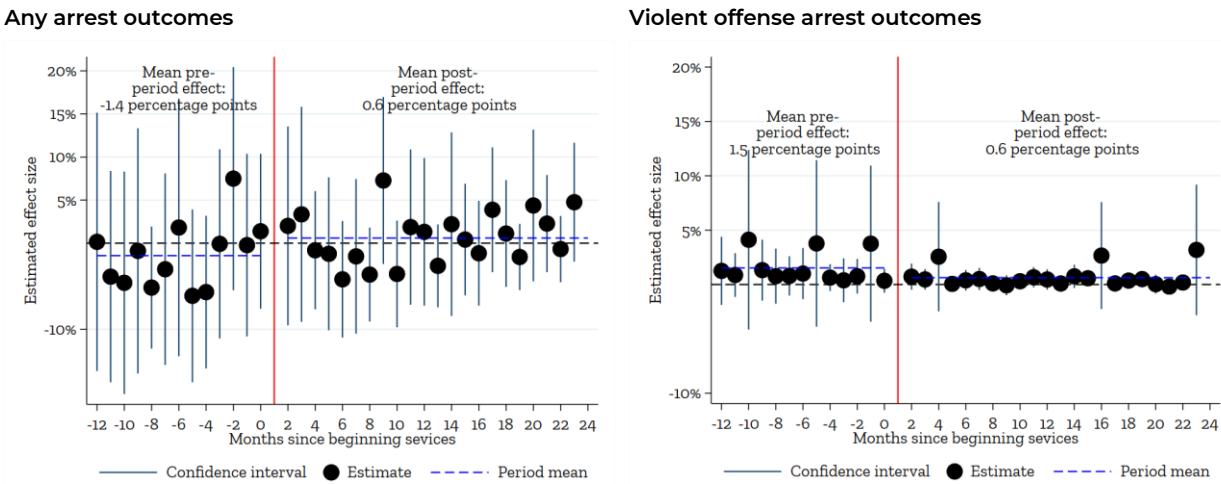


Source: Mathematica calculations using data from CitySpan and OPD.

Note: OU = Oakland Unite; VI = violence interruption.

Time periods are based on the calendar month of a participant's initial contact with CIC services. The "After OU" period begins with and includes the first calendar month following initial contact. The individuals included in the 24-month period calculations are a subset of the individuals in the 12-month period sample. Since OPD data is available only through December 2019, the 12-month period sample excludes participants starting relocation support services in January 2019 or later, and the 24-month period sample analogously applies a January 2018 cutoff. The sample size included in the 12-month period is 242, and 136 for the 24-month period.

Figure C.10. Event study results for CIC participation on co-offenders' any arrest and violent offense outcomes



Source: Mathematica calculations using data from OPD and Oakland Unite.

Note: Values represent month-specific, estimated effect sizes from an event study regression model. The sample is restricted to $N = 136$ individuals in CIC participants' co-offender networks who are observed for at least 24 months following the initial receipt of CIC services. The dependent variable is a binary variable for whether the individual was arrested (left panel) or arrested specifically for at least one violent offense (right panel) in the specified month. For visual clarity, time is expressed relative to the first calendar month after the start of CIC services ($t = 1$). For example, June 2017 is counted as month 0 for a participant receiving violence interruption services on June 18, 2017, and July 2017 is considered as month 1. The event study regression model includes person, year, and month-of-year fixed effects. Standard errors are clustered at the person-level and confidence intervals are reported at the 95 percent level.



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