



Evaluation of the Cincinnati Initiative to Reduce Violence (CIRV)

October 20, 2010

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*This research was supported by funding from the City of Cincinnati and the Ohio Office of Criminal Justice Services (OCJS). Data and other informational materials were provided by partnering agencies of the Cincinnati Initiative to Reduce Violence (CIRV), including the Cincinnati Police Department, Cincinnati Works, Talbert House, Cincinnati Human Relations Commission, and the Community-Police Partnering Center. The description and findings presented within this report are from the authors, and do not necessarily represent the official positions of employees of the City of Cincinnati, Office of Criminal Justice Services, or any CIRV partnering agencies. Please direct all correspondence regarding this report to Robin S. Engel, Ph.D., Director, University of Cincinnati Policing Institute, School of Criminal Justice, University of Cincinnati, P.O. Box 210389, Cincinnati, OH 45221, email: robin.engel@uc.edu.

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INTRODUCTION

From 1991 to 2000, Cincinnati averaged 41.3 homicides per year, a relatively low per capita rate compared to other large Ohio and regional cities. From 2001 to 2006, however, the city averaged 73.3 homicides per year, representing a 300% increase in homicides and culminating in a modern-day high of 89 homicides in 2006 (Engel et al., 2008). Through systematic research with front-line law enforcement officers, a vivid picture of a hyperactive offender population in Cincinnati was revealed: Approximately 0.3% of the city's population, with prior records *averaging* 35 charges apiece, were members of violent groups in 2007. Further analyses revealed that these violent groups were associated with three-quarters of the city's homicides during a one year period (Engel et al., 2009). Historically, there have been very few highly organized, intergenerational gangs with national affiliations in Cincinnati. Rather, the violent crime problem in Cincinnati is associated with loosely-knit social networks of individuals that hang together on the street and promote violence as a means of handling conflict (Engel et al., 2008; Engel and Dunham, 2009). These are the type of episodic groups and gangs that are typical in most mid-sized urban centers, and are quickly spreading to suburban and rural areas (Howell, 2007).

This report provides a brief overview of the Cincinnati Initiative to Reduce Violence (CIRV), and an empirical evaluation of its impact on group/gang-related violence in Cincinnati. This evaluation provides an overall assessment, and relies on quantitative data provided by the Cincinnati Police Department (CPD), Community Police Partnering Center (CPPC), Cincinnati Human Relations Commission (CHRC), Talbert House, and Cincinnati Works. The research presented in this report provides an initial evaluation of the initiative as a whole. Previous reports (Engel et al. 2008, 2009) more thoroughly document the detailed processes of the

initiative, while future reports will examine the individual contributions of various strategies in more depth. The initial findings documented within this report demonstrate a statistically significant 35% reduction in group/gang-related homicides, and a 21.3% decline in fatal and non-fatal shootings in Cincinnati that corresponds directly with the implementation of CIRV.

OVERVIEW OF THE CINCINNATI INITIATIVE TO REDUCE VIOLENCE (CIRV)

In response to Cincinnati's increase in violence, in April 2007 the city's political leadership partnered with law enforcement officials, academics, medical professionals, street advocates, and community and business leaders, to form the Cincinnati Initiative to Reduce Violence (CIRV, pronounced "serve"). CIRV is loosely modeled on the *Boston Gun Project* from the mid-1990s and utilizes a "pulling levers" strategy to directly communicate consequences for violence to at-risk gang members (Braga et al., 2001). The Boston project and similar strategies rely on delivering messages of specific deterrence to those who generate and sustain a culture of violence (e.g., Chermak & McGarrell, 2004; Papachristos, Mearns, & Fagan, 2007; Skogan, Harnett, Bump, & Dubois, 2009). Using focused deterrence approaches, several cities have reported significant reductions in gun-related violence (e.g., Braga, Kennedy, Waring, & Piehl, 2001a, Braga, Kennedy, Piehl, & Waring, 2001b, Braga et al., 2006; Chermak & McGarrell, 2004; McGarrell, Chermak, Wilson, & Corsaro, 2006). Often, however, many of these reductions in violence have not been sustained over time (Kennedy, 2007). To reduce gun-violence long-term, the CIRV Team has sought to systematically identify highly active and chronic violent offenders, target these individuals and their associated groups for intervention, and develop a system for sustainability.

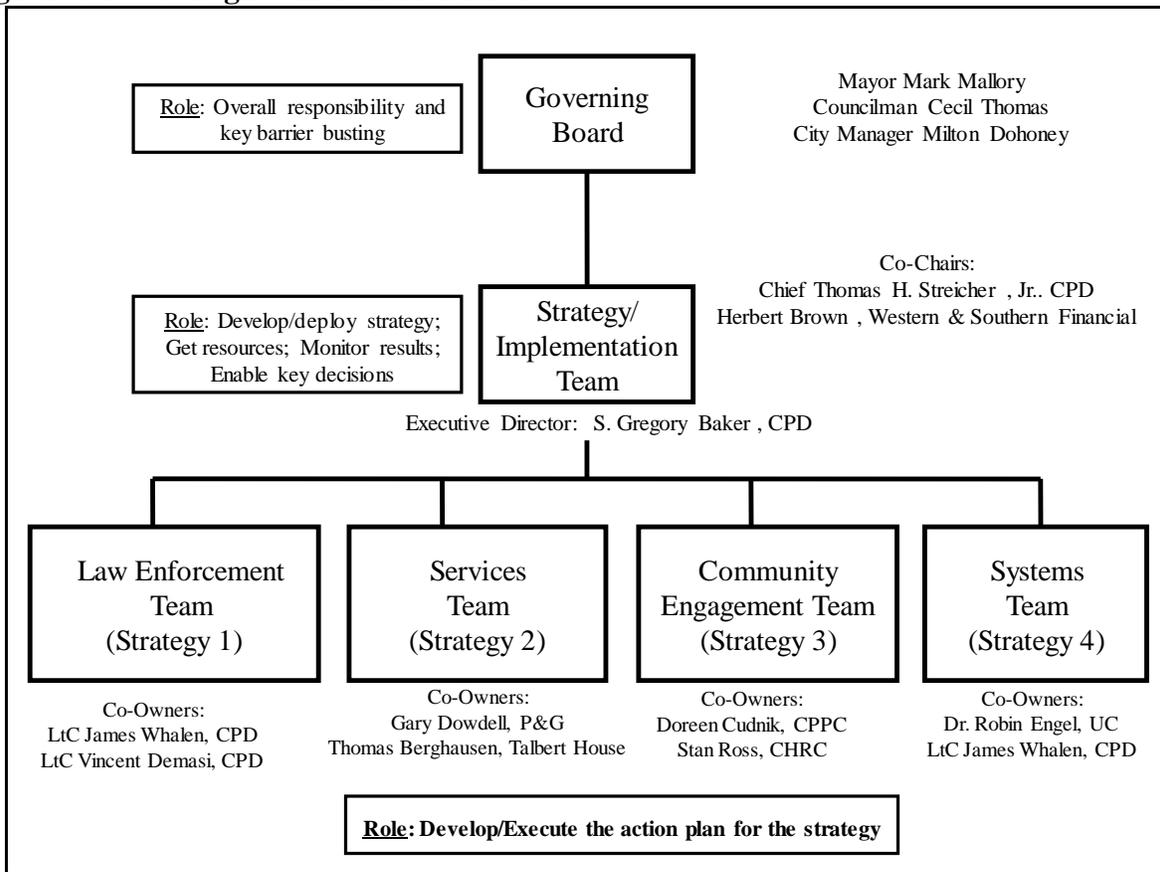
To counter the dramatic increase in gun violence experienced in Cincinnati from 2001 to 2006, the CIRV approach provides laser-focused precision for law enforcement consequences for

violence, along with social service opportunities and community engagement. For the first time, all sectors of the Cincinnati community – police, community activists, political figures, civil rights activists, ex-offenders, parents of murdered children, social service providers, medical personnel, and business, civic and religious leaders – agreed to stand on common ground in approaching these violent offenders. In face-to-face offender notification meetings, members of violent groups were told that the violence must stop, that there would be group consequences if it did not, and that the community would support these consequences. Violent group/gang members were told that there was social service help for all who wanted it; and that CIRV Street Advocates would be assigned to help them navigate the specially developed social service/employment program.

Organizational Structure

The objective of CIRV is clearly focused on the reduction of violence (particularly gun violence) perpetrated by group/gang members. The overall initiative's goals across a five-year period include: 1) reduction of group/gang related homicides by 40%; 2) average of less than two group/gang member involved homicides per month and continual reductions over time; and 3) 30% reduction in fatal and nonfatal shootings. The CIRV effort was organizationally designed to effectively and efficiently meet these goals. Figure 1 displays CIRV's organizational structure and the individuals who currently serve in various positions within the initiative.

Figure 1. CIRV Organizational Structure



The CIRV organizational structure consists of a Governing Board, a Strategy/Implementation Team, and four Strategy Teams – law enforcement, services, community, and systems. The Governing Board, which is comprised of high ranking city officials, is responsible for providing resources to the initiative, as well as overcoming barriers that impede success. The Strategy/Implementation Team is tasked with the daily operations of CIRV, including making key decisions, developing program strategies, securing resources, and continuously monitoring results. The Strategy/Implementation Team reports to the Governing Board on a regular basis to provide progress updates and request resources as needed. The Strategy/Implementation Team is comprised of two co-chairs, who serve as the primary spokespersons of the initiative, the owners of each individual strategy, expert consultants, and

the Executive Director. Finally, the CIRV Strategy Teams are responsible for executing a particular element of the overall initiative. The following section describes the strategy teams and their activities.

CIRV STRATEGY TEAMS

The objectives of the Law Enforcement (LE) Team are to identify, notify, and focus law enforcement efforts on violent groups that engage in gun violence through the development and utilization of a comprehensive law enforcement partnership. Comprised of multiple law enforcement agencies,¹ this team is committed to organizing and sharing information to comprehensively respond to group-related gun violence. The Services Team is responsible for forming and continually improving a life-change system that engages members of violence-prone groups and moves them to an employment-based lifestyle. This team includes representatives from the Talbert House, Cincinnati Works, and the Cincinnati Human Relations Commission (CHRC).

The Community Engagement Team is tasked with forming a partnership to work with affected communities to articulate norms and expectations that explicitly reject violence. Key members of this team include staff from the Community Police Partnering Center (CPPC), CHRC, and faith-based leaders. Finally, the Systems Team is responsible for developing and implementing a system that ensures permanence and quality assurance, and is lead by researchers from the University of Cincinnati. Collectively, these teams are responsible for the following four operational goals of CIRV: 1) Increasing the perceived risks and costs of involvement in violence; 2) providing alternatives to violence; 3) changing community norms regarding

¹ LE Team members include: Cincinnati Police Department, Hamilton County Sheriff's Office, Hamilton County Adult Probation, Ohio Adult Parole Authority, Hamilton County Prosecutor's Office, U.S. Attorney's Office, and Bureau of Alcohol, Tobacco, Firearms, and Explosives, and supported by the Ohio State Attorney General's Office and the Ohio Office of Criminal Justice Services

violence; and 4) sustaining reductions in violence over time. The sections below document the specific activities of the various CIRV teams to meet these operational goals.

Increasing the Risks and Costs of Involvement in Violence

The CIRV Law Enforcement (LE) Team (Strategy 1) is heavily involved in the effort to increase the perceived risks and costs of involvement in violence. The first task for this team was to identify those individuals most at risk as perpetrators and/or victims of gun violence. Since May 2007, six official CIRV Law Enforcement Team gang intelligence gathering sessions have been conducted, resulting in 2,103 individuals ever identified as members of violent groups within the city of Cincinnati. Data available for July 2010 includes 1,517 violent group members, as some individuals are removed from the CIRV LE Team “active” list due to: 1) death; 2) long-term incarceration; 3) relocation to another jurisdiction; and/or 4) ceased involvement with violent group members. Again, this membership represents less than half of one percent of the total population of the city of Cincinnati. The social relationships across the groups were graphically displayed for each data collection period and returned to the CIRV LE Team. These network analyses demonstrate where violent groups have on-going feuds, alliances, volatile relations (not currently feuding but have fought in the past), or no known relationship. In addition, displays of both the social relationships across the groups and their corresponding geographic location were distributed to the CIRV LE Team. For confidentiality purposes, these documents are not contained within this report.

As of July 2010, there were 47 active violent groups/gangs in Cincinnati, with 1,579 known members. These violent group/gang members ranged in age from 11 to 67, with an average age of 26.2; they ranged in the number of identified participants from 3 to 172 with an average of 35 group members. In Cincinnati, there are few known stand-alone juvenile gangs;

rather the majority of violent groups in the city have both juvenile and adult members (Engel and Dunham, 2009); law enforcement officials believe that the adult members are able to exert pressure / influence over the younger members (also see Braga et al., 2008). A homicide review demonstrated that the overwhelming majority of victims were Black (76%), male (81%), and killed by firearms (82%), (Engel et al., 2008). Importantly, from June 2006 to June 2007, nearly three-quarters (74%) of the homicides involved victims and/or suspects that were associated with violent groups (Engel et al., 2008). Using detailed statistical analyses, geographic mapping, and social network analyses, the group/gang population most at risk to be victims and/or suspects in gun-related violence is routinely tracked and shared monthly with law enforcement, CIRV Street Advocates, community engagement specialists, and social service providers to assist in the strategic deployment of dwindling resources.

Offender Notification Meetings (Call-in Sessions)

Focused deterrence approaches typically use offender notification meetings as the central mechanism (and in some cases, the sole method) to communicate with the target population of violent group/gang members and demonstrate the risks and costs of involvement with violence (e.g., Braga et al., 2001; Kennedy & Braga, 1998; Papachristos et al., 2007; Braga et al., 2008). Specifically, the success of focused deterrence initiatives rests on the relentless communication and delivery of the promises made during these meetings. Offender notification or “call-in sessions” are repeated as necessary to demonstrate the delivery on promises and reiterate the message of nonviolence to the target population.

Of the identified group/gang members in Cincinnati, approximately 20% are under court-ordered probation or parole at any given time, and can be ordered to attend CIRV offender notification meetings. From July 2007 through July 2010, there have been 20 call-in sessions

with 488 violent group members; 40.4% of these offenders attended multiple sessions. These sessions ranged in size from 17 participants to 98, with an average of 38 per session. Of the known 1,517 identified group/gang members as of July 2010, 32.2% have attended at least one call-in session. Further, 41 of the current 48 identified violent groups/gangs had at least one member attend a call-in session. Group/gang members are told at these meetings to share the message with their peers, but it is unknown if the approximately 68% of violent group/gang members who have not attended these “call-ins” are aware of the CIRV message. For a more thorough description of the CIRV call-in sessions, see Engel et al., 2008; 2009.

Probation Meetings

Beginning in December 2009, smaller offender notification meetings were conducted with selected probationers. These meetings were designed to be less formal in nature, and provided an opportunity for probationers to ask questions and interact with law enforcement officials and CIRV Street Advocates. From December 2009 through July 2010, four meetings were conducted with 45 probationers, ranging from 9 to 13 participants at each session. These meetings differed in both the size (smaller) and tone (less formal) compared to the traditional call-in sessions. The meetings included brief presentations by law enforcement officials and CIRV Street Advocates (community members did not participate), followed by an opportunity for probationers to ask questions and engage with the presenters.

Community Conversations

The CIRV team has enhanced communication techniques with chronic violent offenders (and neighborhood youths influenced by older offenders) by conducting voluntary “community conversations” with the target population and their “influentials.” Pilot tested on two occasions in 2009, these meetings represent a shorter, less formal version of the traditional courthouse call-

in session, with a stronger emphasis on community involvement, including a dialogue and information sharing. The session is voluntary because supervisees are not ordered to attend as a condition of their court-ordered supervision; rather, the Street Advocates identify and invite any individuals in the community they believe would benefit from hearing the CIRV message, including violent group members, along with their families and other influentials. Initial feedback from the pilot test demonstrates CIRV Street Advocates' ability to recruit the target population to attend these meetings.

Prison Call-in Sessions

The criminal justice system has historically struggled with transitioning prisoners back into the community. Issues with recidivism, community reintegration, and employment continue to be problematic outcomes (Petersilia, 2004). Seiter and Kadela (2003) reported in their evaluation of several different types of prisoner reentry programs that vocational/work programs, drug rehabilitation programs, and halfway house programs were successful at reducing recidivism; yet more recent research suggests that reentry programs that involve the community as an integral part of reintegration may be more successful at transitioning prisoners back into the community (Roman, Wolff, Correa, & Buck, 2007).

An average of 26,915 offenders per year has been incarcerated in Ohio prisons in the past five years, with an average sentence length of 2.2 years. Of these offenders, 9.2% indicate their home address to be within the City of Cincinnati. Of the approximately 2,430 offenders from Cincinnati who enter or exit Ohio Department of Rehabilitation and Correction prisons each year, 19% were convicted of a violent crime. Based on national averages, 29% of these offenders will recidivate within six months of release, and 67% will recidivate within three years (Langan & Levin, 2002).

The CIRV team has also conducted offender notification meetings in prison and jail settings, with offenders scheduled to be released back to Cincinnati neighborhoods within six months. This technique has been successfully pilot tested in two local correctional facilities – River City Correctional Center and Lebanon Correctional Institution. In October 2009, four call-in sessions were conducted with 160 prisoners within these correctional facilities. The number of prisoners attending these ranged from 14 to 63.

Law Enforcement Home/Street/Jail Visits

Finally, “home visits” are a collaborative enhanced supervision program modeled loosely after Boston’s Operation Night Light, which led to a reduction in homicides in the mid-1990s and partnered law enforcement with correctional agencies (Jordan, 1998; Reichert, 2002). This and other similar enhanced supervision strategies implemented across the country have led to crime reductions and enhanced service delivery to target populations (NIJ, 1999; Reichert, 2002). The CPD home visits strategy is a multi-agency collaborative effort that partners the CPD with Hamilton County Adult Probation, Ohio Adult Parole Authority, and the Bureau of Alcohol, Tobacco, and Firearms (ATF) to deliver the anti-violence message to specifically identified high-risk violent group/gang members under court-mandated supervision.

In order to determine which violent group members would receive home visits, the CIRV Law Enforcement Team assessed the violence levels within the city and identified current “hot” spots with the greatest percentage of gun-related violence. The violent groups/gangs associated with these geographic areas were then targeted for home visits. The specific members of the groups/gangs to receive home visits were determined by the operational CIRV LE Team command based on input from knowledgeable beat officers, Vortex officers, and Probation and Parole officials regarding the current “impact” players that were likely driving the violence in the

associated areas. Specifically, the violent group members selected for home visits met the following criteria: 1) members of known violent groups/gangs in Cincinnati; 2) currently under supervision through the Hamilton County Probation Department or the Ohio Adult Parole Authority; and 3) believed to be “impact players” within their groups, related to chronic patterns of crime and violence. During these meetings, supervisees are reminded of the CIRV “message” that law enforcement is focusing on violent groups and that he/she has been identified as a member of such a group; social services are available if they need assistance; and the community is demanding an end to the violence. The home visits are designed to be a narrowly focused, short-term deterrent. The home visit strategy was first used in August 2008. As of July 2010, 182 offenders and/or their family members were successfully contacted and informed of the CIRV message.

The CPD also uses innovative approaches in an effort to circumvent the issues with unknown or incorrect home addresses (see Engel et al., 2009). Both CPD and probation/parole intelligence indicates that members of the target population spend a majority of time away from their “on-file” home addresses. Additional data gathered from street-level patrol and probation/parole officers during on-going CIRV group data collection sessions also provides support by identifying violent group members’ primary street “hangout” locations and current incarceration status in the local jail. Expanding the official “visits” to these locations provided a key innovation to the existing strategy and effectively expanded the non-violent message dissemination. For jail visits, known group/gang members in jail receive visits from CIRV-trained members of the LE team (CPD, probation/parole, and ATF) and are given a specific, individual focused deterrence message of non-violence. Street visits are conducted in conjunction with the home visits. Those individuals who are not contacted at their home address

are then approached at their known street hangout location; other gang members hanging on the street during this time are also delivered similar warning messages.

Group Enforcement

The deterrent success of CIRV relies on the CIRV team following through on the promises made during each of the methods of notification. The Law Enforcement Team promises to bring the full legal force of law enforcement upon groups that engage in gun violence, especially those groups connected to homicides.

From July 2007 to July 2010, a total of 35 groups/gangs have received increased law enforcement action based on the CIRV law enforcement response to a homicide and/or gun violence within the city of Cincinnati, culminating in 201 group members arrested for various felony and misdemeanor charges, along with 17 individuals indicted on federal charges.

Additional group enforcement efforts are on-going. The results of law enforcement action between call-in sessions are detailed at subsequent call-in sessions to demonstrate the return on promises by the Law Enforcement Team. As articulated at the call-in sessions, the Law Enforcement Team pursues not only the shooters in these homicides, but also other group members for any criminal activity in which they are engaged.

In addition to these focused group/gang arrests, CIRV identified group/gang members are routinely arrested for other criminal activities that happen to come to the attention of law enforcement (not as the result of a specific gang enforcement operation). From July 2007 to July 2010, 1,771 identified group/gang members (73.8% of all group/gang members ever identified) have been arrested for various felony and misdemeanor charges, totaling 6,913 separate arrests. These arrests include 1,777 felony arrests, constituting 10.0% of the citywide total of felony arrests during this time period.

Providing Alternatives to Violence

The CIRV Services Team (Strategy 2) is designed to provide meaningful alternatives to violence when gang members and high-risk individuals in the community are making behavior decisions. The goals specific to this team include continually improving a life-change system that successfully engages members of violence-prone groups and moves them to a gun violence-free, pro-social, and eventually, employment-based lifestyle. Comprised of a lead social services agency (Talbert House), employment agency (Cincinnati Works), and CIRV Street Advocates, this team strives to provide immediate and tailored services to individuals choosing to leave the life of violence. The Talbert House conducts intake and case management, while the Street Advocates continually deliver the message of nonviolence. Serving as “life coaches,” these advocates work one-on-one with individuals motivated to change and ensure they are accessing and using the necessary resources.

Providing “would-be offenders” with alternatives to violence has been an inherent weakness of most violence-reduction focused deterrence approaches (Tillyer, Engel, & Lovins, forthcoming). Despite system interventions, individuals are embedded within (or will eventually return to) homes, schools, neighborhoods, and cities with systemic disadvantages that jeopardize their ability to succeed. The available legitimate opportunities, coupled with structural constraints within the broader social context, represent additional explanations for variation in success both between and within focused deterrence initiatives. The CIRV Services Team represents an important step for criminal justice system responses to violence that are part of larger social reforms. Specific strategies proposed for providing alternative to violence include:

- 1) providing social services to violent offenders and at-risk youth that address their criminogenic

needs; 2) direct outreach, including coaching/mentoring of the target population; and 3) violence interruption activities in target neighborhoods.

Social Services

The CIRV approach differs from other focused deterrence initiatives by developing evidence-based service delivery and community engagement components. The CIRV Services Team was recently restructured to deliver services effective in reducing future criminal behavior. Four basic principles for effective intervention must be addressed – risk, need, responsivity, and fidelity (Andrews & Bonta, 1998; Gendreau, 1996). The risk principle refers to the risk of re-offending. The need principle identifies those needs that are both dynamic and criminogenic (correlated to criminal behavior); the four strongest criminogenic needs are antisocial attitudes, peers, behavior, and personality. The responsivity principle is based on research demonstrating that cognitive behavioral and structured social learning approaches are more effective at reducing recidivism. The fidelity principle notes that programs must ensure effective implementation.

Based on these principles, CIRV developed a new service delivery process in July 2009. To ensure adherence to the risk principle, valid risk assessment tools, including a composite risk assessment (ORAS) and a violence screener (Violence Triage Tool), are utilized. To address the needs principle, the focus was expanded beyond employment to include targeting antisocial attitudes, peers, behaviors, and personality factors. The responsivity principle was met by adopting a cognitive-behavioral treatment (CBT) model, which offers an opportunity to address offenders' antisocial attitudes while teaching new skills to effectively manage their environment. The following steps address the fidelity of the model: 1) adoption of a validated risk instrument; 2) training of street advocates on core correctional practices; 3) monthly staff meetings to monitor services delivered; 4) monitoring progress made by offenders; and 5) developing a

centralized data collection process to track offenders. Recent evidence suggests that programs that serve very high risk offenders still can have an impact on recidivism (Dolan & Doyle, 2007). Although many CIRV clients are serious violent offenders, a significant reduction in recidivism can be achieved if the program adheres to the risk, need, responsivity, and fidelity principles.

Direct Outreach

In addition, direct outreach – provided by CIRV Street Advocates – has played an integral role in CIRV. The CIRV team currently utilizes the services of 13 street advocates, one manager, and one administrative assistant from CHRC (funded by the City of Cincinnati). Modeled after Boston and Chicago Ceasefire outreach workers, CIRV Street Advocates serve multiple purposes, including social work and violence intervention, and are selected based on personal experience in low-income, high crime neighborhoods, and the criminal justice system. Their experiences allow them to connect one-on-one with those at increased risk for violence (Skogan et al., 2009). CIRV Advocates strive to provide immediate and tailored services to individuals choosing to leave the life of violence, support for victims' and offenders' families, and alternatives for high-risk youths. CIRV Advocates spend the majority of their time interacting with individuals seeking assistance; client interactions include mentoring, coaching, case management, and building relationships. They also conduct monthly support groups with 10-15 clients per session, with a focus on behavioral change.

From July 2007 through July 2010, the CIRV Street Advocates have been contacted for services and assessed a total of 552 clients. Of these clients, 404 were referred to Cincinnati Works, where 177 (43.8%) completed job readiness training, and 116 (28.7%) obtained their first job. In August 2009, additional social services were provided for CIRV clients by the Talbert House; 51 individuals are currently receiving services.

Violence Interruption

CIRV Street Advocate outreach activities also include violence interruption, mediation, and spreading non-violence messages to the community. Similar to Chicago Ceasefire, violence interruption tactics include CIRV Advocates deployed to violence hot spots and funerals to assess gang-related conflicts and intervene prior to escalation. From January 2009 to July 2010, CIRV Street Advocates documented 81 incidents where they believed that imminent violence between two or more individuals had been disrupted through their intervention. Street Advocates provide alternatives to violence by encouraging those about to engage in violent behavior with suggestions for non-violent conflict resolution.

Several cities have reported an assortment of problems with street workers, including high turnover, little traditional work experiences, difficulties in supervision and evaluation, inadequate training, and unsystematic responses to conflict situations (Skogan et al., 2009; Wilson, Chermak, & McGarrell, 2010). While the work of street advocates is critical for violence reduction, it can also lead to devastating results if they are not properly selected, trained, and held accountable for their activities. For example, an evaluation of *One Vision* in Pittsburgh showed that the program had no effect on homicide rates and that the implementation was actually associated with an increase in assaults and gun assaults (Wilson et al., 2010). Further, Pittsburgh's program evaluation indicated that street workers interacting with gang members were not intervening in gang conflicts and were protecting specific gang-affiliated individuals (Wilson et al., 2010).

In an effort to reduce the likelihood of these issues, the CIRV Street Advocates are required to provide specific documentation regarding their activities (tracked through an electronic database created in August 2009). This database includes instruments detailing

information regarding community outreach, violence interruption, community events, and coaching/mentoring activities. The CIRV Advocates are City of Cincinnati employees with multiple levels of oversight and procedures for disciplinary issues, including a field manager, CHRC Director, and ultimately the City of Cincinnati Manager's Office. CIRV Street Advocates are specifically deployed to intervene in the exact geographic locations (and specific gangs) in need of immediate intervention; this deployment strategy is coordinated directly by CPD officials based on weekly crime analyses and quarterly gang social network analyses.

Changing Community Norms Regarding Violence

The CIRV Community Engagement (CE) Team (Strategy 3) is designed to change community norms regarding violence. This team is based on the principles of Chicago Ceasefire, including outreach and intervention with high-risk individuals; collaboration between criminal justice agencies and personnel to identify and intervene with individuals at-risk for gun violence; community mobilization to respond to shootings within 72 hours of all shooting incidents that result in injury; public education to change attitudes and behaviors about gun violence; and faith-based leadership to engage the community (Skogan et al., 2009). The objectives specific to the CIRV CE Team include forming relationships with individuals and organizations in affected communities to articulate norms and expectations; effectively delivering the "moral voice" message that gun violence is not acceptable; and rejecting the norms and narratives of the street that promote violence. Members of this team represent various interests and groups within the community who reject violence and work toward rebuilding the community. This team is led by CIRV Street Advocates and CPPC officials. Community influentials – including parents, grandparents, other relatives, coaches, mentors, religious leaders, former elected officials,

parents of murdered children, and ex-offenders – assist in designing and carrying messages of non-violence.

Utilizing similar components to Chicago Ceasefire, the CIRV CE Team aims to change norms regarding violence. Specific tactics are utilized to increase collective efficacy by empowering neighborhoods to mobilize and exert informal social control for sustained reductions in gun violence (Sampson, Raudenbush, & Earls, 1997). The central component of this multi-faceted plan is the delivery of the “moral voice of the community” messages that bridges the outreach, education, and mobilization strategies. This message has three components: 1) challenging the street code; 2) “owning” the harm resulting from violence; and 3) creating a “vision of uplift” (i.e., demonstrating a better way of life).

First, this moral voice message is designed to challenge the “street code,” an unstated set of cultural beliefs and principles that are often adopted and reinforced by young, urban males that include beliefs that it is okay to go to prison, death at an early age is unavoidable, respect is the most important thing (and it must be obtained through violence), the police are racist, and individuals have no choice but to follow the code of the streets (Anderson, 1999). The goal of the CIRV CE Team is to undercut these beliefs and dispel the myths. With the assistance of those who previously lived by this code, the CE Team strives to demonstrate there are viable alternatives to violence and life on the street.

The CIRV CE Team also strives to encourage those in high-risk populations to “own the harm” caused by their actions. This message is conveyed with the assistance of community members that have experienced pain and/or loss as a result of gun violence, such as mothers and families of gunshot victims, community religious leaders, and educators. The goal of the “Owning the Harm” message is to show high-risk individuals the harmful results of their actions,

which include hurting innocent people, destroying families, teaching children that violence is acceptable, and culturally and economically destroying communities.

Finally, the third component of the moral message is a “Vision of Uplift.” The CE Team shows those at risk for violence that they can reduce the consequences of violence and help to empower their community. With the assistance of community leaders, mostly faith-based, the CE Team strives to demonstrate that these at-risk individuals are part of the community, and they serve important roles in developing the community and a better life for themselves and others.

Community Asset Inventory

The primary role of the CIRV CE Team is to engage community members, agencies, and faith-based partners who can act as credible influencers within neighborhoods most affected by gun violence, and to articulate community norms and expectations that gun violence will not be tolerated. To facilitate and coordinate community outreach, the CE Team has developed an “asset inventory” process that serves as a resource directory, which is a key component to providing a coordinated response and involves the work of multiple community stakeholders. This process consists of identifying existing resources within the community that could be assets in combating violence. The CE Team focuses on the identification of individuals, associations, institutions, and professional establishments within the community that could provide care for the target population. Community resources focus on pre-violent incident intervention, while professional resources are used to focus on post-violent incident intervention.

The asset inventory process was pilot tested in April 2009 in one Cincinnati neighborhood (Avondale). The CE Team identified specific individuals, programs, and events that could be used to intervene with at-risk youth and young adults within the targeted area. In order to compile this inventory, participants assessed potential resources by asking: 1) What

individuals care for violence-prone youth and young adults? 2) What programs and facilities for recreational, spiritual, mentoring, and employment skills and activities are available within this community? 3) What individuals within the community can act as coaches, mentors, and/or father figures for at-risk adolescents and young adults? Following this information-gathering session, the identified assets and resources are compiled into a document for application.

Community Outreach Activities

The CE Team uses a variety of strategies to engage the community and deliver the moral voice message, including: Community trainings, youth violence prevention programs, outreach events, shooting responses, funeral and vigil events, and other community engagement activities. The various events held from July 2007 to July 2010 are described in greater detail below.

Community Trainings include those events in which representatives from the CPPC provided information on violence reduction strategies to neighborhood volunteers. Community residents received training relevant to the missions of CIRV, along with materials and resources to help combat crime and disorder in their neighborhoods. From July 2007 through July 2010, the CPPC has documented 103 community training sessions with varying levels of attendance ranging from 1 to 86, with an average of 22 individuals.

The *Youth Violence Prevention Programs* (YVPP) are workshops designed for at-risk juveniles, generally aged 12-18 (though a few interventions corresponded with audiences aged 18-25). Community volunteers are trained with established curriculum that aims to decrease anti-social attitudes and encourage positive relationships between youth and law enforcement. From July 2007 to July 2010, 68 YVPP workshops have been held with attendance ranging from 1 to 58, with an average of 16 individuals.

Outreach Events include activities in which CIRV representatives canvas high-crime neighborhoods in efforts to interrupt the norms surrounding violence. CHRC Street Advocates target at-risk and present group members, presenting them with pro-social alternatives to their lifestyle. From July 2007 to July 2010, 363 outreach events have been documented by CHRC and CPPC officials.

Shooting Responses correspond to those times in which CIRV volunteers target individuals, groups, and neighborhoods that have been recently affected by gun violence. It is expected that this focused strategy will interrupt the cycle of retaliation found in many of these crimes, and further empower communities members to take ownership of their neighborhoods. The activities associated with shooting responses including community mobilization and marches. During this three-year period, CPPC officials and CIRV Street Advocates reported conducting 318 shooting responses.

Funeral and Vigil Attendance describes occurrences in which CIRV representatives attend events that honor the life of someone lost to gun violence. The expectation is that by providing evidence of the effects of group membership, offenders will be persuaded to eliminate the violence from their interactions. CIRV Street Advocates provide victims' family members with comfort, emotional support, and opportunities to express their grief without engaging in retaliatory violence. CIRV Street Advocates reported providing these services at 42 funerals/vigils during this three-year period.

CIRV Community Engagement Activities include those events that are specifically branded with the messages of CIRV. These events aim to encourage community members to take responsibility for the moral tone in their neighborhoods, demanding an end to gun violence. It is expected that after attending a Community Engagement event, individuals will return to their

own neighborhoods with the CIRV message that violence is unacceptable. The types of community engagement activities include neighborhood resource fairs, peace rallies, and block parties. At each event, law enforcement is present in hopes of strengthening police-community relations. From July 2007 to July 2010, 26 separate CIRV community engagement activities and events have been documented by the CIRV Community Engagement Team.

Sustainability

The focused deterrence model demands a great deal of coordination both within and between the law enforcement, services, and community partners to operate effectively and efficiently. This intense level of cooperation has been demonstrated by the CIRV Team as it enters its fourth year of partnership. Cincinnati's political leadership has taken an active role in CIRV and has demonstrated financial support and oversight. Ultimately, the goal is for the CIRV process to become institutionalized as the manner in which Cincinnati responds to group/gang violence. Researchers from the University of Cincinnati work with the Project Manager and individual CIRV Team leaders to systematically collect data and provide routine feedback. The CIRV initiative is data-driven, and strategies are modified as feedback is provided to the teams regarding violence levels. Further, the CIRV Systems Team is responsible for creating and updating the teams' OGSM (Objectives, Goals, Strategies, and Measures), balanced score cards, and action plans (see Engel et al., 2008; 2009).

CIRV was designed from the onset to become institutionalized, and has continued to improve and evolve over time. CIRV created a robust operational structure – complete with corporate models employed for management, accountability, performance evaluation, and improvement – that is now considered the standard for focused deterrence approaches. For example, CIRV is the model for six other Ohio cities funded through a partnership with the State

of Ohio, and has also received visits and inspired projects in London, England; Glasgow, Scotland; and Adelaide, South Australia. Members of the CIRV team were awarded the prestigious 2008 *IACP / Motorola Award for Excellence in Law Enforcement*; the 2009 *IACP / West Award for Excellence in Criminal Investigations*; and the 2008 *National Criminal Justice Association's Outstanding Criminal Justice Program Award*. Print and television coverage of CIRV includes over 175 local, state, national, and international stories.

In addition, Cincinnati is one of ten “leadership groups” that provides guidance for the National Network for Safe Communities (NNSC). The primary purpose of the NNSC is to support jurisdictions around the country implementing focused deterrence crime reduction strategies. These strategies have now been implemented in over 75 jurisdictions across the country; nearly fifty jurisdictions have officially joined the NNSC. The CIRV team has produced 14 *Best Practices Guides* used by the State of Ohio and the NNSC to provide guidance for jurisdictions implementing focused deterrence approaches. Cincinnati has hosted visitors from over a dozen jurisdictions on-site, developed training materials used across the State of Ohio, and participated in numerous national and international gatherings to disseminate CIRV-related findings.

EVALUATION

Historically, criminal justice policies have lacked accountability and effectiveness, with most policies and programs being grounded in political ideology or untested assumptions. Evaluation research, which “aims to improve society by examining social policies through the use of various research methodologies,” is crucial to the development, monitoring, and assessment of criminal justice policy (Mears, 2010, p. 36). Examining with methodological rigor whether a policy has achieved its intended outcome is central to responsible policymaking.

Therefore, formal evaluation is necessary to determine: 1) if CIRV is associated with a reduction in various indicators of violence; and 2) if we can conclude with a high degree of certainty that this reduction should be attributed to CIRV activities and not other influences (e.g., seasonal changes in crime trends). The analytic strategies employed below were designed to meet these needs.

Analytic Framework

Ultimately, the goal of the CIRV team is to reduce group/gang member involved violence across the city of Cincinnati. The current investigation is designed to test the potential impact of the CIRV intervention on relevant crime outcomes by relying upon a time series analysis. It is important to note that the interrupted time series design compares patterns of pre-intervention responses with patterns of post-intervention responses across relevant outcomes (Cook & Campbell, 1979). In addition, the regression models used in the subsequent time series analyses are also designed to control for the potential influences of fluctuating crime trends as well as seasonality in each time series (i.e., the changes in crime trends that are associated with specific months during the calendar year).

Data

The trend data used here include several types of criminal offenses reported to the Cincinnati Police Department (CPD) over a six and a half year period for the city of Cincinnati. Offense data were aggregated into a monthly format starting in January 1, 2004 through July 31, 2010, which equates to over three years of pre- and post-intervention data. Each month's crime measure was operationalized as a composite variable, running from its first through its last day, of all offenses over this period.

Variables

Four specific outcome variables were modeled in the current analytic framework.

Homicides were operationalized as unique and fatal crime incidents where each victim was included as a specific homicide count. *Group/Gang Member Involved (GMI) homicides* were operationalized as unique and fatal crime incidents where the victim, suspect, and/or circumstances surrounding the event indicated that group/gang members were involved.²

Alternatively, *Non-GMI homicides* were all homicide incidents that do not meet the GMI criteria described above. Finally, *total shootings* were operationalized as the number of victims that sustained fatal or non-fatal gunshot wounds during unique incidents.

Note that a measure of *GMI shootings* is not included in the analyses below. Given the average number of shooting incidents per month, the CPD does not systematically record whether or not these gun-related incidents are gang-related. Unfortunately, the research team has been unable to retrospectively classify these shootings as gang-related with consistency and

² Homicides are classified by CPD officials as Group/Gang Member Involved (GMI) based on the following criteria and processes. First, the name of the victim and suspect (if known) are crosschecked with the official gang database that is routinely updated by CPD officials. If either the victim or the suspect is a known group/gang member, the homicide is coded as GMI. If the victim is not a known gang member and the suspect is unknown, the specific circumstances of the incident itself are considered. CPD officials consider a totality of circumstances, which include: the location of the offense; the suspected involvement of the victim in illicit acts preceding the homicide; the manner and type of death; demographic characteristics of the victim; time of day; likely suspects; and other relevant characteristics of the incident. If the totality of the circumstances suggests a possibility that a member of a group/gang is involved in the incident, but the specific group/gang members involved remain unknown, the incident is coded as a GMI until proven otherwise. For classifications of GMI where the suspect is initially not known but later arrested, the case is again reviewed for proper GMI determination. These classification criteria were consistently applied across the pre- and post-intervention periods. A single CPD commander is charged with making the final GMI classification and has made all such determinations of cases examined in these analyses; therefore there are no concerns regarding coder inter-rater reliability. Also note that domestic-related homicides that include group/gang members are included as GMI incidents. The rationale behind such a classification is that, based on the focused-deterrence approach, group/gang members are notified that their continued violence will result in law enforcement action taken upon the entire group. Any homicides committed by the target audience (regardless of the specific circumstances) are the subject of the CIRV Team's efforts. Using this coding approach, the number of GMI homicides is likely slightly overestimated, resulting in the most conservative test of CIRV's possible impact on reductions of group/gang involved violence.

validity. Therefore, a measure of all shooting victims is used as a proxy measure, based on the assumption that similar to Cincinnati homicides, a majority of these shootings are gang-related.

We also incorporated an independent variable defined as the *post-intervention* period, which we operationalized as July 2007 thereafter. This measure was created as a dummy variable where months between January 2004 through June 2007 were defined as the pre-intervention period (i.e., value = 0). Subsequently, July 2007 and all subsequent months through July 2010 were operationalized as the post-intervention period (i.e., value = 1) because July 2007 was when the initial CIRV offender notification session occurred. More specifically, fifty-five offenders were summoned to the initial notification session in July 2007. Although the CIRV team officially started its organizational work in April 2007, July was the first month that group/gang members were made aware that law enforcement consequences had changed; that social services were readily available; and that community members would no longer tolerate gun violence.

In order to account for potential trend influences, we added both a simple linear *trend* variable (to account for linear trends) and a *trend-squared* variable (to account for curvilinear trends), which were apparent in the bivariate graphs displayed in the results section.³ Similarly, we included *monthly dummy variables*, using December as the reference month, to account for seasonal effects (i.e., seasonal shocks) that occurred during specific periods of the year (mostly in the late spring and early summer), which are also shown in the bivariate trend graphs.

Bivariate Analyses

As an initial step, we examined the average monthly percentage changes in the different types of homicide as well as firearm related incidents. Table 1 indicates that many of the violent

³ The trend variable was created as a sequential time measure from the start to the end of the time series data (i.e., our data ran from January 2004 (1) to July 2010 (79)). The trend-squared variable was simply the trend variable squared (trend variable * trend variable) to account for potential quadratic changes in a given time series.

crime outcomes experienced substantive declines between the pre- and post-intervention period. More specifically, the average number of homicides declined from 6.3 per month to 5.5 per month. It is also apparent that this overall decline in homicide was likely driven by the specific reduction in GMI related homicide events, which declined from 3.8 homicides per month to 2.9 per month during this same time frame. Conversely, non-GMI homicides actually experienced a slight increase, again indicating that the driving force behind the overall decline in the number of monthly homicides was specific to a change in GMI homicides. Finally, the total number of shootings in the city experienced a modest reduction from 36.6 incidents per month to 34.3 incidents per month as well.

Table 1: Bivariate Percentage Change in Violent Crime Outcomes

Offense Type	Number of Offenses Per Month (Pre-Intervention)	Number of Offenses Per Month (Post-Intervention)
Homicides	6.35	5.54
GMI Homicides	3.85	2.97
Non-GMI Homicides	2.50	2.56
Total Shootings	36.66	34.37

Figure 1 displays the monthly number of homicides between January 2004 and July 2010. We note that the “break” in the series corresponds with the July 2007 intervention date.

Figure 1: Trends in Homicide

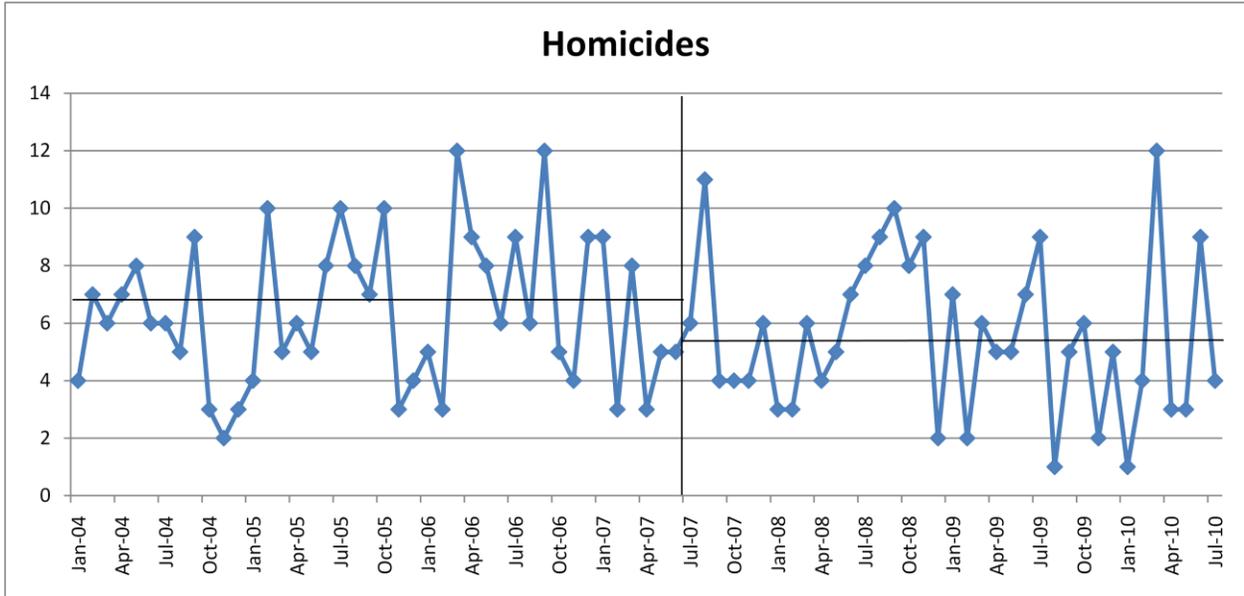


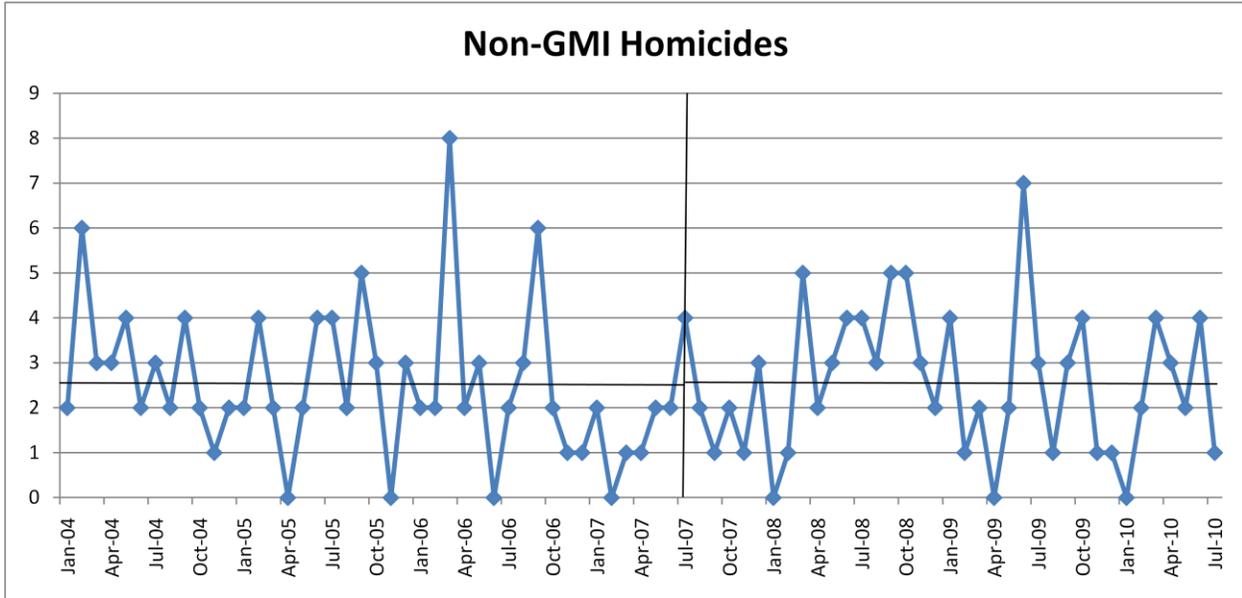
Figure 2 similarly shows the monthly number of GMI related homicides, which again declined by nearly one incident per month during this break in the time series.

Figure 2: Trends in GMI Related Homicides



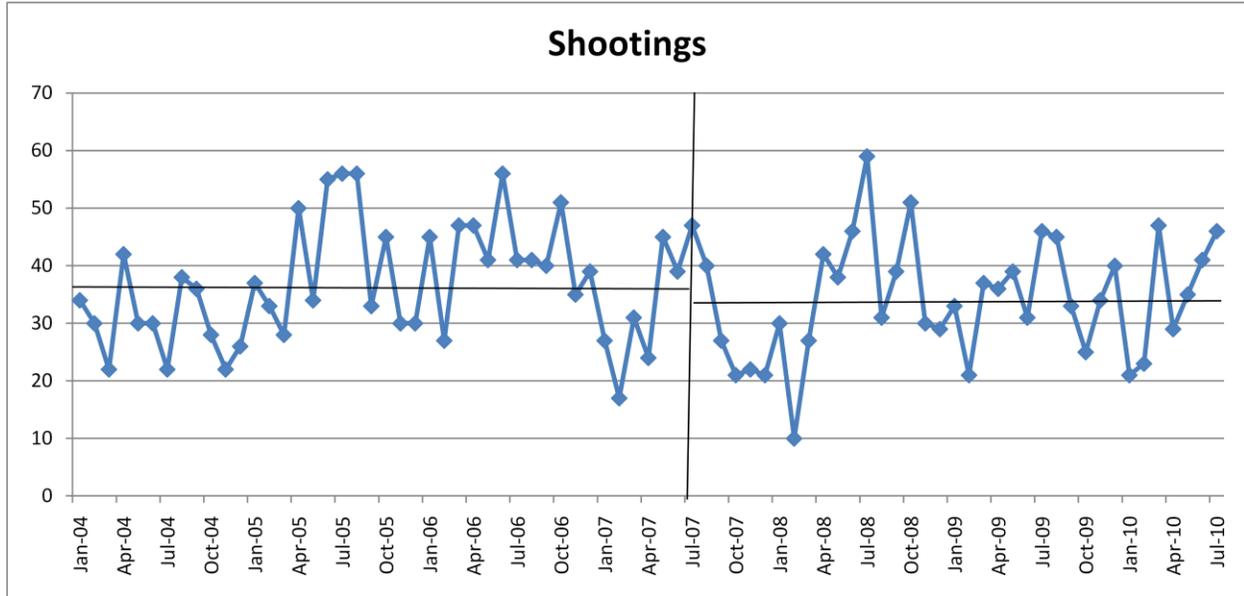
Figure 3 displays the monthly number of Non-GMI homicides, which actually experienced a very slight increase over the period examined here.

Figure 3: Trends in Non-GMI Related Homicides



We next display the monthly number of firearm related offenses that occurred within Cincinnati between January 2004 and July 2010 (see Figure 4), which experienced a modest decline after the initial July 2007 notification session.

Figure 4: Trends in Firearm Related Incidents



Multivariate Analyses

While the trend analyses are suggestive of potential program impact, it is important to note that the bivariate percentage changes that have been displayed to this point represent simple pre- and post-intervention reductions and thus do not control for prior trends in the data, seasonality, and other confounding influences that are likely to create a regression toward the mean in the relevant crime outcomes. As noted earlier, one of the most widely adopted statistical procedures in econometrics and criminal justice used to determine the impact of programs and public policies is time series analysis. As McCleary and Hay (1980, p. 141) note, “the widest use of the time series design has clearly been in the area of legal impact assessment.”

We utilized Generalized Linear Modeling count regression analysis to estimate the impact of the CIRV intervention (see Long, 1997). Ordinal Least Squares (OLS) regression models are inappropriate for analyzing count outcomes because count data do not approximate a normal distribution and thus analysis from these models would lead to biased and inconsistent

estimates (King, 1988). Each outcome examined was estimated using a log-linear Poisson distribution, unless the sample variance was significantly greater than the sample mean (i.e., an overdispersed distribution) in which case negative binomial regression was used given its additional parameter to account for the distribution of the variance independent from the mean (Long, 1997; Long & Freese, 2003).⁴ Parameter estimates for each regression model were subsequently expressed as incidence rate ratios (i.e., the change in the rate of an outcome based on a unit change in an independent variable), which are simply calculated as the exponentiated coefficients given the use of logarithmic transformation in GLM (Long & Freese, 2003).

Table 2 presents the impact assessment of the CIRV intervention strategy on homicides while controlling for potential influences in the trend data. More specifically, the post-intervention estimate can be interpreted as the mean change in homicides between the pre- and post-intervention periods, centering on the date of the first call-in session in July 2007. After controlling for monthly seasonality and linear as well as curvilinear trends in the data, homicides experienced a decline of roughly 13.6 percent following the first notification session. However, we note that the overall decline in homicides did not approach the social scientific standard of statistical significance (i.e., p -value = 0.44). Thus, we are not able to assert with a high-degree of confidence that the observed change in homicides was not simply due to chance.

⁴ We examined the goodness-of-fit statistics for each full regression and chose, where appropriate, negative binomial regression models in place of Poisson models when the Chi-Square p -value statistics were statistically significant ($p < .05$), which indicates statistically significant evidence of overdispersion (Long and Freese, 2003: 270). This type of statistical model was specifically used when firearm related incidents were examined.

Table 2: Poisson Regression Results for Homicide Trends

Measure	<u>Homicides</u>		
	I.R.R.	Coeff.	St. Error
Intercept	--	1.510	0.238
Post-Intervention	0.864	-0.146	0.190
Controls			
Trend	1.008	0.008	0.008
Trend Squared	0.999	-0.001	0.001
January	0.983	-0.017	0.255
February	0.961	-0.040	0.256
March	1.640**	0.491	0.230
April	1.099	0.094	0.248
May	1.157	0.146	0.245
June	1.423	0.353	0.249
July	1.660**	0.507	0.236
August	1.383	0.324	0.244
September	1.623**	0.484	0.234
October	1.242	0.217	0.236
November	0.829	-0.188	0.279
Model Statistics			
Log Likelihood		-173.98	
LR Chi-Square Test (df)		26.14 (14)	

* $p < .10$; ** $p < .05$.

Table 3 displays the impact of CIRV intervention strategy on GMI, or group-related, homicides while controlling for potential influences in the trend data. Again, after controlling for monthly seasonality and linear as well as curvilinear trends in the data, GMI homicides experienced a decline of roughly 34.8 percent following the first notification session. In addition, this type of homicide experienced a statistically significant decline ($p < 0.10$) after the CIRV strategy was fully implemented. Thus, we are able to assert with a high degree of confidence (90% confidence threshold) that this estimated change in the average number of monthly gang homicides was not simply due to chance or a pre-existing pattern in the data.

Table 3: Poisson Regression Results for GMI Homicide Trends

Measure	<u>GMI Homicides</u>		
	I.R.R.	Coeff.	St. Error
Intercept	--	0.708	0.319
Post-Intervention	0.652*	-0.427	0.248
Controls			
Trend	1.027**	0.027	0.011
Trend Squared	0.999*	-0.001	0.000
January	1.095	0.091	0.326
February	0.829	-0.187	0.348
March	1.545	0.435	0.304
April	1.331	0.286	0.312
May	1.069	0.067	0.321
June	1.266	0.236	0.315
July	1.696*	0.528	0.308
August	1.624	0.485	0.310
September	1.374	0.318	0.320
October	1.069	0.067	0.338
November	1.005	0.005	0.343
Model Statistics			
Log Likelihood		-156.13	
LR Chi-Square Test (df)		22.01 (14)	

* p < .10; ** p < .05.

Table 4 similarly displays the impact of CIRV on non-GMI homicides. Interestingly, this specific type of homicide actually experienced an increase of roughly 34.6 percent, though we note this change was not statistically significant (p = 0.32). There also were not consistent patterns of seasonal effects in these other forms of non-GMI homicide during this period.

Table 4: Poisson Regression Results for GMI Homicide Trends

	<u>Non-GMI Homicides</u>		
Measure	I.R.R.	Coeff.	St. Error
Intercept	--	0.985	0.362
Post-Intervention	1.346	0.297	0.299
Controls			
Trend	0.982	-0.018	0.013
Trend Squared	1.000	0.000	0.000
January	0.824	-0.193	0.409
February	1.106	0.101	0.383
March	1.742	0.555	0.352
April	0.773	-0.258	0.418
May	1.271	0.240	0.374
June	1.639	0.494	0.358
July	1.611	0.477	0.366
August	1.055	0.054	0.401
September	1.962	0.674	0.354
October	1.481	0.393	0.372
November	0.580	-0.545	0.476
Model Statistics			
Log Likelihood		-279.76	
LR Chi-Square Test (df)		24.42 (14)	

* p < .10; ** p < .05.

Table 5 displays the estimated change in the total number of firearm related incidents in Cincinnati. We found that the number of shootings declined by 21.3 percent, and that this estimate was statistically significant ($p < .05$) even after controlling for prior trends in the series. Also, we used negative binomial estimation since there was statistically significant evidence of overdispersion (variance > mean) in this specific outcome. The likelihood ratio Chi-square statistic was statistically significant, indicating the need to adjust the estimated model to better control for the skewed nature of this outcome variable (see Long & Freese, 2003).

Table 5: Negative Binomial Regression Results for Shooting Incidents

Measure	<u>Shootings</u>		
	I.R.R.	Coeff.	St. Error
Intercept	--	3.320	0.128
Post-Intervention	0.787**	-0.240	0.107
Controls			
Trend	1.007	0.007	0.004
Trend Squared	0.999	-0.001	0.000
January	1.065	0.063	0.130
February	0.754**	-0.283	0.136
March	1.110	0.104	0.129
April	1.255*	0.227	0.127
May	1.206	0.187	0.127
June	1.366**	0.312	0.125
July	1.501**	0.406	0.129
August	1.381**	0.323	0.130
September	1.140	0.131	0.133
October	1.201	0.183	0.132
November	0.938	-0.064	0.136
Model Statistics			
Log Likelihood		-271.82	
LR Chi-Square Test (df)		40.75 (14)	

* p < .10; ** p < .05.

SUMMARY

In this section, we briefly summarize the estimated effects of CIRV on the different types of violent crime in Cincinnati between 2007 and 2010. We utilized July 2007 as the intervention date because the CIRV notification sessions began during this month. As shown in Tables 1-4, we found that the overall (but non-statistically significant) decline in all types of homicide was likely driven by the significant decline in GMI homicides. Conversely, non-GMI homicides went through a slight (though again non-significant) increase during this same period. Thus, while fatally violent incidents involving actors that were not affiliated with the loosely structured groups/gangs of high-risk offenders were slightly increasing during the period examined here, GMI homicides experienced a significant ($p < 0.10$) decrease of 34.8% during this same time

frame. In addition, firearm related offenses (shown in Table 5) experienced a strong and statistically significant decline ($p < 0.05$) of 21.3% after CIRV was implemented within the city.

In sum, our results indicate that the specific types of violence (i.e., GMI homicides and firearm related incidents) that the CIRV strategy was designed to impact experienced reductions that were unlikely due to random chance or because they followed patterns that were consistent with prior trends in violence over time. Future research is necessary to discern whether specific changes in relevant outcomes corresponded with different components of the CIRV strategy, and whether those potential relationships were sustained (or short-lived) over time.

These future analyses will rely on longitudinal based panel models that will be designed to capture whether specific components of the CIRV strategy (i.e., deterrence strategies, public notification sessions, community outreach, and social service provisions) corresponded with changes in the relevant crime outcome measures at specific points in time. More specifically, researchers will attempt to model whether variables related to each of these conceptually-based measures was significantly associated with the estimated decrease in the different violent crime outcomes examined here (i.e., at the time of the specific strategies, or whether there was a potential “lag” or delayed effect). Ultimately, future research will attempt to unravel the processes of the CIRV intervention that may have influenced the change in GMI-homicides as well as firearm related offenses. Given that the initial results in this report suggest that “something happened” to reduce gang-related violence when the CIRV intervention occurred, our ultimate goal is to better understand just what may have been the driving force behind the estimated change in violent crime.

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