



RESEARCH REPORT

# Put the Guns Down

## Outcomes and Impacts of the Chicago Violence Reduction Strategy

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# Executive Summary

Across the United States, policymakers, practitioners, and communities are seeking ways to reduce the lethal violence highly concentrated in a relatively small number of urban neighborhoods. With funding from the John D. and Catherine T. MacArthur Foundation, the National Network for Safe Communities (NNSC) collaborated with the Chicago Police Department (CPD) and other city stakeholders to implement the Chicago Violence Reduction Strategy (VRS), beginning in 2009. Chicago VRS identifies and targets street groups disproportionately responsible for gun violence and works to deter additional violence using a three-pronged strategy: criminal justice sanctions, community moral suasion, and social services provision. The intervention includes call-in meetings in the targeted police districts, during which identified group members are put on notice by VRS partners—including top leadership from CPD, federal and state prosecutors, and credible community messengers—that although they are valued community members, gun violence must stop, and that street groups represented in the meeting that continue to be involved in shootings will be the target of coordinated enforcement actions.

Researchers at the Urban Institute and Yale University, in partnership with NNSC, conducted a comprehensive, mixed-methods, quasi-experimental outcome and impact evaluation of Chicago VRS funded by the MacArthur Foundation. The evaluation began in November 2011, seeking to determine whether and how Chicago VRS affected group member-involved violence and how the intervention may have been related to perceptions of group members, community residents, and police officers.

## Evaluation Methodology

Two broad research questions guided the evaluation:

1. *Did VRS reduce group member-involved violence?* The Violence Reduction Strategy was primarily intended to affect the shooting behavior of group members in the intervention communities. The impact evaluation examined how much the shooting behaviors of the groups exposed to the intervention decreased relative to those not exposed to the intervention.
2. *Were self-reported perceptions and behaviors different in VRS districts?* The Violence Reduction Strategy was secondarily intended to change group members', community residents', and police officers' perceptions and behaviors by challenging the norms and narratives they might hold that support or do not deter community violence. The outcome evaluation examined the

perceptions of group members, community residents, and police officers in VRS and non-VRS districts, including those with direct exposure to or knowledge of the intervention.

Guided by these research questions, the evaluation had two main components:

- A prospective, quasi-experimental design, employing propensity score matching techniques, using crime data on group member shootings (impact evaluation)
- A quasi-experimental design using multiple waves of surveys of group members, community residents, and police officers in two police districts that received the VRS intervention and in two comparison districts (outcome evaluation)

In addition, the evaluation included semistructured interviews conducted with group members who attended VRS call-ins. These interviews were intended to support our understanding of whether and how VRS's antiviolence message was being heard and disseminated by those in attendance.

The resulting report includes three main findings sections. The first discusses VRS's logic and how VRS was implemented in the neighborhoods, providing detail regarding the environment in which VRS operated, how attendees responded to the call-ins, and how much knowledge of VRS was evident among group members, among community residents, and within law enforcement. The next section focuses on whether VRS reduced violence among group factions whose members attended any call-in from August 2010 to December 2013. The final results section draws on the survey data to examine whether respondents in the VRS districts had different perceptions than those in the non-VRS districts, with attention to the perceptions of those group members who were the primary target population for the VRS intervention.

## Findings

Based on the data collected, we identify several key findings:

1. **The Violence Reduction Strategy reduced violence as intended among the groups treated by the intervention.** The impact evaluation found that VRS was associated with a 23 percent reduction in the shooting patterns of treated groups (victimization and offending) and a 32 percent reduction in the shooting victimization of group members. No statistically significant decrease was observed for suspected shooting perpetration, largely because the identity of many of the shooters was unknown during the evaluation period. The quasi-experimental

impact evaluation found that the groups that received VRS treatment experienced significant short-term reductions in shootings and shooting victimizations.

2. **The Violence Reduction Strategy was active in the “right” districts among the “right” people.** Group members in the treatment districts reported high levels of recent victimization among people they know. More than half knew someone who had been a recent victim of a shooting or shooting attempt. The survey findings demonstrate that group members, as identified by CPD and their networks, can benefit from the reductions in neighborhood violence VRS intends to bring about.
3. **The VRS strategy—specifically, delivery of the antiviolence message—could be challenged by the high level of mutual mistrust between group members and police officers.** The survey findings demonstrate that group members’ perceptions of justice system actors are negative and that police officers’ perceptions of group members’ morality and ability to change are low. Mutual mistrust threatens VRS because the intervention’s underlying logic is that stronger police-community relationships will reduce shootings. The mistrust underscores the intervention’s importance in repairing and strengthening justice system–community relationships.
4. **Knowledge of VRS and its components appears contained to those exposed directly to the intervention.** Most group members and community residents had not heard of VRS, the call-ins, or enforcement reactions, even after VRS had operated in the district for at least one year. Further, group members and community residents in VRS districts did not report significantly greater knowledge of VRS or the call-ins than did residents in the non-VRS districts. This is another potential threat to VRS because the intervention assumes the antiviolence message will spread through districts. Alternatively, group members and community residents might not associate Chicago VRS with the antiviolence message delivered at the call-ins or the related law enforcement actions, or they might not know that those meetings are called call-ins.
5. **Almost all interviewed call-in participants reported delivering the antiviolence message to family and friends.** Regardless of call-in attendees’ skepticism about whether the intervention would work, whether people they spoke to would be receptive to its message, or whether they self-reported current association with a group or a gang, the small sample interviewed said they would spread the word. Joint delivery of the message by justice system actors and respected community voices enhanced receptivity to the message.
6. **Group members perceived improvements in neighborhood safety.** In both treatment districts, Austin and Belmont Cragin, neighborhood conditions appear better by the follow-up surveys, as perceived by the group members in our sample.



7. **Differences were not evident in group members' perceptions of the likelihood of sanctions, concerns for violence and precautionary behaviors, and victimization experiences and recent criminal activity.** The lack of significant findings in the multivariate models suggests that self-reported perceptions and behaviors do not differ among those in the treatment districts and those in the comparison districts. This finding suggests that during VRS implementation, the larger network of group members may not have heard about or understood there were enhanced consequences for violence in their district and may not have changed their behavior in response to those consequences.



# Introduction and Background

Across the United States, policymakers, practitioners, and communities are seeking ways to reduce the lethal violence highly concentrated in a relatively small number of urban neighborhoods. At the same time, concerns about mass incarceration and the legitimacy of the justice system imply that the best violence-reduction interventions would avoid resorting to overly broad justice system responses that impose further burdens on already disadvantaged communities and strain relationships between communities and the justice system. The Group Violence Intervention (GVI) of the National Network for Safe Communities (NNSC) was developed to reduce lethal violence in a tightly focused manner.

The Group Violence Intervention is an evidence-based antiviolence strategy using a focused deterrence approach to reduce gun violence between street groups. With funding from the John D. and Catherine T. MacArthur Foundation, the NNSC collaborated with the Chicago Police Department (CPD) and other city stakeholders to implement a version of the GVI in Chicago. The intervention, called the Chicago Violence Reduction Strategy (VRS), began in 2009 (and continues as of this writing). Chicago VRS, and the GVI model underlying it, evolved from Boston's Operation CeaseFire initiative, designed and implemented in the mid-1990s to reduce youth gun violence (NNSC 2016). The GVI strategy has been replicated by many jurisdictions, based on its reported success in Boston and elsewhere. Evidence supporting group-based focused deterrence approaches has accumulated over the intervening years (Braga et al. 2001; Braga and Weisburd 2012).

Consistent with the GVI model, Chicago VRS identified and targeted street groups disproportionately responsible for gun violence and then deterred additional violence occurring among those groups using a three-pronged strategy of criminal justice sanctions, community moral suasion, and social service provision. After a problem analysis and gang audits, which resulted in detailed social-network maps of which groups are involved in violent disputes with whom and in what crime hot spots, the intervention included call-in meetings in the targeted police districts.<sup>1</sup> In the call-in meetings, identified group members were put on notice by VRS partners, including top leadership from the Chicago Police Department, the US Attorney's Office, and the Illinois State Attorney's Office, to "put the guns down" and "stop shooting." In these call-ins, the partners would elaborate on this straightforward message with three statements:

1. Further violence by any member of the group will be met with coordinated enforcement action against all group members (criminal justice sanctions).

2. The community values the people in the groups but condemns their violent actions (community moral suasion).
3. There is a genuine offer of help for those who want it (social service provision).

The transmission of this message by trusted and respected community members and high-level justice system representatives through the call-ins was the core element of the VRS intervention. Five basic premises, common to all GVI replications, underlie VRS's approach to violence reduction:

1. Violence in high-crime urban neighborhoods is driven primarily by the dynamics of groups (e.g., gangs, cliques, drug crews) composed of relatively few people in those neighborhoods.
2. Norms and narratives justifying crime and violence, such as believing that disrespect must be responded to with violence, are an important underpinning of group-based violence.
3. Targeted enforcement actions can deter group members from committing violence if a credible promise that further violence will trigger enforcement actions is clearly communicated to members of the groups actively engaged in conflicts and violence.
4. A strong message from trusted and respected community members that violence is wrong and must stop reduces violence by undercutting the norms and narratives justifying violence among group members.
5. If respected community members and law enforcement jointly communicate to group members messages consistent with premises 3 and 4, they will have greater effect than either in isolation. A long history of mutual mistrust between urban minority communities and law enforcement is a barrier to communities' cooperation.

## Group Violence in Chicago

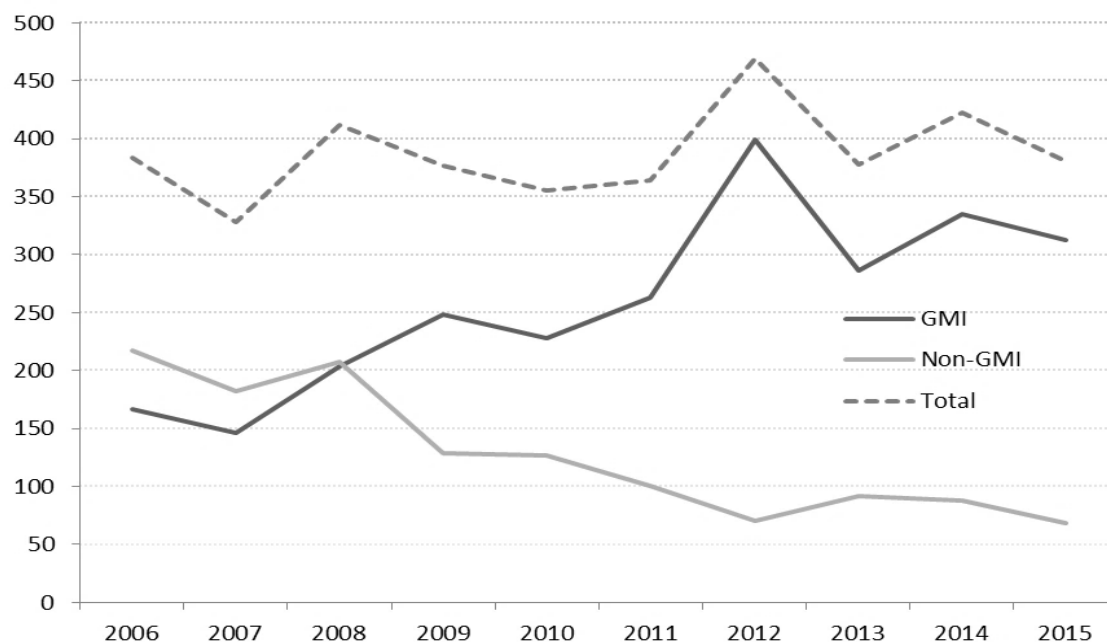
A substantial proportion of Chicago gun violence arises from the dynamics of criminally active groups (Papachristos and Kirk 2015). Although these groups are often referred to as “gangs,” many of them are smaller and more loosely organized than that term may imply. Further, over the last decade or so, many of Chicago's historically organized gangs have devolved into smaller, less-structured street-corner crews. Consistent with the theory of the GVI, we use the more general term “group” in this report.<sup>2</sup>

Group member-involved homicides have contributed significantly to Chicago's homicide problem over the past two decades (Papachristos and Kirk 2015). Figure 1 illustrates the proportion of fatal shootings in Chicago that involved group members and group nonmembers, and figure 2 shows the same for nonfatal shootings. Citywide, fatal shootings that involve group nonmembers have declined

steadily since 2006. But fatal shootings involving group members have increased and since 2008 have constituted most fatal shootings in Chicago. (The proportion of nonfatal shootings is closer to an even split.) The Violence Reduction Strategy intends to address this portion of Chicago homicides.

**FIGURE 1**

**Fatal Shootings in Chicago by Group Member Involvement, 2006–15**



**Source:** Chicago Police Department.

**Note:** Group member-involved (GMI) shootings are those in which the Chicago Police Department identifies either victims or perpetrators as gang members.

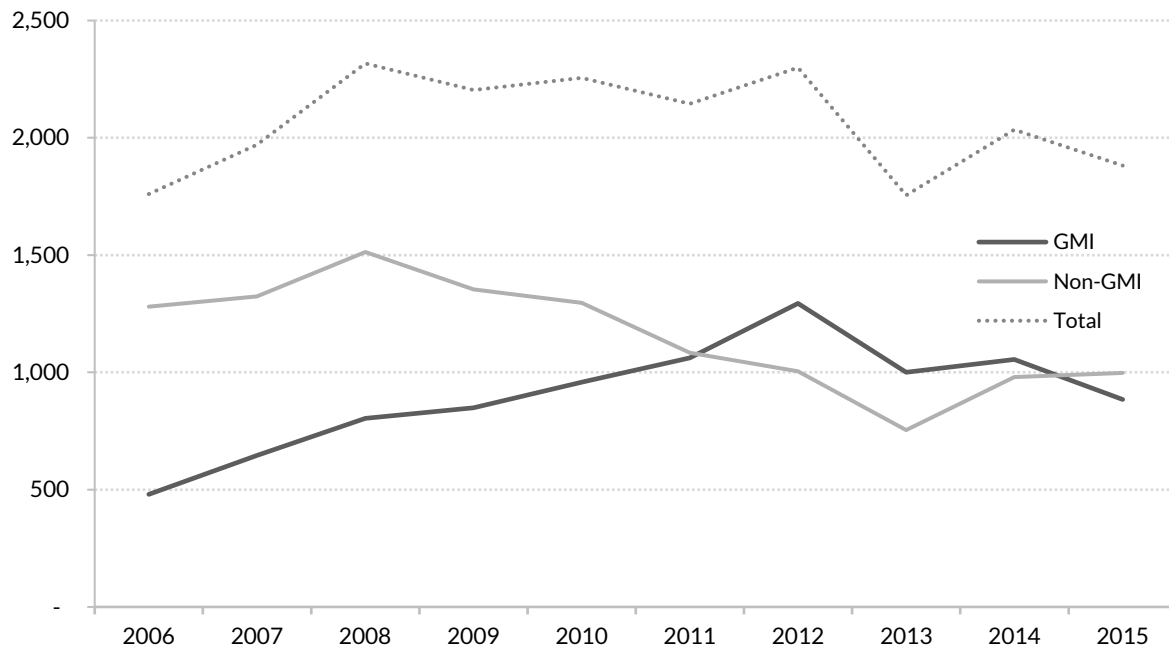
Given GVI's promise and what could be learned about its application in a large city, researchers at the Urban Institute and Yale University, in partnership with NNSC, conducted a comprehensive, mixed-methods, quasi-experimental outcome and impact evaluation of Chicago VRS.<sup>3</sup> With funding from the MacArthur Foundation, the evaluation began in November 2011 to determine whether and how Chicago VRS affected group member-involved violence and how perceptions of group members, community residents, and police officers may have been related to the VRS intervention. The outcome and impact evaluation was intended to answer two research questions:

1. Did VRS reduce group member-involved violence (impact evaluation)?

2. Were self-reported perceptions and behaviors of group members, community residents, and law enforcement officers different in VRS districts and non-VRS districts (outcome evaluation)?

FIGURE 2

**Nonfatal Shootings in Chicago by Group Member Involvement, 2006–15**



**Source:** Chicago Police Department.

**Note:** Group member-involved (GMI) shootings are those in which the Chicago Police Department identifies either victims or perpetrators as gang members.

This report summarizes key findings from the VRS evaluation, some of which have been published by Papachristos and Kirk (2015). This report is also associated with a companion brief focused on mutual mistrust between community residents and law enforcement. In the next section, we describe the evaluation design, data collection methods, and analysis approaches. Then, we discuss how VRS was implemented. Next, we present findings from the impact evaluation focused on VRS's impact on group member-involved shootings and then findings from the outcome evaluation focused on group members' self-reported attitudes and perceptions. The final sections summarize the evaluation's limitations and the findings' implications.

# Evaluation Design, Methods, and Analysis Approaches

Informed by VRS implementation, our evaluation assessed the strategy's impact on group member-involved shootings (impact evaluation) and focused on self-reported behaviors and perceptions of group members, community residents, and police officers (outcome evaluation). The impact evaluation is guided by the logic that VRS will change group member behavior through exposure to the VRS intervention. The outcome evaluation is guided by the logic that VRS can change community violence by altering the attitudes and perceptions of group members, community residents, and police officers. The logic of VRS assumes it will affect the attitudes and perceptions of those exposed to the intervention directly and among the larger population of group members, community residents, and law enforcement that learn about VRS's antiviolence message and subsequent enforcement actions. The attitudes and perceptions of group members, community residents, and police could also facilitate or hinder VRS operations and impact. Two broad research questions guided the evaluation:

1. *Did VRS reduce group member-involved violence?* Primarily, VRS was intended to affect the shooting behavior of group members in the intervention communities. The impact evaluation examined how much the shooting behaviors of groups exposed to the intervention decreased relative to those not exposed to the intervention.
2. *Were self-reported perceptions and behaviors different in VRS districts?* Secondarily, VRS was intended to change group members', community residents', and police officers' perceptions and behaviors by challenging the norms and narratives they might hold that support or do not deter community violence. The outcome evaluation examined the perceptions of group members, community residents, and police officers in VRS and non-VRS districts, including those with direct exposure to or knowledge of the intervention.

Guided by these research questions, the evaluation had two main components:

- A prospective, quasi-experimental design, employing propensity score matching techniques, using crime data on group member shootings (impact evaluation)
- A quasi-experimental design using multiple waves of surveys of group members, community residents, and police officers in two police districts that received the VRS intervention and two comparison districts (outcome evaluation)

In addition, the evaluation included semistructured interviews with group members who attended VRS call-ins. These interviews were conducted to support our understanding of whether and how VRS's antiviolence message was being heard by those in attendance. The interviews also probed attendees on whether they had or intended to share VRS's antiviolence message with their friends and networks. Although the evaluation did not include a formal process evaluation, we draw on findings from the semistructured interviews of group members, surveys, and information from NNSC to understand the context under which VRS was implemented. This context was also used to inform the impact and outcome evaluations and to interpret the findings.

The evaluation design was intended in two critical ways to address gaps in previous studies of focused deterrence approaches to violence reduction. First, our study examined the impact of the strategy on groups rather than on individuals or communities, because the primary locus of the GVI is the group. In contrast, most studies focus on violence reduction at either the neighborhood or the individual level (Braga et al. 2001; Papachristos, Meares, and Fagan 2007). Previous analyses of GVI's impact at the group level have not been possible because the number of comparable nontreated groups is insufficient (an exception is Braga, Hureau, and Papachristos 2014). Chicago VRS presented a unique opportunity for group-level impact evaluation for two reasons: (1) implementation was staged over time and focused on specific groups, allowing us to clearly identify which groups were treated and when, and (2) the number of groups in Chicago is large, allowing for a sufficient pool of comparison groups from which to sample.

Second, our study explores the self-reported perceptions and behaviors of the people central to and intended to benefit from VRS. The need to address norms and narratives that justify group violence and lead to mistrust between communities and police is a critical GVI premise. But prior evaluations have not measured how group members, community residents, and police regard one another and the neighborhood conditions where they live and work. Prior evaluations have also not included assessments of whether individual perceptions and behaviors are different in areas where GVI has been implemented compared with areas where it has not been implemented. Meares and Papachristos (2009) surveyed a few people who attended forums as part of Chicago Project Safe Neighborhoods (PSN), a focused deterrence approach targeting formerly incarcerated people with histories of gun violence. This study found that forum participants perceived police officers' actions as more legitimate after VRS, but the study did not include a comparison group.



# Impact Evaluation Data Collection Strategy

The impact evaluation examined VRS's impact on groups represented at one or more VRS call-ins from August 2010 through December 2013 (Papachristos and Kirk 2015). To conduct the impact analysis, we collected CPD data and constructed a group-level database that contained as much information as possible about each of the 858 groups in Chicago. The Chicago Police Department provided three sources of data covering January 1, 2006, to March 31, 2014:

1. Incident-level records of all arrests in Chicago
2. Homicide and nonfatal shooting records
3. Additional group information collected during gang audits, including demographic, organizational, network, and crime involvement information

The impact evaluation employed propensity score matching, using data in the group-level database to find nontreated groups similar to treated groups. We used propensity score matching to prevent differences in the pretreatment characteristics of each group related to the likelihood of both attending a call-in (VRS treatment) and shooting behaviors from yielding biased estimates of program impact. The propensity score was the probability that a certain group attended a call-in, given all other characteristics of the group. It provided a summary measure of all characteristics that could confound the ability to estimate the effect of call-in attendance on shootings in the subsequent 12 months. Group attributes were drawn from the group database, containing 23 covariates on each of the 858 identified groups. A logit model was used to estimate the propensity of call-in attendance for each group, and the covariates were used as predictors of call-in attendance.

## Analysis Approach

The outcome variable, fatal and nonfatal shootings, measures the number of separate shootings group members were involved in either as a perpetrator or a victim in the 12 months after a call-in. Three outcome variables were constructed: total shooting involvement, victimization (or victim of shooting), and offending (or shooting perpetration). Once propensity scores were created for each group, treated groups were matched with up to three comparison groups with similar propensity scores. Matched observations were similar on average across all covariates that estimated the propensity of call-in attendance. We could match 148 of the 149 treated groups to at least one comparison. The matching process used 211 comparison groups and involved 428 comparison matches, with some comparison groups matched to more than one treated group. Upon matching treated and comparison groups, we

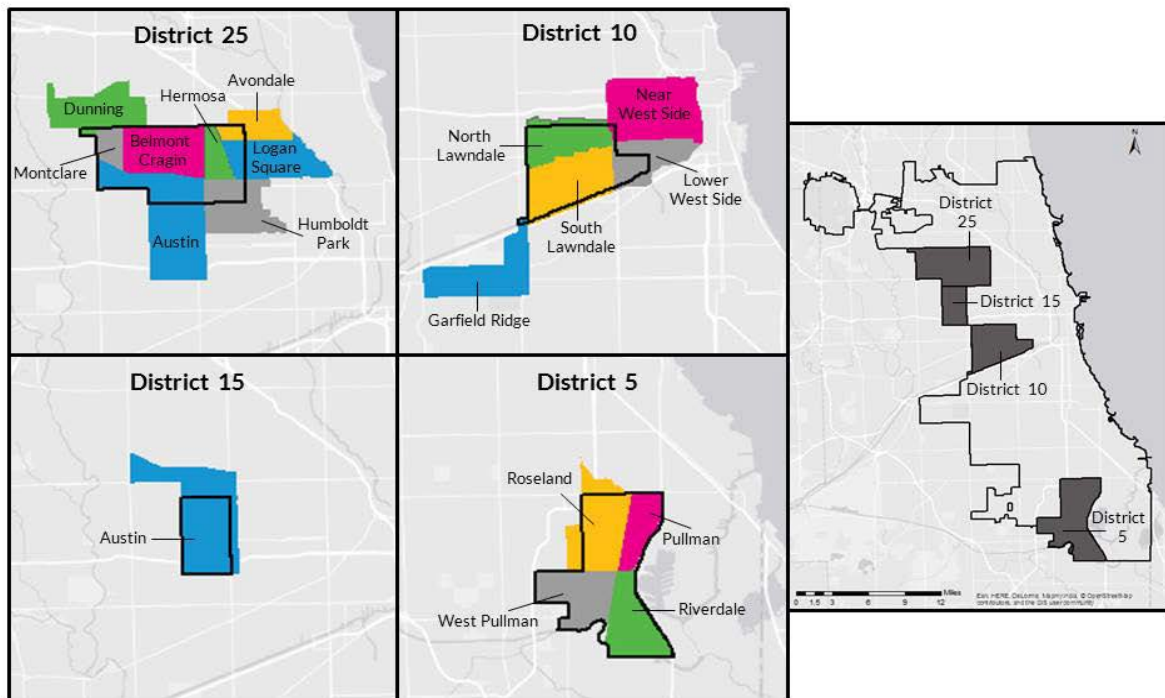
determined whether the imbalance was controlled for with the propensity score matching. Assessment of the percentage reduction in absolute bias and the mean differences across groups for each covariate after adjusting for propensity scores found no significant differences in the characteristics available in the group-level data between the treated and comparison groups in the final matched sample (appendix B).

## Outcome Evaluation Data Collection Strategy

To understand the perspectives of the people central to VRS and how perceptions may have evolved when VRS was implemented, we collected survey data from people in group networks (“group members”), community residents, and police officers in two districts that received VRS implementation (treatment) and two districts that did not receive VRS implementation (comparison). The comparison districts were identified by NNSC, CPD, and the research team as places with comparable levels of violence and group activity to the treatment districts. The comparison districts were also places where neither NNSC nor CPD had immediate plans to implement VRS. The two districts that received VRS implementation during the evaluation period and were included in the outcome evaluation were the 15th and the 25th. The two comparison districts selected for the 15th and 25th districts were the 5th and 10th districts, respectively. These four police districts roughly correspond to the Austin (15th), Belmont Cragin (25th), Roseland (5th), and Lawndale (10th) community area boundaries (figure 3). When discussing these districts, we refer to them by their approximate community area names.

FIGURE 3

Surveyed Police Districts, with Community Area Boundaries Identified



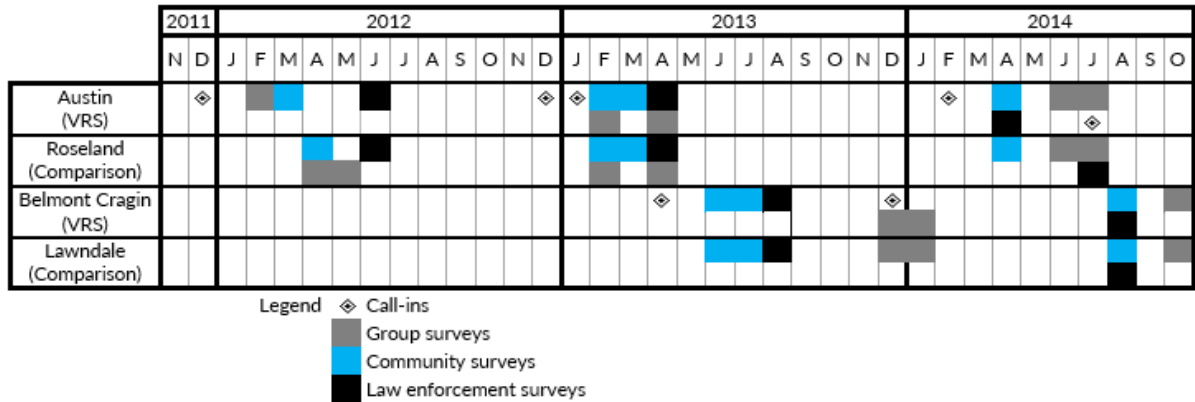
Source: Chicago Data Portal neighborhood boundaries (<https://data.cityofchicago.org/Facilities-Geographic-Boundaries/Boundaries-Community-Areas-current-/cauq-8yn6>) and police districts (<https://data.cityofchicago.org/Public-Safety/Boundaries-Police-Districts/4dt9-88ua>).

Our initial design included a plan to capture baseline perspectives by administering surveys of group members, community residents, and police officers in the VRS and non-VRS districts before any VRS intervention activities occurred. Two follow-up survey waves were planned for after the baseline, with the first follow-up occurring in VRS and non-VRS districts three to six months following the first call-in and the second occurring approximately one year after the first call-in. We expected to detect changes in perceptions, in the immediate term and the long term, in the VRS districts relative to the non-VRS districts. This initial design plan was compromised by the initiation and pace of VRS implementation. Our eventual data collection strategy did not follow the initial plan, which affected the eventual utility of the findings in isolating VRS effects. We discuss this in the Limitations section.

The timing of VRS implementation precluded our ability to field the surveys *before* the first call-in in either treatment district. In addition, the pace of VRS intervention activities progressed in the VRS districts longer than we anticipated. We planned to implement our first follow-up survey after

sustained VRS activities, such as follow-up and repeated call-ins and enforcement actions executed over a few months. Our baseline surveys in Austin were completed after an initial joint call-in that included the adjoining 11th district. We conducted surveys in Austin because it was unclear how long it would be before VRS expanded to another district. (The Violence Reduction Strategy expansion to another district did not occur for more than one year.) The Chicago Police Department and NNSC did not provide the evaluation team sufficient advance notice to field the surveys before the first call-in in Belmont Cragin. Because we could not field the surveys before the first call-in, we modified our data collection strategy such that follow-up surveys were fielded after the second call-in occurred in each district. Because the first Belmont Cragin call-in occurred long after the study began, we could complete only two survey waves. We timed implementation of the survey waves among the three sample groups in all districts to reduce the influence of external events biasing the results (figure 4). The survey waves were executed over two years in Austin (VRS) and Roseland (non-VRS) and over one year in Belmont Cragin (VRS) and Lawndale (non-VRS).

**FIGURE 4**  
**Timing of Survey Implementation by Sample Group, VRS and Non-VRS Districts**



**Source:** Call-in calendar provided by the National Network for Safe Communities and Urban Institute calendar of survey administration process.  
**Note:** VRS = Chicago Violence Reduction Strategy.

### Group Member Surveys

We constructed our group member survey sample in Austin, Belmont Cragin, Lawndale, and Roseland through several steps. First, we used arrest data from CPD to create co-offending networks of CPD-identified group members for each police district.<sup>4</sup> Second, we identified the component<sup>5</sup> in the co-

offending network that contained the most people (i.e., the largest component) in each district.<sup>6</sup> Third, we used statistical techniques to model the likelihood of people within the largest component being selected to attend a call-in. Specifically, based partly on information about the people who had been selected for the call-in, we calculated propensity scores that included a person's position in the network, group membership, and proximity in the network to homicide victims and group members. Then, in each district, we ranked the group members on their propensity scores and randomly sampled 500 people from the top 1,000 on the list. In the treatment districts, our final sample also included the people who attended the recent call-in. After sample construction, we collected the address information CPD had on file for all 1,000 people in our sample.

After selecting our initial sample in Austin and Roseland, we attempted to resurvey the same group members in the second wave. But because of difficulties locating the sample using the address information provided by CPD at the first wave, we determined the need to resample at each wave and to get more recent address information from CPD. We had significant difficulties trying to find Austin and Roseland group members at the second wave and realized the need to work with CPD to get updated address information. Yet, because of staffing changes at CPD at our second wave in Austin and Roseland, we could not get updated address information from CPD. This resulted in a small sample in those districts. We regained access to CPD's address data in time for the third survey wave in Austin and Roseland. Given the small number of Austin and Roseland group member surveys in the second wave, findings from the outcome evaluation use the first and third survey waves only.<sup>7</sup> The total number of group members surveyed in each district at each wave are shown in table 1.

The surveys were administered face to face to the randomly sampled group members by Chicago-based field interviewers. The interviewers were supervised by researchers and used paper-and-pencil instruments. Surveys were implemented over one week, including at least one weekend day. The survey instrument conducted with group members was wide ranging and captured respondents' sociodemographic characteristics and their participation in and knowledge of the VRS intervention and other neighborhood antiviolence strategies, as well as their experiences and perceptions of their neighborhoods, violence and victimization, justice system actors, and other relevant domains (see table 4 on page 15).

TABLE 1

**Group Members Surveyed by Wave and Police District (Year, Month)**

	<b>Wave 1</b>	<b>Wave 2</b>	<b>Wave 3</b>
Austin/D15 (VRS)	140 (2012, February)	18 (2013, February)	97 (2014, June)
Roseland/D5 (non-VRS)	146 (2012, May)	63 (2013, February)	127 (2014, June)
Belmont Cragin/D25 (VRS)	77 (2013, December/January)	85 (2014, October)	
Lawndale/D10 (non-VRS)	92 (2013, December/January)	83 (2014, October)	

**Source:** Urban Institute calendar of data collection activities.

**Notes:** VRS = Chicago Violence Reduction Strategy. "D" followed by a number indicates district. Includes only validated surveys.

**Community Resident Surveys**

In each of the four districts, we constructed our sample of community residents by randomly selecting 450 households from all residential addresses. We drew a separate random sample at each survey wave. We made no attempt to resurvey the same households, though our random selection process could have resulted in a household being selected twice. The surveys were administered face to face to any adult in the sampled household by Chicago-based field interviewers. The interviewers were supervised by researchers and used paper-and-pencil instruments. Surveys were implemented over one week, including at least one weekend day. The number of community residents surveyed in each district at each wave is shown in table 2.

TABLE 2

**Community Residents Surveyed by Wave and Police District (Year, Month)**

	<b>Wave 1</b>	<b>Wave 2</b>	<b>Wave 3</b>
Austin/D15 (VRS)	161 (2012, March)	121 (2013, February/March)	125 (2014, April)
Roseland/D5 (non-VRS)	166 (2012, April)	115 (2013, February/March)	108 (2014, April)
Belmont Cragin/D25 (VRS)	114 (2013, June/July)	121 (2014, August)	
Lawndale/D10 (non-VRS)	124 (2013, June/July)	120 (2014, August)	

**Source:** Urban Institute calendar of data collection activities.

**Notes:** VRS = Chicago Violence Reduction Strategy. "D" followed by a number indicates district. Includes only validated surveys.

The community resident survey instrument was shorter than the group member instrument, but captured similar information. The resident instrument captured the respondents' sociodemographic characteristics and their participation and knowledge of the VRS intervention and other neighborhood antiviolence strategies, as well as their experiences and perceptions of their neighborhoods, violence and victimization, justice system actors, and other relevant domains (see table 4 on page 15).

### Police Officer Surveys

We administered surveys to CPD officers at all roll call meetings over one day in each district. This administration method resulted in a sample of patrol officers working that day and members of the tactical units as they began their shifts. Our survey sample does not include officers who were on vacation, not working, on furlough, or otherwise absent from the roll call on the survey administration day. Surveys were short and self-administered using paper-and-pencil instruments. The number of officers surveyed in each district in each wave is shown in table 3. The officer instrument captured respondents' sociodemographic characteristics and their participation in and knowledge of VRS and other neighborhood antiviolence strategies, as well as perceptions of neighborhood conditions, gangs, community cooperation in the districts they police, and other relevant domains (see table 4).

**TABLE 3**

**Police Officers Surveyed by Wave and Police District (Year/Month)**

	<b>Wave 1</b>	<b>Wave 2</b>	<b>Wave 3</b>
Austin/D15 (VRS)	102 (2012, June)	103 (2013, April)	99 (2014, April)
Roseland/D5 (non-VRS)	66 (2012, June)	89 (2013, April)	68 (2014, April)
Belmont Cragin/D25 (VRS)	100 (2013, August)	126 (2014, August)	
Lawndale/D10 (non-VRS)	97 (2013, August)	99 (2014, August)	

**Source:** Urban Institute calendar of data collection activities.

**Notes:** VRS = Chicago Violence Reduction Strategy. "D" followed by a number indicates district. Includes only validated surveys.

A complete sociodemographic profile of the three survey respondent groups by valid survey wave and by VRS and non-VRS districts is provided in appendix A.

# Analysis Approach

The surveys captured self-reported perceptions and behaviors of group members, residents, and police officers, focused on neighborhood conditions, interactions and relationships between police and residents, residents' perspectives of the legitimacy of justice system actors, and officers' perceptions of gang members and residents. Our initial hypotheses suggested VRS would have a broad and measurable impact on the behavior of group members, residents, and police officers, as well as the relationships between them. The Violence Reduction Strategy was expected to change the perceptions of those exposed to the intervention through moral suasion, criminal justice sanctions, and social service provision. For this latter group, we expected the antiviolence message would be spread throughout the targeted districts, as people who attended the call-ins spread the word to those who had not been exposed to the intervention. As we came to understand more about VRS's implementation, our analysis approach for each sampled group was modified to explore whether perceptions among those in the VRS districts (Austin and Belmont Cragin) differed from those in the non-VRS districts (Roseland and Lawndale) on a few key outcomes. We focused on outcomes that could be directly or indirectly related to the logic of VRS's implementation and were statistically suitable for multivariate analyses. Table 4 shows all survey domains by sampled group and indicates which were analyzed as a key outcome. This report focuses on group member outcomes, though a few key outcomes were analyzed from the resident and officer samples.

For several measures, we first used interrelated questions to create scaled measures that generally demonstrated acceptable reliability across the waves (an alpha score of 0.7 or higher). We then conducted bivariate analyses (two-tailed *t*-tests) on these outcomes to examine whether there were statistically significant differences between respondents in the VRS districts and respondents in the non-VRS districts by survey wave. Following the bivariate analyses, we conducted multivariate analyses by survey wave, using logistic or linear regression, which include controls for sociodemographic characteristics and other relevant measures captured through the surveys. As mentioned, achieving a reasonably large sample of group members in Austin and Roseland was difficult in the second survey wave. Therefore, our analyses focus on Austin and Roseland group members, residents, and officers surveyed at the first and third waves. Wave 3 surveys were implemented approximately two years after wave 1. Our analyses of Belmont Cragin and Lawndale group members, residents, and officers include wave 1 and wave 2, where wave 2 was implemented approximately one year after wave 1.



TABLE 4

## Survey Domains by Sample Group

	Key outcome
<b>Group member survey domain</b>	
Participation in a call-in and knowledge of VRS, the call-in, and VRS enforcement reactions to shootings	
Participation in and knowledge of other neighborhood antiviolence strategies	
Perceptions of the legitimacy of justice system actors and support for system actors	
Perceptions of the likelihood of punishment for shootings	✓
Perceptions of the law and legal cynicism	✓
Recent engagement in criminal activities	✓
Perceptions of the safety of neighborhood landmarks or areas	✓
Recent victimization experiences in the neighborhood	✓
Knowledge of people who have been recently victimized in the neighborhood	✓
Level of concern about violence against them in the neighborhood	✓
Level of concern about violence against their family and friends in the neighborhood	✓
Frequency of engaging in certain precautionary behaviors out of concern for safety	✓
Perceptions of neighborhood conditions and resources	
Frequency of neighborhood crime	
Perceptions of unreasonable police stops	
Involvement in groups, group activity, and characteristics of neighborhood street groups	
Frequency of gun carrying	
<b>Community resident survey domain</b>	
Participation in a call-in and knowledge of VRS, the call-in, and enforcement reactions to shootings as a result of VRS	
Participation in and knowledge of other neighborhood antiviolence strategies	
Perceptions of the legitimacy of justice system actors and support for system actors	
Willingness to participate in different neighborhood crime control activities	✓
Perceptions of the safety of neighborhood landmarks or areas	✓
Recent victimization experiences in the neighborhood	✓
Knowledge of people who have been recently victimized in the neighborhood	✓
Frequency of certain precautionary behaviors out of concern for safety	✓
Perceptions of neighborhood conditions and resources	
Frequency of neighborhood crime	
Participation in and knowledge of other neighborhood antiviolence strategies	
Perceptions of the law and legal cynicism	
Perceptions of unreasonable police stops	

	Key outcome
<b>Police officer survey domain</b>	
Participation in a call-in and knowledge of VRS, the call-in, and enforcement reactions to shootings as a result of VRS	
Participation in and knowledge of other neighborhood antiviolence strategies	
Perceptions of gangs and gang morality	
Perceptions of community cooperation with police	✓
Perceptions of the efficacy of antiviolence strategies	
Perceptions of community trust of police	
Perceptions of community opposition to gangs	
Perceptions of policing styles and role or mission in the community	

**Source:** Urban Institute group member, community resident, and law enforcement survey instruments.

**Notes:** VRS = Chicago Violence Reduction Strategy. A “key outcome” is one that could be logically connected to VRS’s implementation and was suitable for multivariate analyses. “Recent” means occurring in the prior 12 months.

## Semistructured Interviews of Group Members

Finally, we interviewed group members selected to attend the call-ins to gain insight on this critical part of the intervention. We recruited attendees from three call-ins to participate in one-on-one semistructured interviews to learn how they understood the VRS message and intervention described in the call-in. Researchers attended three call-ins: Austin call-ins in December 2012 and January 2013 and a Belmont Cragin call-in in December 2013. Twenty-five people participated in interviews following these call-ins. The interviews were intended to capture people’s perceptions of and experiences with the call-in, including their perspective and understanding of the VRS message and whether they intended to share that message with their networks. Interview participants were also asked to provide their perspectives on the dynamics of gang/group activity, crime, and violence in their neighborhood. Interviews were held within a few days of the call-in at a library and a community center. To draw themes, each interview was transcribed. Then, the research team identified common themes related to whether and how participants understood the VRS message and whether and how it would be communicated to their friends and family.

# VRS Implementation

The Chicago Violence Reduction Strategy was a complex, multifaceted effort. Although the funded evaluation did not include a process evaluation component, the research team had access to information regarding VRS's logic and how VRS was implemented in the neighborhoods. To provide contextual information for the impact and outcome analyses discussed in subsequent sections, we draw upon information the research team gathered from five sources:

1. Violence Reduction Strategy progress reports
2. Periodic conversations with core VRS partners at NNSC throughout implementation
3. Direct observation of the call-ins in which interview subject recruitment happened
4. Semistructured interviews with call-in participants
5. Surveys collected for the outcome evaluation

In this section, we draw upon this information to provide detail regarding the environment in which VRS operated, how attendees responded to the call-ins, and how much knowledge of VRS was evident among group members, community residents, and law enforcement.

## Overview of VRS Implementation

Implementation of Chicago VRS was overseen by a citywide steering committee composed of the superintendent of police and senior representatives of CPD, the US Attorney's Office, the Cook County District Attorney, Illinois Department of Correction–Parole Division, Cook County Probation, and the Mayor's Office. Dedicated VRS staff, who worked for NNSC, consisted of a Chicago-based project director and project manager to support, coordinate, and staff the steering committee and implement the project. Implementation of VRS commenced with a problem analysis that included CPD officers and VRS staff conducting gang audits to identify the local gangs and groups active in a police district, with a focus on those involved in violent conflicts. By summer 2012, gang audits had been completed for every police district in the city. Upon selecting a district for VRS implementation, the partners built on the gang audit to add CPD intelligence on local gangs and groups, and conducted social network analyses to identify the most connected group members to receive the VRS antiviolence message (the call-in) and take it back to their networks. These identified people were invited to attend a call-in meeting, and those under parole supervision were required to attend.

Preparation for the call-in involved building a coalition to forge partnerships between CPD, social service providers, and influential community actors, such as staff from neighborhood associations, clergy, formerly incarcerated people, and family members of violence victims. The community actors had to be respected by the group members, because their role in the call-in was to articulate the community stance against violence to motivate and reinforce desistance from violence by the group members (community moral suasion). Coalition building often involved work to build trust and overcome mutual suspicion between community representatives and law enforcement.

In the call-in meetings, coalition partners, including top leadership across the justice system, jointly delivered the VRS message: “Stop the violence. Put down the guns. Stop the shooting and killing.” This straightforward message was elaborated upon through three core VRS elements: criminal justice sanctions, community moral suasion, and social service provision. The call-in meetings were carefully executed, and speakers were designated to deliver their portion of the antiviolence message. Senior leadership from CPD, the State’s Attorney’s Office, and the US Attorney’s Office discussed the enhanced sanctions facing groups that continued to engage in shootings, presenting past VRS enforcement actions as concrete examples. Community speakers represented three distinct perspectives: the Voice of Community Pain (someone who has lost someone they loved to violence), the Voice of Hope and Aspiration (someone who reminds attendees that they are valued and needed as contributing members to the community), and the Voice of Redemption (someone with an offending history who discusses how they changed their own life). In many cases, the person serving as the Voice of Redemption also represented the partner social service agency.

As a group-based intervention, VRS was also intended to affect group members who did not attend the call-in meeting. Call-in attendees were explicitly instructed to spread the word to their networks, so the VRS message was shared throughout the groups represented at the call-in. After the call-in, the partnership was responsible for carefully monitoring the district for violent incidents and if any occurred, determining whether any groups from the call-in were involved. Groups determined to be involved in violent incidents were to be met with a coordinated response delivering swift sanctions to all members, based on any vulnerabilities to the justice system (e.g., outstanding warrants, parole or probation supervision). After the initial call-in, further call-ins were to follow as necessary to extend the reach and impact of the VRS in the target district.

The first VRS district was the 11th, which held its first call-in in August 2010. The steering committee and VRS staff decided when and where to expand VRS, based on the district’s level of violence and local leadership support for the approach. The expansion of VRS call-ins by police district from 2010 through 2014 is shown in figure 5. In 2013, the VRS intervention began to include custom



group member attendees, and the second, in December 2013, had 39. Some group members attended more than one call-in. The VRS dosage as defined by direct exposure to the antiviolence message delivered at the call-ins was different in the two survey treatment districts. As many as 169 Austin group members were exposed to the VRS message through a call-in during the study period. In Belmont Cragin, the number was 64 group members.

Three points related to the method and progress of VRS's implementation are relevant for the evaluation:

1. Core aspects of VRS's implementation, such as inclusion of the custom notifications, changed over the evaluation period.
2. The intervention focused on the people who attended a call-in or who received a custom notification.
3. The Violence Reduction Strategy was implemented in a district over several years, as demonstrated through the scheduling of call-ins (figure 4).

The outcome evaluation design was not well positioned to isolate potential VRS impacts on perceptions and behaviors, even among group members. The surveys were implemented among a large network of group members, community residents, and police officers. The respondents in our sample may be poor proxies for understanding VRS effects because the intervention was narrowly focused on the groups whose members attended a call-in or received a custom notification. Nonetheless, the survey data provide rich detail on perceptions and behaviors and useful insights on the context under which VRS operated.

## Insights on Implementation Context

Using data from the surveys and semistructured group member interviews, we provide additional insight on the context in which VRS was implemented. We first draw on some of the survey domains shown in table 4. In particular, we describe how group members in the two treatment districts (Austin and Belmont Cragin) reported violence, victimization, and perceptions of procedural fairness by justice system actors. We then describe the perceptions of gang members reported by officers surveyed in the two treatment districts. We compare knowledge of VRS and its components among group members, community residents, and police officers in the VRS (Austin and Belmont Cragin) and non-VRS districts (Roseland and Lawndale). Finally, we describe findings from semistructured interviews with call-in attendees. These findings provide context for the outcome and impact evaluation analyses.

## Group Members' Victimization Experiences in VRS Districts

The VRS antiviolence message, delivered through call-ins and custom notifications, is intended to resonate with group members at high risk of violence (committing it and being victims of it) and those close to people at high risk of violence. To illustrate the extent of violence within the group members in our sample, table 5 shows reported levels of different types of victimization experienced by group members surveyed in the two VRS districts at wave 1: Austin (2012) and Belmont Cragin (2013). Table 5 also includes group members' levels of victimization. Recall that the first wave of surveys was implemented in each treatment district after the first call-ins.

For context, at wave 1 (2012), we surveyed group members in Austin who were overwhelmingly male (95 percent) and African American/Black (99 percent). Most were 21 to 30 years old (68 percent), had never married (70 percent), and had earned a high school diploma/GED as their highest level of educational attainment (55 percent). Thirty-nine percent were employed at the time of the survey. More than half had children (53 percent), most of whom were minors (94 percent). On a scale of 1 (poor) to 5 (excellent), the members rated the quality of life in their neighborhood at 2.6 on average. At wave 1 (2013), we surveyed members in Belmont Cragin who were all male (100 percent) and mostly Hispanic/Latino (70 percent). Sixty-six percent were 21 to 30 years old, had never married (81 percent), and had earned a high school diploma/GED as their highest level of educational attainment (64 percent). Nearly half of those surveyed reported an annual income less than \$10,000 (45 percent). Few were employed (36 percent) at the time of the survey. Forty-seven percent had children, and 93 percent of those children were minors. On a scale of 1 (poor) to 5 (excellent), the Belmont Cragin members rated the quality of life in their neighborhood at 3.4 on average.

A large percentage of group members in both VRS districts reported knowing people who had been victims of violence in their neighborhoods in the prior 12 months (table 5). Most notably, more than half of the group member respondents in both VRS districts reported knowing someone who had been a recent victim of a shooting or shooting attempt. Proportions of those reporting to know victims of a violent fight and an assault are also high in both VRS districts. A higher percentage of Austin group members reported to know victims of various crimes than Belmont Cragin group members. Further, a nontrivial percentage of group members in both VRS districts, particularly Austin, reported to have been victimized by crime recently.

TABLE 5

**Share of Group Members Who Reported Knowing Victims of Recent Crimes in Their Neighborhood**

	Austin/D15 (VRS)	Belmont Cragin/D25 (VRS)
Home burglary	50.0	30.7
Car theft	57.4	35.5
Mugging or robbery	57.4	36.5
Violent fight	75.0	53.9
Assault	65.7	45.9
Rape or sexual assault	22.1	20.3
Stabbing or stabbing attempt	42.3	25.3
Shooting or shooting attempt	59.6	51.3
Been a victim of any of the above yourself	42.6	20.0

**Source:** Urban Institute analysis of group member surveys in Austin and Belmont Cragin at wave 1.

**Notes:** VRS = Chicago Violence Reduction Strategy. “D” followed by a number indicates district. “Recent” means occurring in the prior 12 months. Valid *N* = 137 (Austin), 76 (Belmont Cragin).

**Group Members’ Perceptions of Justice System Actors in VRS Districts**

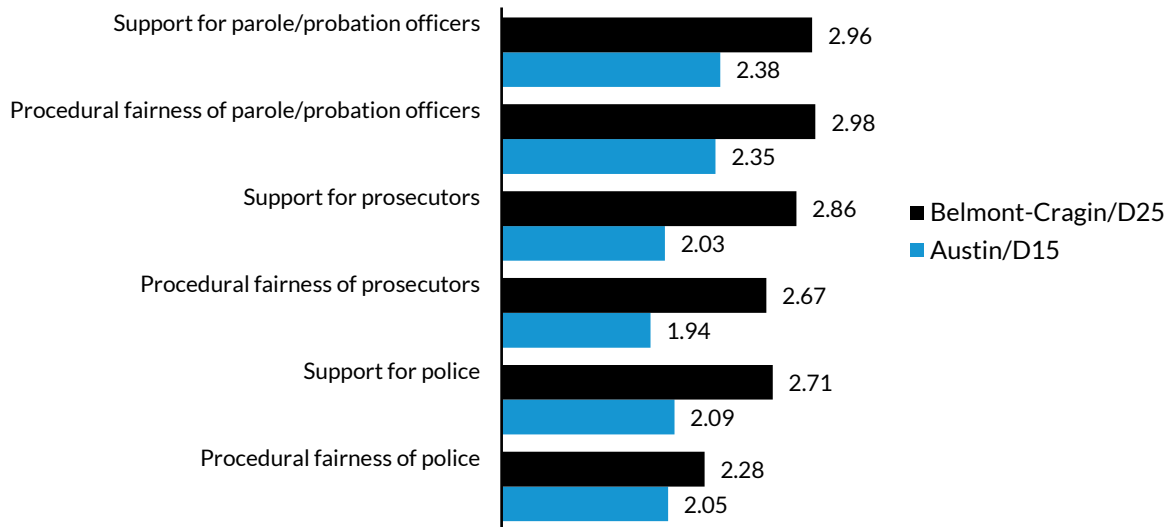
The Violence Reduction Strategy is based on a coalition of justice system actors, particularly the police, and community representatives trying to use moral suasion and their credibility to get group members to stop shooting. Distrust of justice system actors among group members challenges the VRS antiviolence message and has long characterized high-crime, disadvantaged neighborhoods. To clarify the justice system actors’ credibility among group members, figure 6 shows surveyed Austin and Belmont Cragin group members’ perceptions of the legitimacy of the police, prosecutors, and parole and probation officers and support for those same justice system actors.

A four-item scale of procedural fairness principles that ranges from 1 (strongly disagree) to 5 (strongly agree) is shown in figure 6. On this fairness scale, group members in both VRS districts disagree that the police, prosecutors, and probation and parole officers adhere to principals of procedural fairness. A four-item scale of support for justice system actors that ranges from 1 (strongly disagree) to 5 (strongly agree) is also shown in figure 6. On the support scale, group members in both VRS districts disagree with statements showing support for police, prosecutors, and probation and parole officers. Support for justice system actors and perceptions of their procedural fairness are low among group members, particularly among Austin group members.



FIGURE 6

### Procedural Fairness of and Support for Justice System Actors among Group Members in VRS Districts



**Source:** Urban Institute analysis of surveys of group member respondents in Austin and Belmont Cragin, at wave 1.

**Notes:** VRS = Chicago Violence Reduction Strategy. “D” followed by a number indicates district. Valid N = 139 (Austin), 76 (Belmont Cragin). “Procedural fairness” is a reliable scale ( $\alpha$  at or above 0.7) ranging from 1 (strongly disagree) to 5 (strongly agree) on the following four statements: “Most [police/prosecutors/probation officers] in my neighborhood are willing to listen to what I have to say,” “Most [police/prosecutors/probation officers] in my neighborhood treat people with respect,” “Most [police/prosecutors/probation officers] in my neighborhood treat people fairly,” and “The [police/prosecutors/probation officers] in my neighborhood care about the well-being of everyone they deal with.” “Support” is a reliable scale ( $\alpha$  at or above 0.7) ranging from 1 (strongly disagree) to 5 (strongly agree) on the following four statements: “Most [police/prosecutors/probation officers] in my neighborhood do their job well,” “I can usually understand why the [police/prosecutors/probation officers] who work in my neighborhood are acting as they are in a particular situation,” “The [police/prosecutors/probation officers] in my neighborhood are effective at reducing crime,” and “Most people in my neighborhood view the [police/prosecutors/probation officers] favorably.”

### Police Officers’ Perceptions of Gang/Group Members in VRS Districts

The Violence Reduction Strategy uses moral suasion and justice sanctions to encourage group members to stop shooting. Using the wave 1 surveys of officers in the two VRS districts, table 6 shows that police officers have poor perceptions of gang members and their ability to change their behavior. In Austin at wave 1 (2012), the majority of police officers surveyed were men (80 percent), were patrol or beat officers (79 percent), were white (57 percent), and had some college or a two-year degree as their highest level of educational attainment (62 percent). Approximately two-fifths surveyed were 31 to 40 years old at the time of the survey. Only 2 percent of those surveyed lived in the Austin police district. On average, the officers had been working for CPD for 10 years and in the 15th district for 7 years.

Most of those surveyed were satisfied with their work as officers in general (88 percent) and in the district in particular (82 percent). In Belmont Cragin at wave 1 (2013), the majority of officers surveyed were men (82 percent), were patrol officers (85 percent), were white (66 percent), and had some college or a two-year college degrees their highest level of educational attainment (57 percent). A little over two-fifths were 41 to 50 years old at the time of the survey. Eleven percent of those surveyed lived in the 25th district. On average, the officers had been working for CPD for 12.5 years and had been working in the 25th district for 8 years. Most were satisfied with their work as officers in general (92 percent) and in the district in particular (94 percent).

Police officers surveyed in both VRS districts did not have much confidence in the receptivity of gang members to moral suasion (table 6). Only a small share agreed that gang members care about the impact of violence on their communities or that they had similar values to gang nonmembers. Further, approximately 30 percent of surveyed officers in each district believed there is no way to change the behavior of gang members, and approximately 10 percent believed that gang members care about the impact of violence in their communities.

**TABLE 6**

**Share of Police Officers Agreeing with Statements Regarding Gang Members' Activities and Morality in Chicago Violence Reduction Strategy Districts**

	Austin (D15)	Belmont Cragin (D25)
Gangs in the community that I police frequently engage in violent activity.	96.0	78.8
Gang members care about the impact of violence on the communities they live in.	8.9	10.1
The kinds of people who join gangs are just bad people.	27.3	25.3
Gang members don't care about going to prison.	56.1	52.0
There's no way to change the behavior of gang members.	35.4	31.3
Gang members in the community I police have similar values to gang nonmembers.	12.1	8.2
Gang members know right from wrong.	62.0	64.6

**Source:** Urban Institute analysis of surveys of police officers in Austin and Belmont Cragin at wave 1.

**Notes:** "D" followed by a number indicates district. Valid N = 101 (Austin), 99 (Belmont Cragin). Questions were asked on a five-point scale from 1 (strongly disagree) to 5 (strongly agree).

### Knowledge of VRS and Its Components in VRS and Non-VRS Districts

Because the surveys included people who did not have direct exposure to VRS, they help us understand whether VRS's antiviolence message was known outside the people who attended the call-ins or received custom notifications. The surveys of group members, community residents, and police officers

asked about whether they heard of VRS and whether they had heard of call-in meetings. The group members and police officers were also asked about whether they had heard of VRS's enhanced law enforcement reactions to shootings. Table 7 focuses on wave 3 surveys in Austin (VRS) and Roseland (non-VRS) and wave 2 surveys in Belmont Cragin (VRS) and Lawndale (non-VRS). This table focuses on the last survey wave in each district, following a period of sustained VRS implementation.

Group members' and community residents' awareness of VRS was not high in either VRS district. Significantly fewer Austin (VRS) residents reported knowing about VRS than Roseland (non-VRS) residents did. In both VRS districts, group members and residents reported more knowledge of the call-ins than of "Chicago VRS." Austin group members reported a marginally significant higher knowledge of the call-ins than Roseland group members did. By contrast, at least half of surveyed officers reported knowledge of VRS and the call-ins in both VRS and non-VRS districts. Austin officers (VRS district) more often reported knowledge of VRS and the call-ins than Roseland officers (non-VRS district). Surprisingly, a significantly higher percentage of officers in Lawndale (non-VRS district) had heard of the call-ins and enforcement reactions to shootings than officers in Belmont Cragin (VRS district). This is an interesting finding because Lawndale is situated immediately south of Austin.

**TABLE 7**

**Group Members, Community Residents, and Police Officers Reporting to Know about Chicago VRS, VRS Call-Ins, and VRS Law Enforcement Reactions (percent)**

	Austin (VRS)	Roseland (non-VRS)	Belmont Cragin (VRS)	Lawndale (non-VRS)
<b>Knowledge of Chicago VRS</b>				
Group members	18.1	22.4	21.2	31.3
Community residents	17.9**	29.2	27.7	23.9
Police officers	87.8***	63.2	66.9	75.5
<b>Knowledge of call-ins</b>				
Group members	36.8*	25.0	22.0	27.5
Community residents	31.7	32.7	35.8	39.1
Police officers	80.2***	51.5	57.3**	71.4
<b>Knowledge of enforcement reactions</b>				
Group members	13.0**	4.8	7.1	8.9
Police officers	47.9	37.3	32.8**	46.3

**Source:** Urban Institute analysis of surveys of group members, community residents, and police officers in Austin and Roseland at wave 3 and in Belmont Cragin and Lawndale at wave 2.

**Notes:** VRS = Chicago Violence Reduction Strategy. Valid N (group): 96 (Austin), 126 (Roseland), 85 (Belmont Cragin), 80 (Lawndale). Valid N (community): 123 (Austin), 107 (Roseland), 119 (Belmont Cragin), 117 (Lawndale). Valid N (law enforcement): 98 (Austin), 68 (Roseland), 125 (Belmont Cragin), 98 (Lawndale). Tests of statistically significant differences were assessed using two-tailed t-tests on paired VRS districts and non-VRS districts—that is, Austin is compared with Roseland, and Belmont Cragin is compared with Lawndale. \*  $p < 0.10$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$ .

## Group Members' Understanding and Receptivity to the VRS Message

Finally, we draw on the interviews with call-in participants to understand how they perceived the VRS antiviolenence message and their intentions to share the message among their networks. Of the 25 interview participants across the three call-ins, all were male and nearly all had been instructed to attend by their parole officers. Only one person reported coming to the call-in voluntarily. Two participants did not indicate how they came to attend the call-in. Four of the January 2013 interview participants had been to a call-in before the one to which they had been invited to participate.

- **The message transmitted in the call-ins was clear.** Those interviewed concisely summarized the messages communicated by the call-in through phrases such as “don’t shoot,” “put the guns down,” and “stop the violence.” The threat of consequences for groups involved in further violence also stuck with those interviewed. As one put it, “*It gave me a head’s up on me knowing that I can’t get up with the wrong people or the wrong place. That sticks.*” Participants who knew of prior VRS enforcement reactions to shootings, which were referenced during the call-in meeting, found the message more credible. One participant noted, “*I personally knew the crew they took down, so I believe it.*” Some respondents, like the one quoted below, processed the call-in message as a request by the police for assistance in preventing violence in the community:

*I almost got the wrong view of the message because I was puzzled by them saying that because I belonged to the Four Corner Hustlers at one point in my life—I’ve been away from them for 15 years—but by it being in my background, they are going to come down on me if one fool shoots somebody. What questions can I answer? I don’t know the guy. What help can I be? When I took myself out the organization, it wasn’t an easy process. It took pain and suffering. I’m trying to stay out of it. I’m being brought back into it by the police. But after I let it all soak in, I kind of understood it a little better because maybe they think it’s help that I can give. They want some help from the community.*

- **Community voices resonated.** Those interviewed mentioned that community representatives’ messages created a different reaction than justice system actors’ did. Many of those interviewed used the word “resonated.” Some of those interviewed suggested that the community voices made them more receptive to the call-in message, as opposed to feeling angry and alienated by the threat of group sanctions delivered by the justice system staff. One person described the impact of the message from a formerly incarcerated community resident who managed a social service organization that served as the community moral suasion and

social services provision. This person initially left the call-in, but came back to sign up for services: *"It meant a lot to me, that's why I came back. The dude, what he said was true."*

- **Participants said they had or would spread the VRS message.** All but four of those interviewed said they had described the call-in and its messages to other people, including family, friends, and others involved in street activities. This is notable because most interviews occurred within three days of the call-in. Even interviewees who were skeptical about whether VRS could work said they told others about it. The four people who said they had not told anyone indicated that they didn't know or associate with anyone potentially involved in violence.

When asked what they told people about the call-in message, the people we interviewed focused on the consequences of further violence and the need to put down guns. One person described: *"I got this homie who has a pistol. I said they coming down on s--t. I said if you get caught, they coming down on me. The police said if the person in the gang do something, they are coming down on the whole squad. ...I said get rid of that gun. If you got the gun, which I know he got it, I said do something."* Participants described varied responses from people they told, ranging from taking it seriously (*"I hang with some smart dudes, they were cool with the message"*) to indifference (*"They think I'm lying, that it's a game"*).

- **Self-reported participation or association with groups or gangs varied among those interviewed.** Even though all interview participants were identified as being group members by CPD and VRS staff through group audits, many maintained they were no longer affiliated with active groups, gangs, or crews. Four denied having ever been a member of such a group. Although some interviewees reported no current affiliation, they nonetheless said they would carry the VRS message into their communities, as summarized by one individual: *"I don't hang around, but I know what's going on in the neighborhood."*
- **Employment assistance was the most welcome form of social service.** Many of those interviewed said that getting employment was a primary concern for them, and they saw the offer of services in this area as one of the most (potentially) valuable aspects of the call-in.<sup>8</sup> Although the VRS social service providers offered different service types, employment help was the only service interviewees mentioned. As one respondent put it when asked if the call-in was a valuable use of his time: *"My main thing was trying to find employment resources. That was really valuable."*
- **Perceptions of the police varied.** Varied and complex views of the police came up in the interviews. Many expressed negative views of the police, some because of the perception that

many officers are corrupt. Others said that officers did not truly care about what happened in their communities or that the police harassed people living there. But an equal number of those interviewed said that there were some good officers and some bad ones or that the police were “just doing their jobs.” A few of those interviewed felt that police acted differently in the call-ins than they did in the street and were more respectful. For some, this difference was a refreshing change, but for others, the perceived difference was upsetting. One participant said: *“In the meeting, they made it seem like they really cared, want us to stop. In the streets, they’ll pull up and say, ‘Go ahead and kill each other, that’s another one of you off the street.’ What I get from them in the street is real. That’s my life. We ain’t never going to see the superintendent again, unless they have another call-in.”*

- **Those who thought VRS would work emphasized the impact of the enforcement actions.**

About one-third of those interviewed expressed confidence that VRS would reduce shootings because the proposed enforcement actions against groups would affect the group or group members’ ability to make money through illegal activity. The typical sentiments were expressed this way by a respondent: *“If the organization sees that it’s now worth it to stop, they will. If they know that their stuff (money, cars) will get taken, then they will see that it’s not worth it to continue shooting. If it’s about selling, not about violence...then guys who hear about the group accountability will stop doing violence. Most of them are just trying to just get money.”*

## Key Implementation Take-Aways

To provide context for the impact and outcome evaluation, we underscore the following key take-aways:

1. **The Violence Reduction Strategy was active in the “right” districts among the “right” people.** Group members in the treatment districts reported high levels of recent victimization among people they know. More than half knew someone who had been the recent victim of a shooting or a shooting attempt. The survey findings demonstrate that group members, as identified by CPD and their networks, can benefit from the reductions in neighborhood violence VRS intends to bring about.
2. **The VRS strategy, specifically, delivery of the antiviolence message, could be challenged by the high level of mutual mistrust between group members and police officers.** The survey findings demonstrate that group members’ perceptions of justice system actors are negative

and that police officers' perceptions of group members' morality and ability to change is low. Mutual mistrust is a threat to VRS because its underlying logic is that stronger police-community relationships will reduce shootings. The mutual mistrust also underscores the intervention's importance in how well VRS can repair and strengthen justice system-community relationships.

3. **Knowledge of VRS and its components appears contained to those with direct exposure.**

Most surveyed group members and community residents had not heard of VRS, the call-ins, or enforcement reactions, even after VRS operated in the district for at least one year. Further, group members and community residents in VRS districts did not report significantly greater knowledge of VRS or the call-ins than did residents in the non-VRS districts. This is another potential threat to VRS, since the intervention assumes the antiviolence message will spread through the districts. Alternatively, group members and community residents might not associate Chicago VRS with the antiviolence message delivered at the call-ins or recent law enforcement actions, or know those meetings are called call-ins.

4. **Almost all interviewed call-in participants reported delivering the antiviolence message to family and friends.** Regardless of their skepticism about whether the intervention would work, whether they believed those they spoke to would be receptive to the message, or whether they self-reported current association with a group or a gang, the small sample of interviewed call-in attendees said they would spread the word. The strategy of joint delivery of the message by justice system actors and respected community voices enhanced receptivity to the message.

# Impact Evaluation Findings: Did VRS Reduce Group Member Violence?

With the implementation context in mind, we focused on whether VRS reduced violence among group members who attended a call-in from August 2010 to December 2013.<sup>9</sup> As mentioned, VRS was designed to reduce the group-involved shootings that contribute to substantial violence in Chicago, especially in high-violence districts. The primary locus of the VRS intervention was the group. The size and level of group-involved violence in Chicago is unique relative to other cities and presents distinct challenges for intervention and prevention efforts. Reaching all groups in the city with any single program or initiative is impossible. Yet the number of groups in Chicago offers an opportunity to create group-level experimental conditions suitable for an evaluation. The Violence Reduction Strategy was delivered to a small number of Chicago groups responsible for group conflicts and gun violence within the VRS districts during the intervention period. In total, 858 groups were identified in Chicago, and 149 of them (17 percent) had a member attend a call-in during the three and a half years covered by the group-level impact analysis. The study leveraged this fact to create a quasi-experimental design that compared the 149 groups that attended a call-in from August 2010 through December 2013 with a statistically comparable set of 211 comparison groups that did not attend a call-in.

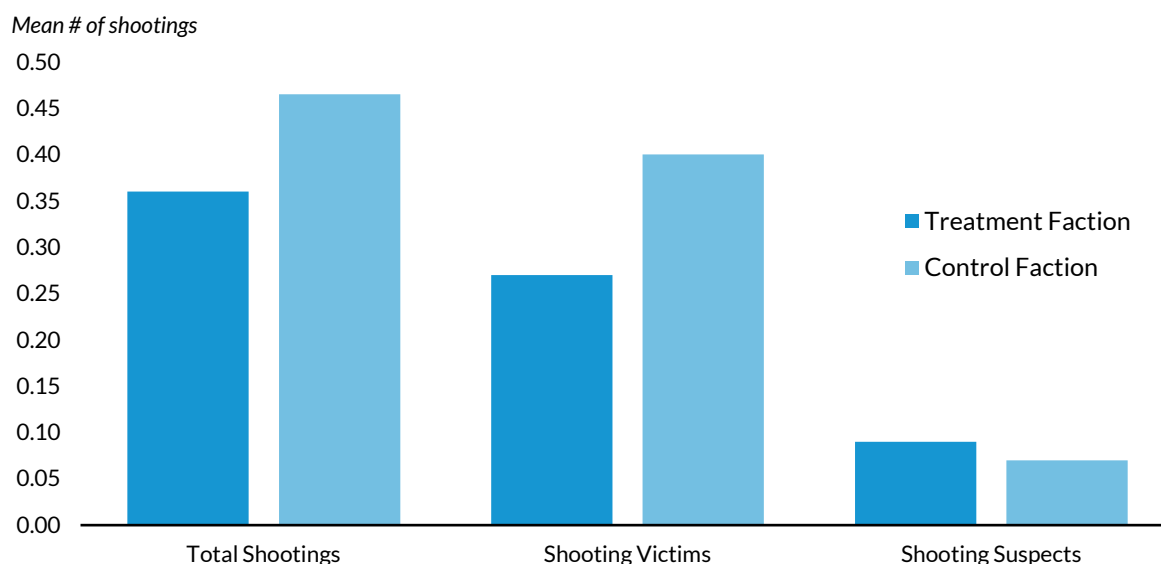
Because of the large number of groups in Chicago, the city's size, and its absolute and relative levels of group-involved violence, groups' behavior can change while city-level violence changes very little. With more than 800 groups in the city, conflicts among some combination of groups might fade as conflicts among other groups develop. Trends in fatal and nonfatal shootings in Chicago were shown in figures 1 and 2, disaggregated by shootings that did and did not involve a group member as victim or perpetrator. The level and trend of fatal shootings in Chicago were fairly steady from 2006 through 2015, as well as during the 2010 to 2013 VRS implementation period. But this masks the different trends for group member-involved and group nonmember-involved fatal shootings. Fatal shootings that did not involve group members declined significantly from 2006 through 2015, while group member-involved fatal shootings increased before leveling off after a spike in 2012. The divergence in these trends was similar but less dramatic for nonfatal shootings in which the group member-involved proportion increases and the group nonmember-involved proportion decreases, with each remaining around half the total. An effective evaluation of a program like VRS, which treats only a small portion of gangs, is not one focused on whether city-level violence declines but is instead one focused on whether the targeted groups' behavior changes.



Groups represented at the August 2010–December 2013 call-ins were considered “treated” groups. Nontreated groups were used to construct a comparison group to test VRS’s efficacy. All groups, treated and matched comparisons, were involved in 254 shootings in the 12 months after the call-in. Decreases in the shooting involvement of the VRS treated groups relative to the comparison groups would be evidence of program impact, whereas increases or no changes in the shooting behavior of the VRS treated groups would indicate that VRS did not have an impact.

**FIGURE 7**

**Predicted Number of Fatal and Nonfatal Shootings in the Year  
after Chicago Violence Reduction Strategy Call-In Attendance, Propensity-Matched Groups**



**Source:** Andrew V. Papachristos and David S. Kirk, “Changing the Street Dynamic: Evaluating Chicago’s Group Violence Reduction Strategy,” *Criminology and Public Policy* 14 (August 2015): 525–58.

Call-in attendance yielded a significant reduction in the likelihood of subsequent group shootings. In the 12 months after their call-in dates, groups that received the VRS intervention were on average involved in 0.36 shootings, whereas comparison groups on average were involved in 0.46 shootings (figure 7). The findings suggest that if at least one group member attended a VRS call-in, that group would be involved in 22 percent fewer shootings in the 12 months after the call-in than if no member of that group had attended a call-in. We also disaggregated the model by group members as victims and perpetrators of shootings to see whether VRS’s impact extended to both types of shooting involvement. Of the 254 shootings that involved a treated or a comparison group, 211 of those had group members as victims, and 43 had group members as known suspects. In large part, this reflects a data limitation, as many perpetrators of shootings (especially recent shootings) are unknown at the time of the analysis.

Overall, call-in attendance (VRS treatment) yielded a 32 percent reduction in the likelihood of nonfatal and fatal victimization in the 12 months after the VRS call-in. The Violence Reduction Strategy had no observable effect on known offending or shooting perpetration. Although these findings demonstrate a significant relationship between call-in attendance and VRS treatment and victimization, it does not appear that call-in attendance reduces fatal or nonfatal shootings.

# Outcome Evaluation Findings: Are Group Member Perceptions and Behaviors in VRS Districts Different?

Drawing on the surveys implemented in the two VRS districts and the two non-VRS districts, this section focuses on whether respondents in the VRS districts had different perceptions than those in the non-VRS districts. We focus on the group members, given the implementation context previously described. The Violence Reduction Strategy was intended to change norms and narratives of group members, community residents, and law enforcement, but implementation focused on group members who attended the call-ins. To the extent perceptions in VRS districts were different than those in non-VRS districts, we would expect to more readily see these differences when comparing VRS with non-VRS group members than with community residents or police officers. Further, the group members' perceptions are most theoretically connected to the intervention. Perceptions among residents and officers, and how much they were different in VRS and non-VRS districts, could be more easily attributable to factors external to VRS.

Our sample of group members in the VRS districts was not limited to those who received the VRS intervention or attended a call-in meeting. As such, the survey findings capture the perceptions of group members in which exposure to the VRS message was varied and apparently limited. (A minority of the sampled group members had heard of the intervention or the call-ins.) The surveys are useful in understanding whether differences in self-reported perceptions and behaviors regarding safety, victimization, and concern about violence were evident in VRS districts compared with non-VRS districts. This portion of the evaluation does not make causal claims regarding VRS's impact on these perceptions. The respondents represented in our sample may be poor proxies for understanding whether VRS is having its intended effects.

The complete sociodemographic profile of survey respondents is shown in appendix A. Generally, the group member sample comprises younger males who were not employed at the time of the survey. In the first treatment-comparison district pair—Austin and Roseland—the group members surveyed were almost exclusively African American/Black, and in the second treatment-comparison pair—Belmont Cragin and Lawndale—a higher percentage of respondents were Latino/Hispanic. These racial

and ethnic breakdowns largely mirror the neighborhoods' racial and ethnic composition. Bivariate analyses use two-tailed *t*-tests to indicate whether perceptions and behaviors among group members in the VRS districts are significantly different from those in the non-VRS districts. The multivariate analyses employ logistic or linear regression with a dummy variable for treatment district, controlling for sample differences on items likely related to perceptions and behaviors. Sociodemographic controls included age, gender, educational level, marital status, employment status, parental status, community tenure, quality of life, knowledge of VRS or the call-in, and knowledge of Project Safe Neighborhoods and Chicago CeaseFire.<sup>10</sup> The bivariate and multivariate analyses focused on nine key outcomes (table 8).

**TABLE 8**

**Group Member Outcome Measures Used for Bivariate and Multivariate Models**

Perceptions of the likelihood of punishment for shootings	Scaled item measuring respondents' perceptions of the likelihood that someone in the neighborhood would be arrested, be charged, be convicted, and go to prison for being involved in a shooting (4-point scale)
Legal acceptance <sup>a</sup>	Single item measuring respondents' degree of agreement to one question, "I feel I should accept the decisions made by legal authorities"
Recent engagement in criminal activities	Binary indicator of respondents' self-reported engagement in 10 criminal activities, ranging from drinking alcohol in public to firing a gun
Perceptions of the safety of neighborhood landmarks or areas	Scaled item measuring respondents' perception of the safety of 6 neighborhood landmarks or areas, such as neighborhood parks and the local "L" station (5-point scale)
Recent victimization experiences in the neighborhood	Binary indicator of having been a victim of 8 crime victimization types in the prior 12 months
Knowledge of people who have been recently victimized in the neighborhood	Binary indicator of knowing victims of 8 crime victimization types in the prior 12 months
Level of concern about violence against them in the neighborhood	Single item measuring respondents' concern about the possibility of violence against them in the neighborhood (4-point scale)
Level of concern about violence against their family and friends in the neighborhood	Single item measuring respondents' concern about the possibility of violence against their friends and family in the neighborhood (4-point scale)
Frequency of certain precautionary behaviors out of concern for safety (scaled item) <sup>b</sup>	Scaled item measuring respondents' frequency of engaging in 4 precautionary behaviors, such as avoiding certain streets out of concern for safety (4-point scale)

**Source:** Urban Institute group member survey instrument.

<sup>a</sup> Although several questions assessing perceptions of the law and legal cynicism were included in the survey, based on previous research, the items did not reliably scale. One measure of perceptions of the law and legal cynicism is included, measured as how much respondents agreed with one question, "I feel I should accept the decisions made by legal authorities."

<sup>b</sup> The precautionary behavior scale was marginally reliable in wave 1 for the Austin-Roseland pair ( $\alpha = 0.67$ ).

Bivariate results shown in table 9 illustrate the differences between VRS and non-VRS group members. The bivariate findings suggest significant differences between the VRS and non-VRS group members on a few key outcomes. The results are different across the two treatment-comparison pairs. In the first, Austin and Roseland, there were more differences in the outcomes of surveyed group members in 2012 than in 2014. Generally, the significant differences observed in 2012 indicate that Austin group members' perceptions of and experiences in their neighborhood were worse than in the comparison (e.g., less legal acceptance, less safety, more victimization, and more concern about victimization). In 2014, many significant differences between Austin and Roseland group members were not evident. Notably, opposite the 2012 finding, Austin group members perceived their neighborhood landmarks to be safer than did Roseland group members in 2014 (following sustained VRS intervention). The second treatment-comparison pair, Belmont Cragin and Lawndale, shows fewer significant differences. In 2013, surveyed Belmont Cragin group members reported more legal acceptance and more concern for their safety than comparison group members did. In 2014, there were no significant differences between the Belmont Cragin and Lawndale group members.

Given the sociodemographic differences of those surveyed in the VRS and non-VRS districts, the multivariate models are more useful in isolating potential district-level differences in self-reported perceptions and behaviors. (See appendixes C and D for the full multivariate models.) In the first treatment-comparison pair, we found that being an Austin group member was associated with generally worse perceptions and behaviors in 2012 (table 10). Being an Austin group member was associated with significantly less legal acceptance, less neighborhood safety, and more neighborhood victimization experiences after controls. Yet, being an Austin group member was also associated with a significantly higher perception of the likelihood of punishment for shootings, an outcome on which VRS is focused. In 2014, there were fewer observed significant differences on the key outcomes (relative to 2012). Notably, being an Austin group member was associated with significantly higher ratings of neighborhood safety after controls in 2014. Overall, however, our 2014 models show that group membership in the Austin district was not associated with significantly different perceptions and behaviors after a period of sustained VRS intervention.

TABLE 9

## Bivariate Analyses of Group Members' Self-Reported Perceptions and Behaviors

	Austin (Treatment) Members Relative to Roseland (Comparison) Members		Belmont Cragin (Treatment) Members Relative to Lawndale (Comparison) Members	
	2012 (wave 1)	2014 (wave 3)	2013 (wave 1)	2014 (wave 2)
Punishment for shootings	Higher likelihood***	NS	NS	NS
Legal acceptance	Less acceptance***	NS	More acceptance***	NS
Engagement in criminal activities	NS	NS	NS	NS
Safety of neighborhood landmarks/areas	Less safe***	More safe***	NS	NS
Victimization experiences in the neighborhood	More victimization***	NS	NS	NS
Knowledge of people who have been recently victimized	NS	NS	NS	NS
Concern about violence against them	More concern*	NS	More concern*	NS
Concern about violence against their family/friends	NS	NS	NS	NS
Frequency of precautionary behaviors out of concern for safety	NS	NS	NS	NS

**Source:** Urban Institute analysis of surveys of group members in Austin, Belmont Cragin, Lawndale, and Roseland.

**Notes:** NS = no significant differences; VRS = Chicago Victim Reduction Strategy. Valid Austin-Roseland  $N = 2012$  (wave 1): 238–286; 2014 (wave 3): 212–224. Valid Belmont Cragin–Lawndale  $N = 2013$  (wave 1): 158–168; 2014 (wave 2): 150–166. Bivariate columns note significant differences between VRS district and non-VRS district respondents in each pair, at or below  $p < 0.10$  on each outcome using two-tailed t-tests: \*  $p < 0.05$ ; \*\*\*  $p < 0.01$  using linear or logistic regression.

With the second treatment-comparison pair shown in table 10, our analyses show that Belmont Cragin group membership was not associated with significantly different self-reported perceptions and behaviors after controls. Being a Belmont Cragin group member was also associated with significantly lower perceptions of neighborhood safety and marginally significantly lower knowledge of people being recently victimized. In 2014, however, being a Belmont Cragin group member was associated with significantly higher ratings of neighborhood safety and more legal acceptance (a marginally statistically significant difference). As with the Austin-Roseland multivariate models, this suggests that on the key outcomes we explored, being a group member in Belmont Cragin was not associated with many significant different self-reported experiences and perceptions. Notably, however, being a group member in both Austin and Belmont Cragin was associated with significantly better perceptions of neighborhood safety using various controls at the follow-up survey period. Also, the follow-up surveys

were implemented in the Austin-Roseland districts following a longer period of VRS intervention (more than two years) than the Belmont Cragin districts (more than one year).

TABLE 10

**Multivariate Analyses of Group Members' Self-Reported Perceptions and Behaviors**

Outcome	Model	Austin (Treatment) Members Relative to Roseland (Comparison) Members		Belmont Cragin (Treatment) Members relative to Lawndale (Comparison) Members	
		2012 (wave 1)	2014 (wave 3)	2013 (wave 1)	2014 (wave 2)
Punishment for shootings	Linear	Higher likelihood***	NS	NS	NS
Legal acceptance	Linear	Less acceptance***	NS	NS	More acceptance*
Engagement in criminal activities	Logistic	NS	NS	NS	NS
Safety of neighborhood landmarks/areas	Linear	Less safe***	More safe***	Less safe**	More safe**
Victimization experiences in the neighborhood	Logistic	More victimization***	NS	NS	NS
Knowledge of people who have been recently victimized	Logistic	NS	NS	Less knowledge*	NS
Concern about violence against them	Linear	More concern**	NS	NS	NS
Concern about violence against their family/friends	Linear	More concern**	NS	NS	NS
Frequency of precautionary behaviors out of concern for safety	Linear	NS	NS	NS	NS

**Source:** Urban Institute analysis of surveys of group members in Austin, Belmont Cragin, Lawndale, and Roseland.

**Notes:** NS = treatment variable is not significant. Valid Austin-Roseland N = 2012 (wave 1): 219–265; 2014 (wave 3): 181–208. Valid Belmont Cragin–Lawndale N = 2013 (wave 1): 150–157; 2014 (wave 2): 134–157. Multivariate columns note where the treatment variable (Austin or Belmont Cragin group member) is significant using linear regression with various controls: \*  $p < 0.10$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$  using linear or logistic regression.

## Are Residents' and Officers' Perceptions and Behaviors Different in VRS Districts?

Bivariate and multivariate findings on the behaviors and perceptions of community residents and officers are shown in appendix C. Focusing on the five community resident outcomes and the one police officer outcome indicated in table 4, the multivariate analyses demonstrate that being an officer in the Belmont Cragin district was associated with significantly better perceptions of the community's

cooperation with police in 2013 and 2014. The multivariate analyses of residents demonstrate that being an Austin resident was associated with significantly less willingness to participate in crime control activities in 2014 (wave 3) and that being a Belmont Cragin resident was associated with significantly less knowledge of recent crime victims in 2014 (wave 2). Although these findings are interesting, we cannot attribute them to VRS.



# Conclusions

The Chicago Violence Reduction Strategy evaluation produced the following key findings related to VRS's impact on group violence and differences in perceptions among VRS and non-VRS districts:

- **The Violence Reduction Strategy reduced violence as intended among the groups treated by the intervention.** The impact evaluation found that VRS was associated with a 23 percent reduction in the shooting patterns of treated groups (as both victims and offenders) and a 32 percent reduction in the shooting victimization of group members. No statistically significant decrease was observed for suspected shooting perpetration, largely because the identity of many of the shooters was unknown during the evaluation period. The quasi-experimental impact evaluation found that the groups receiving VRS treatment experienced significant short-term reductions in shootings and shooting victimizations.
- **Improvements in the perceptions of neighborhood safety were evident among group members.** In both treatment districts, Austin and Belmont Cragin, the neighborhood conditions appeared better by the follow-up surveys, as perceived by the group members in our sample. This provides evidence that the VRS districts were perceived to be safer following VRS implementation over one-year and two-year periods in the two different districts.
- **Differences were not evident in group members' perceptions of the likelihood of sanctions, concerns for violence and precautionary behaviors, and victimization experiences and recent criminal activity.** The lack of significant findings in the multivariate models suggests that self-reported perceptions and behaviors are not different among those in the treatment districts relative to the comparison districts. This suggests that during the period VRS was implemented, the larger network of group members may not have heard about or understood the enhanced consequences for violence and may not have changed their behavior because of the enhanced consequences.

## Limitations

This study intended to make a unique contribution to understanding the GVI model's potential when implemented in a large city with high levels of violence among hundreds of group networks. Before we discuss the findings' implications, we note some limitations to the study. Some limitations are caused by

the way VRS was implemented. Implementation proceeded differently than initially expected, which aided execution of the impact evaluation, but hampered execution of the outcome evaluation. Limitations unrelated to VRS's implementation are inherent in the methods used for the impact and outcome evaluations.

For the analyses of group-level shootings (impact evaluation), our ability to use propensity score matching techniques to examine the intervention's impact provides one of the strongest tests of a GVI intervention to date. But the propensity score matching technique may have failed to fully control for differences between the treatment and comparison groups that could be related to shootings. Chicago police districts and the groups within them were not randomly selected for the intervention. Although we cannot know the full impact on shooting outcomes of unobserved differences between the treated and the matched comparison groups, we believe our data include most of the important characteristics related to shooting outcomes. The treated and nontreated groups included in the analysis are similar in observable characteristics (appendix B). We believe any unobserved differences are unlikely to change the story that the intervention had an impact on group-level shootings. Our finding that VRS led to changes in total shootings is also consistent with the finding from the outcome evaluation that group members in both treatment districts perceived their neighborhoods as being safer at the time of the follow-up survey.

For the analyses of group members' perceptions (outcome evaluation), we are limited in what implications we can draw from the findings related to the VRS intervention. First, VRS was implemented while other violence-reduction and prevention efforts occurred in the city. Chicago is a large city with multiple policing and antiviolence activities. Most notable are two large and well-known antiviolence programs, Chicago CeaseFire/Cure Violence and PSN.<sup>11</sup> Staff working on PSN and VRS collaborated to avoid intervening with the same people (Papachristos and Kirk 2015), and Cure Violence did not operate in the VRS districts during the study period (Henry, Knoblauch, and Sigurvinsdottir 2014). Cure Violence did, however, operate in Lawndale, which raises the possibility that Cure Violence could have affected self-reported attitudes and behaviors. Other antiviolence initiatives and social service programs were active or being implemented over the study period in all four surveyed districts and are not fully accounted for in our models, which could be related to group members' self-reported attitudes and behaviors. The multivariate models included controls for knowledge of Cure Violence and PSN, but these antiviolence efforts could have affected neighborhood conditions perceived by group members.<sup>12</sup>

Second, because of the timing and method of survey data collection relative to VRS intervention activities (i.e., two call-ins over one year and limited custom notifications), we do not know how the observed or lack of observed differences in group members' perceptions are related to VRS.

Alternatively, we do not know how well our modified outcome evaluation tests VRS's logic and impact. We could not collect baseline surveys in either treatment district, and the follow-up surveys were conducted one year after only two call-ins had occurred. This has a few implications.

First, the logic of VRS is that it would contribute to broader changes in attitudes and perceptions that would be durable and cumulative across the treatment districts. As such, the final treatment samples purposely included are a broader network of group members. Our treatment samples mostly comprised people with no exposure or knowledge of the intervention or its components. On one hand, our lack of significant findings on group members' perceptions could indicate that VRS does not lead to widespread changes in attitudes and perceptions. On the other hand, our lack of significant findings might suggest that our models do not include enough people with exposure or knowledge of the intervention. Relatedly, given the sheer number of groups and the size of intended VRS treatment areas, broad changes in perceptions may take longer to manifest than the period covered by our surveys.

Second, we do not know how the timing of our follow-up surveys complicates these issues. Our follow-up surveys were conducted at least one year following sustained intervention activities, a period that may have been inappropriate to testing effects. The Violence Reduction Strategy's logic suggests perceptions would change over time, but the timing of that change is based on unclear mechanisms, such as how quickly treated group members would talk to their networks and change their behavior and attitudes; whether those networks would tell even more people and change their behavior and attitudes, and so on; and whether enhanced enforcement would lead to actual and perceived crime reductions and neighborhood improvements. We do not know whether the timing of the follow-up surveys, had they occurred six months earlier or six months later, for example, would have resulted in different findings. The survey findings provide insights into group members' perceptions of their neighborhood conditions, but how well this is attributable to VRS's impact (or lack thereof) is questionable.

Third, our final sample of respondents may not be generalizable to the wider population living in those districts. Our eventual sample was determined by factors including which group members and community residents were home during the hours when the survey was occurring, which addresses could be accessed (households in apartment buildings were more difficult to access than those in single-family dwellings), and residents' inclination to take the survey when contacted. Our ability to survey group members was determined by the availability of address data in CPD databases, and we found that many of the provided addresses were not valid for a range of reasons (e.g., address did not exist or person never or no longer lived at the provided address). We attempted to mitigate these issues by surveying on weekends, in evening hours when possible, and providing the option to complete surveys

by phone. But these factors relating to who we surveyed may have varied by district and limit the generalizability of the sample to the population as a whole.<sup>13</sup>

Finally, our multivariate results are based on small samples of group members. Our samples may have precluded our ability to detect differences in perceptions. Although we tried to use a parsimonious set of control variables to increase power, a larger sample of group members may have yielded different results. But our finding that few group members perceived the neighborhood to be safer at the time of the follow-up suggests that this is a robust finding, given it was evident in each treatment-comparison pair, one and two years following sustained VRS intervention.

## Take-Aways

Chicago VRS is a complex effort that sought to affect the dynamics of group violence in Chicago. The strategy produced immediate reductions in gun violence through the careful identification and engagement of the groups most at risk of shooting and being shot. This aspect of VRS was tightly focused (VRS call-ins touched only 17 percent of identified groups in the city during its first four years of operation), including open communication with group members about heightened sanctions and follow-through on that threat if necessary. In addition, VRS made moral claims on group members and provided concrete social service support.

The VRS partners also aimed to change norms, narratives, and mutual mistrust present among the group members, community residents, and the police. These norms and narratives can justify violence and impede the creation and sustainability of collaboration between the community and the justice system to reduce violence. Changing norms, narratives, and mutual mistrust involves more broadly targeted efforts, which may manifest over a longer period. Changing norms, narrative, and mutual mistrust is also complicated by the national conversation regarding issues in the justice system that have intensified since the death of Michael Brown and subsequent events in Ferguson, Missouri; Cleveland; New York City; Chicago; and many other cities.

We developed a study design intended to address VRS's impact both on the violence outcomes and on norms, narratives, and trust. We found that VRS achieved its primary goal, reducing group-level shootings. But we also found evidence of substantial contextual challenges to VRS's success, particularly the high levels of mutual mistrust between community residents and police. These represent a barrier to VRS narrowly, and as evidenced by events in Chicago since the conclusion of the evaluation period (such as the death of Laquan McDonald and the public outcry after the video of his

killing became public), a threat to successful antiviolenence work broadly.<sup>14</sup> These events underscore how critical the issue of community trust in the justice system remains, and how great a threat the lack of trust and legitimacy represents to sustaining successful violence-reduction initiatives.

The Violence Reduction Strategy and similar interventions need to be part of a comprehensive strategy against violence that addresses police-community trust and the lack of police legitimacy in communities burdened by pervasive violence. Our findings are a reminder that although these neighborhoods need the reduction in violence that VRS can provide, they need a comprehensive strategy that sustains and builds upon VRS's violence-reduction accomplishments. The Violence Reduction Strategy can expand its techniques and its reach and be situated as a component of a broad effort to deliver public protection to our most vulnerable communities in a way that is not only effective in reducing violence, but is viewed by community members as just and legitimate.

# Appendix A. Sociodemographic Characteristics of Survey Respondents by Sampled Group

TABLE A.1

Sociodemographic Characteristics of Group Members by Wave and District (percent)

	Austin/D15 (VRS)		Roseland/D5 (non-VRS)		Belmont Cragin/D25 (VRS)		Lawndale/D10 (non-VRS)	
	2012 wave 1	2014 wave 3	2012 wave 1	2014 wave 3	2013 wave 1	2014 wave 2	2013 wave 1	2014 wave 2
<b>Age</b>								
18–20	3.8	12.8	17.7	20.5	30.3	17.6	41.1	23.8
21–30	67.9	64.9	48.9	57.5	65.8	77.7	55.6	72.5
31+	28.2	22.3	33.3	22.0	3.9	4.7	3.3	3.8
<b>Male</b>	94.8	97.9	82.5	85.0	100.0	100.0	100.0	98.8
<b>Race or ethnicity</b>								
African American/Black	99.3	98.9	100.0	98.4	26.3	36.5	95.7	92.5
Hispanic/Latino/a	0.7	0.0	0.0	1.6	69.7	61.2	3.3	7.5
Other	0.0	1.1	0.0	0.0	3.9	2.4	1.1	0.0
<b>Highest level of education</b>								
Less than HS diploma/GED	26.3	26.6	23.8	29.1	22.7	25.9	27.2	25.0
HS diploma or GED	54.9	67.0	62.9	60.6	64.0	68.2	68.5	72.5
Some college/2-year college degree	18.0	5.3	12.6	10.2	13.3	5.9	4.3	2.5
College graduate or above	0.8	1.1	0.7	0.0	0.0	0.0	0.0	0.0
<b>Currently employed</b>	39.3	27.2	27.5	16.1	35.6	38.6	14.1	31.6
<b>Household income</b>								
Less than \$10,000	25.8	77.0	57.8	88.4	45.3	79.3	60.4	84.9
\$10,000–\$19,999	20.8	10.3	18.5	4.1	25.0	7.3	22.6	8.2
\$20,000–\$29,999	25.0	3.5	11.9	3.3	10.9	4.9	9.4	4.1
\$30,000+	28.3	9.2	11.8	4.1	18.8	8.5	7.6	2.7

**Source:** Urban Institute analysis of surveys of group members in Austin (D15), Roseland (D5), Belmont Cragin (D25), and Lawndale (D10).

**Notes:** HS = high school; VRS = Chicago Violence Reduction Strategy. Valid N = Austin, wave 1: 135; Austin, wave 3: 94; Roseland, wave 1: 144; Roseland, wave 3: 127; Belmont Cragin, wave 1: 76; Belmont Cragin, wave 2: 85; Lawndale, wave 1: 92; Lawndale, wave 2: 80.

TABLE A.2

## Sociodemographic Characteristics of Community Residents by Wave and District (percent)

	Austin/D15 (VRS)		Roseland/D5 (non-VRS)		Belmont Cragin/D25 (VRS)		Lawndale/D10 (non-VRS)	
	2012 wave 1	2014 wave 3	2012 wave 1	2014 wave 3	2013 wave 1	2014 wave 2	2013 wave 1	2014 wave 2
<b>Age</b>								
<20	7.6	1.6	4.5	9.3	8.8	10.1	4.9	4.3
21–30	19.7	39.3	25.5	4.7	23.0	19.3	22.0	24.8
31–40	17.2	18.0	23.6	16.8	14.2	18.5	23.6	19.7
41–50	23.6	24.6	21.0	24.3	17.7	23.5	19.5	19.7
51+	31.9	16.4	25.5	44.9	36.3	28.6	30.1	31.6
<b>Male</b>	45.2	59.8	47.1	53.3	46.9	41.2	42.3	50.9
<b>Race or ethnicity</b>								
African American/ Black	93.0	92.7	98.1	97.2	23.2	21.2	56.1	53.9
Hispanic/Latino/a	3.8	3.3	0.0	1.9	58.0	62.7	39.8	39.3
Other	3.2	4.1	1.9	0.9	18.8	16.1	4.1	6.8
<b>Highest level of education</b>								
Less than HS diploma/GED	13.5	3.3	12.1	11.2	15.0	7.6	20.3	14.5
HS diploma or GED	44.9	56.9	52.9	32.7	39.8	44.9	36.6	51.3
Some college/2-year degree	35.3	30.1	25.5	39.3	32.7	32.2	32.5	28.2
College graduate or above	6.4	9.8	9.6	16.8	12.4	15.3	10.6	6.0
<b>Currently employed</b>	44.2	47.2	49.7	35.8	51.3	52.1	47.2	44.9
<b>Household income</b>								
Less than \$10,000	36.8	31.1	35.7	30.1	17.5	23.0	36.4	36.1
\$10,000–\$19,999	17.3	20.4	29.3	15.1	22.3	21.2	21.2	22.2
\$20,000–\$29,999	18.8	21.4	12.9	16.4	20.4	15.9	14.4	19.4
\$30,000+	27.1	27.2	22.1	38.4	39.8	39.8	28.0	22.2

**Source:** Urban Institute analysis of surveys of community residents in Austin (D15), Roseland (D5), Belmont Cragin (D25), and Lawndale (D10).

**Notes:** HS = high school; VRS = Chicago Violence Reduction Strategy. Valid N = Austin, wave 1: 158; Austin, wave 3: 123; Roseland, wave 1: 157; Roseland, wave 3: 107; Belmont Cragin, wave 1: 113; Belmont Cragin, wave 2: 119; Lawndale, wave 1: 124; Lawndale, wave 2: 118.

TABLE A.3

## Sociodemographic Characteristics of Police Officers by Wave and District (percent)

	Austin/D15 (VRS)		Roseland/D5 (non-VRS)		Belmont Cragin/D25 (VRS)		Lawndale/D10 (non-VRS)	
	2012 wave 1	2014 wave 3	2012 wave 1	2014 wave 3	2013 wave 1	2014 wave 2	2013 wave 1	2014 wave 2
<b>Age</b>								
21–30	29.5	18.9	10.9	27.3	12.5	17.4	12.2	19.1
31–40	37.9	54.4	40.6	34.8	37.5	45.5	58.9	48.9
41–50	26.3	21.1	39.1	33.3	41.7	28.9	22.2	22.3
51+	6.3	5.6	9.4	4.6	8.3	8.3	6.7	9.6
<b>Male</b>	80.4	82.6	70.9	81.0	81.7	81.5	88.2	83.3
<b>Race or ethnicity</b>								
White	57.1	58.5	23.6	37.5	66.3	55.5	35.0	31.3
African American/Black	15.5	13.4	52.7	50.0	9.6	8.2	2.5	7.2
Hispanic/Latino/a	21.4	22.0	10.9	12.5	18.1	23.6	57.5	54.2
Other	6.0	6.1	12.7	0.0	6.0	12.7	5.0	7.2
<b>Patrol/beat officer</b>	78.7	81.3	91.4	83.3	85.4	84.3	70.8	81.7
<b>Lives in district</b>	2.0	5.4	11.7	6.2	10.6	10.1	3.4	3.3
<b>Highest level of education</b>								
Less than HS diploma/GED	0.0	1.1	1.8	0.0	0.0	0.0	0.0	0.0
HS diploma or GED	20.9	16.9	12.3	26.6	20.7	16.4	16.5	12.4
Some college/2-year degree	61.5	61.8	57.9	51.6	56.5	70.7	69.4	68.5
College graduate or above	17.6	20.2	28.1	21.9	22.8	12.9	14.1	19.1
<b>Months working with Chicago Police Dept. (average)</b>	120.4	114.6	138.8	94.7	151.3	125.6	126.0	128.0

**Source:** Urban Institute analysis of surveys of police officers in Austin (D15), Roseland (D5), Belmont Cragin (D25), and Lawndale (D10).

**Notes:** HS = high school; VRS = Chicago Violence Reduction Strategy. Valid N = Austin, wave 1: 101; Austin, wave 3: 97; Roseland, wave 1: 66; Roseland, wave 3: 67; Belmont Cragin, wave 1: 99; Belmont Cragin, wave 2: 125; Lawndale, wave 1: 95; Lawndale, wave 2: 98.



# Appendix B. Faction Covariate Balance before and after Matching

TABLE B.1

Faction Covariate Balance before and after Matching

Covariates	Raw Means		Differences in Means		Percentage Reduction in Absolute Bias	Postmatch Hypothesis Test	
	VRS	Non-VRS	Unadjusted	Postmatch		t-statistic	p-value
<b>Amount of turf controlled (sq. ft.)</b>	3,300,000	2,800,000	500,000	0.00	98.3	-0.01	0.99
<b>Arrests</b>							
Aggravated assault arrests	1.34	0.85	0.49	-0.30	37.3	-1.32	0.19
Drug arrests	6.30	2.08	4.21	-0.99	76.6	-0.86	0.39
Robbery arrests	0.49	0.30	0.19	-0.03	83.7	-0.23	0.82
Other felony arrests	5.18	2.22	2.96	-0.36	87.9	-0.44	0.66
<b>Network characteristics</b>							
Average degree	2.13	1.95	0.19	-0.01	95.8	-0.18	0.86
Average path length	4.09	2.96	1.13	-0.17	85.4	-0.72	0.47
Number of components in network	10.06	5.36	4.70	-1.27	73.0	-1.06	0.29
<b>Chicago Police Department area</b>							
Area 2 (vs. 1)	0.35	0.31	0.04	0.02	55.2	0.28	0.78
Area 3 (vs. 1)	0.51	0.23	0.29	0.09	67.9	1.40	0.16
<b>Faction—level of organization</b>							
Low (vs. high)	0.15	0.24	-0.09	0.02	79.1	0.39	0.70
Medium (vs. high)	0.37	0.38	-0.01	0.00	47.1	0.08	0.94
<b>Faction—level of violence</b>							
Low (vs. high)	0.21	0.23	-0.02	0.01	56.3	0.18	0.86
Medium (vs. high)	0.30	0.31	-0.01	0.09	-878.4	1.61	0.11
<b>Faction size</b>	44.85	35.77	9.07	8.71	4.0	1.16	0.25
<b>Median age of faction members</b>	21.34	22.23	-0.89	-0.10	89.1	-0.22	0.83
<b>Racial composition of faction</b>							
African American/Black	0.76	0.47	0.29	0.00	98.5	-0.09	0.93

Covariates	Raw Means		Differences in Means		Percentage Reduction in Absolute Bias	Postmatch Hypothesis Test	
	VRS	Non-VRS	Unadjusted	Postmatch		t-statistic	p-value
Hispanic	0.13	0.21	-0.08	-0.01	91.1	-0.17	0.87
Mixed race	0.05	0.25	-0.19	-0.01	96.5	-0.25	0.80
<b>Shooting—2006 to 2010</b>	3.85	2.11	1.74	-0.96	45.2	-1.63	0.11
<b>Total number of active alliances</b>	2.39	4.24	-1.85	-0.10	94.7	-0.22	0.82
<b>Total number of active conflicts</b>	3.02	5.72	-2.70	-0.16	94.0	-0.30	0.77

**Source:** Andrew V. Papachristos and David S. Kirk, “Changing the Street Dynamic: Evaluating Chicago’s Group Violence Reduction Strategy,” *Criminology and Public Policy* 14 (August 2015): 525–58.

**Notes:** VRS = Chicago Violence Reduction Strategy. *N* = 576. Model specifications = three-to-one matching with caliper of 0.05.

# Appendix C. Bivariate and Multivariate Summary Findings from Analyses of Community Resident Surveys and Police Officer Surveys

TABLE C.1

## Bivariate Analyses of Community Residents' Self-Reported Perceptions and Behaviors

	Austin (Treatment) Residents Relative to Roseland (Comparison) Residents		Belmont Cragin (Treatment) Residents Relative to Lawndale (Comparison) Residents	
	2012 (wave 1)	2014 (wave 3)	2013 (wave 1)	2014 (wave 2)
Safety of neighborhood landmarks/areas	More safe**	Less safe*	More safe*	More safe***
Victimization experiences in the neighborhood	NS	NS	NS	NS
Knowledge of people who have been recently victimized	Less knowledge**	More knowledge*	NS	Less knowledge***
Frequency of precautionary behaviors out of concern for safety	NS	NS	NS	Less frequently*
Willingness to participate in crime control activities	More willingness*	Less willingness***	More willingness*	NS

**Source:** Urban Institute analysis of surveys of community residents in Austin (D15), Roseland (D5), Belmont Cragin (D25), and Lawndale (D10).

**Notes:** Valid Austin/Roseland N = 2012 (wave 1): 284–315; 2014 (wave 3): 219–32, depending on the outcome. Valid Belmont Cragin/Lawndale N = 2013 (wave 1): 132–238; 2014 (wave 2): 218–37, depending on the outcome. Bivariate columns note significant differences between VRS and non-VRS community residents on each key outcome using two-tailed *t*-tests (\*  $p < 0.10$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$ ); NS = no significant difference.

TABLE C.2

## Multivariate Analyses of Community Residents' Self-Reported Perceptions and Behaviors

Outcome	Model	Austin (Treatment) Residents Relative to Roseland (Comparison) Residents		Belmont Cragin (Treatment) Residents Relative to Lawndale (Comparison) Residents	
		2012 (wave 1)	2014 (wave 3)	2013 (wave 1)	2014 (wave 2)
Safety of neighborhood landmarks/areas	Linear	NS	NS	NS	NS
Victimization experiences in the neighborhood	Logistic	NS	NS	NS	NS
Knowledge of people who have been recently victimized	Logistic	Less knowledge**	NS	NS	Less knowledge*
Frequency of precautionary behaviors out of concern for safety	Linear	NS	NS	NS	NS
Willingness to participate in crime control activities	Linear	More willing*	Less willing**	NS	NS

**Source:** Urban Institute analysis of surveys of community residents in Austin (D15), Roseland (D5), Belmont Cragin (D25), and Lawndale (D10).

**Notes:** Valid Austin/Roseland  $N = 2012$  (wave 1): 264–294; 2014 (wave 3): 202–221, depending on the outcome. Valid Belmont Cragin/Lawndale  $N = 2013$  (wave 1): 221–226; 2014 (wave 2): 213–231, depending on the outcome. Multivariate columns note where the treatment variable (Austin/Belmont Cragin community resident) is significant using linear or logistic regression with various controls: \*  $p < 0.10$ ; \*\*  $p < 0.05$  using linear or logistic regression; NS = treatment variable is not significant.

TABLE C.3

## Bivariate Analyses of Police Officers' Self-Reported Perceptions and Behaviors

	Austin (Treatment) Officers Relative to Roseland (Comparison) Officers		Belmont Cragin (Treatment) Officers Relative to Lawndale (Comparison) Officers	
	2012 (wave 1)	2014 (wave 3)	2013 (wave 1)	2014 (wave 2)
Community cooperation with police	NS	NS	More cooperation***	More cooperation**

**Source:** Urban Institute analysis of surveys of police officers in Austin (D15), Roseland (D5), Belmont Cragin (D25), and Lawndale (D10).

**Notes:** Valid N = Austin/Roseland 2012 (wave 1): 167; 2014 (wave 3): 164. Valid N = Belmont Cragin/Lawndale 2013 (wave 1): 193; 2014 (wave 2): 224. Bivariate columns note significant differences between VRS and non-VRS police officers on each key outcome using two-tailed t-tests (\*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$ ). NS = no significant difference.

TABLE C.4

## Multivariate Analyses of Police Officers' Self-Reported Perceptions and Behaviors

Outcome	Model	Austin (Treatment) Residents Relative to Roseland (Comparison) Residents		Belmont Cragin (Treatment) Residents Relative to Lawndale (Comparison) Residents	
		2012 (wave 1)	2014 (wave 3)	2013 (wave 1)	2014 (wave 2)
Community cooperation with police	Linear	NS	NS	More cooperation***	More cooperation**

**Source:** Urban Institute analysis of surveys of police officers in Austin (D15), Roseland (D5), Belmont Cragin (D25), and Lawndale (D10).

**Notes:** Valid Austin/Roseland N = 2012 (wave 1): 121; 2014 (wave 3): 125. Valid Belmont Cragin/Lawndale N = 2013 (wave 1): 150; 2014 (wave 2): 167. Multivariate columns note where the treatment variable (Austin/Belmont Cragin police officer) is significant, using linear regression with various controls: \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$  using linear or logistic regression; NS = treatment variable is not significant.

# Appendix D. Multivariate Regression Models

TABLE D.1

**Multivariate Linear Regression for Certainty of Criminal Justice Punishment for Shootings, Austin and Roseland Group Members**

Variable title	2012 coefficient (standard error)	2014 coefficient (standard error)
Austin group member	0.517*** (.1166)	0.151 (.1457)
Age	0.0160 (.05894)	0.247*** (.08448)
Male	0.288* (.173)	0.169 (.2433)
Black	-0.399 (.8403)	-0.276 (.5678)
Education	-0.0779 (.08882)	-0.0746 (.1279)
Married	0.0753 (.193)	0.343 (.3701)
Has child	0.0100 (.1174)	-0.354** (.1617)
Currently employed	0.0620 (.121)	-0.190 (.178)
Tenure in neighborhood (in months)	-0.000511 (.0005037)	0.000345 (.0006434)
Quality of life	-0.0678 (.05046)	0.0455 (.06266)
Know of Chicago Violence Reduction Strategy or call-in	0.0164 (.1152)	0.112 (.1484)
Know of Project Safe Neighborhoods	-0.0642 (.1174)	-0.0205 (.1525)
Know of CeaseFire	-0.0858 (.1256)	0.350 (.2421)
Intercept	3.609*** (.9145)	2.111*** (.7138)
Valid N	261	208

**Source:** Urban Institute analysis of surveys of group members in Austin (D15) and Roseland (D5).

**Notes:** Each column reports coefficients from a linear regression and standard errors are in parentheses. The coefficient for the Austin group member variable can be interpreted as the change in the level of certainty of criminal justice punishment for shootings from being an Austin group member as opposed to being a Roseland comparison, all other things being equal. Positive values indicate that Austin group members report higher levels of certainty of criminal justice punishment for shootings than Roseland comparisons, whereas negative values indicate that they report lower levels of certainty of punishment.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

TABLE D.2

## Multivariate Linear Regression for Legal Acceptance, Austin and Roseland Group Members

Variable title	2012 coefficient (standard error)	2014 coefficient (standard error)
Austin group member	-1.202*** (.1879)	0.0752 (.2311)
Age	-0.0114 (.0952)	-0.156 (.134)
Male	0.0303 (.28)	-0.136 (.3858)
Black	-0.735 (1.362)	-0.279 (.9005)
Education	0.119 (.143)	0.183 (.2028)
Married	0.0507 (.3056)	0.580 (.5869)
Has child	0.116 (.1894)	-0.0678 (.2564)
Currently employed	0.0204 (.1951)	0.0471 (.2823)
Tenure in neighborhood (in months)	-0.000402 (.00081)	-0.000684 (.00102)
Quality of life	0.287*** (.08152)	0.153 (.09936)
Know of Chicago Violence Reduction Strategy or call-in	0.242 (.1839)	0.217 (.2353)
Know of Project Safe Neighborhoods	0.159 (.1884)	0.122 (.2418)
Know of CeaseFire	0.0501 (.2029)	-0.289 (.384)
Intercept	2.986** (1.48)	3.400*** (1.132)
Valid N	265	208

**Source:** Urban Institute analysis of surveys of group members in Austin (D15) and Roseland (D5).

**Notes:** Each column reports coefficients from a linear regression and standard errors are in parentheses. The coefficient for the Austin group member variable can be interpreted as the change in the level of legal acceptance from being an Austin group member as opposed to being a Roseland comparison, all other things being equal. Positive values indicate that Austin group members report higher levels of legal acceptance than Roseland comparisons, whereas negative values indicate that they report lower levels of legal acceptance.

\*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

TABLE D.3

**Multivariate Logistic Regression for Engagement in Criminal Activities,  
Austin and Roseland Group Members**

Variable title	2012 coefficient (standard error)	2014 coefficient (standard error)
Austin group member	0.111 (.3459)	0.226 (.3873)
Age	-0.312* (.1773)	-0.295 (.2128)
Male	0.0781 (.4889)	0.209 (.5763)
Black	0 (omitted)	0.700 (1.32)
Education	-0.506* (.2647)	0.251 (.3209)
Married	-0.0618 (.5252)	-1.252 (.9269)
Has child	-0.157 (.3592)	0.647 (.4117)
Currently employed	-0.221 (.3538)	-0.199 (.4457)
Tenure in neighborhood (in months)	-0.00206 (.001577)	-0.00213 (.001654)
Quality of life	-0.327** (.1513)	-0.000701 (.1628)
Know of Chicago Violence Reduction Strategy or call-in	-0.639* (.3328)	-0.493 (.3891)
Know of Project Safe Neighborhoods	0.530 (.3607)	1.479*** (.4341)
Know of CeaseFire	-0.0111 (.3903)	-0.484 (.6503)
Intercept	4.188*** (.9574)	0.594 (1.75)
Valid N	250	199

**Source:** Urban Institute analysis of surveys of group members in Austin (D15) and Roseland (D5).

**Notes:** Each column reports coefficients from a logistic regression and standard errors are in parentheses. The coefficient for the Austin group member variable can be interpreted as the change in the log-odds of engagement in criminal activities from being an Austin group member as opposed to being a Roseland comparison, all other things being equal. Positive values indicate that Austin group members are more likely than Roseland comparisons to report engagement in criminal activities, whereas negative values indicate that they are less likely to report engagement in criminal activities.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$



TABLE D.4

**Multivariate Linear Regression for Safety of Area Landmarks/Areas,  
Austin and Roseland Group Members**

Variable title	2012 coefficient (standard error)	2014 coefficient (standard error)
Austin group member	-0.624*** (.1147)	0.377*** (.1379)
Age	0.102* (.058)	0.123 (.08015)
Male	0.166 (.1707)	-0.154 (.2301)
Black	0.104 (.829)	-1.113** (.537)
Education	0.195** (.08742)	0.254** (.121)
Married	-0.153 (.1866)	0.225 (.3504)
Has child	0.0372 (.1156)	0.00431 (.153)
Currently employed	-0.115 (.1196)	-0.230 (.17)
Tenure in neighborhood (in months)	-0.000405 (.0004933)	-0.000555 (.0006088)
Quality of life	0.249*** (.04972)	0.360*** (.05926)
Know of Chicago Violence Reduction Strategy or call-in	0.0749 (.1129)	0.169 (.1406)
Know of Project Safe Neighborhoods	0.192* (.115)	-0.155 (.1444)
Know of CeaseFire	0.0322 (.1236)	-0.183 (.229)
Intercept	1.208 (.9021)	2.484*** (.6754)
Valid N	263	207

**Source:** Urban Institute analysis of surveys of group members in Austin (D15) and Roseland (D5).

**Notes:** Each column reports coefficients from a linear regression and standard errors are in parentheses. The coefficient for the Austin group member variable can be interpreted as the change in the level of safety of area landmarks from being an Austin group member as opposed to being a Roseland comparison, all other things being equal. Positive values indicate that Austin group members report higher safety of area landmarks than Roseland comparisons, whereas negative values indicate that they report lower levels of safety of area landmarks.

\*  $p < 0.10$ , \*  $p < 0.05$ , \*\*\*  $p < 0.01$

TABLE D.5

**Multivariate Logistic Regression for Victimization Experiences in the Neighborhood,  
Austin and Roseland Group Members**

Variable title	2012 coefficient (standard error)	2014 coefficient (standard error)
Austin group member	1.697*** (.4151)	0.182 (.4135)
Age	-0.368t (.1946)	0.0717 (.2396)
Male	-0.158 (.568)	0.404 (.8277)
Black	0 (omitted)	0 (omitted)
Education	-0.662** (.2874)	0.243 (.355)
Married	0.828 (.6064)	-0.404 (1.183)
Has child	-0.374 (.3652)	-0.155 (.4503)
Currently employed	-0.0896 (.3883)	-0.942 (.5993)
Tenure in neighborhood (in months)	0.000287 (.001673)	-0.000366 (.001867)
Quality of life	0.0189 (.1677)	-0.127 (.1932)
Know of Chicago Violence Reduction Strategy or call-in	-0.576 (.3708)	-0.151 (.4201)
Know of Project Safe Neighborhoods	-0.312 (.3841)	-0.106 (.4267)
Know of CeaseFire	0.377 (.4184)	0 (omitted)
Intercept	0.597 (.9747)	-1.643 (1.249)
Valid N	219	181

**Source:** Urban Institute analysis of surveys of group members in Austin (D15) and Roseland (D5).

**Notes:** Each column reports coefficients from a logistic regression and standard errors are in parentheses. The coefficient for the Austin group member variable can be interpreted as the change in the log-odds of victimization experiences from being an Austin group member as opposed to being a Roseland comparison, all other things being equal. Positive values indicate that Austin group members are more likely than Roseland comparisons to report victimization experiences, whereas negative values indicate that they are less likely to report victimization experiences.

\*  $p < 0.05$ , \*\*\*  $p < 0.01$

TABLE D.6

**Multivariate Logistic Regression for Knowledge of People Who Have Been Recently Victimized,  
Austin and Roseland Group Members**

Variable title	2012 coefficient (standard error)	2014 coefficient (standard error)
Austin group member	0.159 (.3961)	-0.133 (.4104)
Age	-0.348* (.2029)	-0.344 (.237)
Male	0.813 (.5162)	0.779 (.592)
Black	0 (.)	0.439 (1.279)
Education	0.0324 (.2932)	0.168 (.375)
Married	-1.640*** (.5096)	-0.635 (.9521)
Has child	0.420 (.4026)	0.0505 (.4574)
Currently employed	0.0408 (.3991)	-0.126 (.4908)
Tenure in neighborhood (in months)	-0.000174 (.001524)	0.000570 (.001707)
Quality of life	-0.354** (.1705)	-0.380** (.1762)
Know of Chicago Violence Reduction Strategy or call-in	0.293 (.3896)	0.552 (.4344)
Know of Project Safe Neighborhoods	0.300 (.4029)	0.0418 (.4284)
Know of CeaseFire	-0.0195 (.4001)	0.110 (.6638)
Intercept	2.380** (1.004)	1.713 (1.744)
Valid N	259	205

**Source:** Urban Institute analysis of surveys of group members in Austin (D15) and Roseland (D5).

**Notes:** Each column reports coefficients from a logistic regression and standard errors are in parentheses. The coefficient for the Austin group member variable can be interpreted as the change in the log-odds of knowledge of people who have been victimized in the prior 12 months from being an Austin group member as opposed to being a Roseland comparison, all other things being equal. Positive values indicate that Austin group members are more likely than Roseland comparisons to report knowledge of people who have been recently victimized, whereas negative values indicate that they are less likely to report knowledge of people who have been recently victimized.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

TABLE D.7

**Multivariate Linear Regression for Concern about Becoming Victims of Violence,  
Austin and Roseland Group Members**

Variable title	2012 coefficient (standard error)	2014 coefficient (standard error)
Austin group member	0.359** (.1433)	-0.00800 (.1579)
Age	-0.0345 (.07187)	-0.160* (.09156)
Male	-0.0378 (.2111)	0.0466 (.2636)
Black	0.656 (1.027)	0.270 (.6154)
Education	-0.188* (.1082)	-0.143 (.1386)
Married	0.519** (.2304)	0.181 (.401)
Has child	-0.130 (.1438)	-0.0453 (.1752)
Currently employed	-0.0541 (.1484)	-0.155 (.1929)
Tenure in neighborhood (in months)	0.000218 (.0006151)	0.000245 (.0006973)
Quality of life	-0.282*** (.06169)	-0.151** (.0679)
Know of Chicago Violence Reduction Strategy or call-in	0.229 (.1393)	0.0148 (.1608)
Know of Project Safe Neighborhoods	-0.243* (.1439)	0.0375 (.1653)
Know of CeaseFire	0.248 (.1532)	0.153 (.2624)
Intercept	2.902*** (1.117)	2.987*** (.7736)
Valid N	262	208

**Source:** Urban Institute analysis of surveys of group members in Austin (D15) and Roseland (D5).

**Notes:** Each column reports coefficients from a linear regression and standard errors are in parentheses. The coefficient for the Austin group member variable can be interpreted as the change in the level of concern about violence against them from being an Austin group member as opposed to being a Roseland comparison, all other things being equal. Positive values indicate that Austin group members report higher levels of concern about violence against them than Roseland comparisons, whereas negative values indicate that they report lower levels of concern about violence against them.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

TABLE D.8

**Multivariate Linear Regression for Concern about Violence against Family,  
Austin and Roseland Group Members**

Variable title	2012 coefficient (standard error)	2014 coefficient (standard error)
Austin group member	0.301** (.1446)	-0.0584 (.1598)
Age	0.0376 (.07333)	-0.0953 (.09267)
Male	-0.310 (.2148)	-0.371 (.2668)
Black	0.828 (1.044)	-0.109 (.6228)
Education	-0.194* (.1101)	-0.180 (.1402)
Married	0.514* (.2344)	0.358 (.4059)
Has child	-0.0899 (.1454)	-0.000151 (.1773)
Currently employed	-0.213 (.1496)	-0.000393 (.1953)
Tenure in neighborhood (in months)	-0.0000551 (.0006214)	-0.000112 (.0007057)
Quality of life	-0.248*** (.06253)	-0.163** (.06873)
Know of Chicago Violence Reduction Strategy or call-in	0.154 (.1411)	-0.0833 (.1628)
Know of Project Safe Neighborhoods	-0.262* (.1444)	0.0918 (.1673)
Know of CeaseFire	0.279* (.1566)	0.468* (.2656)
Intercept	2.806** (1.135)	3.363*** (.783)
Valid N	264	208

**Source:** Urban Institute analysis of surveys of group members in Austin (D15) and Roseland (D5).

**Notes:** Each column reports coefficients from a linear regression and standard errors are in parentheses. The coefficient for the Austin group member variable can be interpreted as the change in the level of concern about violence against family from being an Austin group member as opposed to being a Roseland comparison, all other things being equal. Positive values indicate that Austin group members report higher levels of concern about violence against family than Roseland comparisons, whereas negative values indicate that they report lower levels of concern about violence against family.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

TABLE D.9

**Multivariate Linear Regression for Frequency of Precautionary Behaviors Out of Concern for Safety, Austin and Roseland Group Members**

Variable title	2012 coefficient (standard error)	2014 coefficient (standard error)
Austin group member	0.0905 (.1144)	0.0389 (.1178)
Age	-0.00922 (.0579)	0.0118 (.06887)
Male	-0.279 (.1702)	-0.228 (.1957)
Black	-0.592 (.8277)	-0.299 (.4569)
Education	-0.00815 (.08728)	-0.0971 (.1029)
Married	0.0418 (.1861)	0.241 (.2981)
Has child	-0.0658 (.1152)	-0.0984 (.1302)
Currently employed	0.137 (.1187)	0.0527 (.145)
Tenure in neighborhood (in months)	0.000142 (.0004925)	0.000368 (.0005196)
Quality of life	-0.0835* (.04955)	-0.0429 (.05042)
Know of Chicago Violence Reduction Strategy or call-in	0.153 (.1122)	-0.166 (.1202)
Know of Project Safe Neighborhoods	0.327*** (.1146)	-0.0550 (.1239)
Know of CeaseFire	0.133 (.1234)	-0.0331 (.1949)
Intercept	3.413*** (.9006)	3.347*** (.5755)
Valid N	264	205

**Source:** Urban Institute analysis of surveys of group members in Austin (D15) and Roseland (D5).

**Notes:** Each column reports coefficients from a linear regression and standard errors are in parentheses. The coefficient for the Austin group member variable can be interpreted as the change in the level of frequency of precautionary behaviors out of concern for safety from being an Austin group member as opposed to being a Roseland comparison, all other things being equal. Positive values indicate that Austin group members report higher levels of precautionary behavior out of concern for safety than Roseland comparisons, whereas negative values indicate that they report lower levels of precautionary behavior out of concern for safety.

\*\*\*  $p < 0.01$

TABLE D.10

**Multivariate Linear Regression for Certainty of Criminal Justice Punishment for Shootings,  
Belmont Cragin and Lawndale Group Members**

Variable title	2013 coefficient (standard error)	2014 coefficient (standard error)
Belmont Cragin group member	-0.274 (.1833)	-0.0125 (.1356)
Age	-0.0142 (.09289)	0.171* (.08927)
Male	0 (.)	-0.962 (.7063)
Hispanic	0.210 (.1933)	-0.223 (.1423)
Education	-0.250* (.1219)	-0.0457 (.1219)
Married	-0.155 (.2873)	0.344 (.261)
Has child	-0.269** (.127)	-0.225* (.1259)
Currently employed	-0.00947 (.1495)	0.134 (.1219)
Tenure in neighborhood (in months)	0.000673 (.0006887)	-0.000601 (.0006923)
Quality of life	-0.0105 (.05553)	-0.00136 (.06753)
Know of Chicago Violence Reduction Strategy or call-in	0.0519 (.1309)	-0.199 (.1215)
Know of Project Safe Neighborhoods	0.0119 (.1339)	0.0640 (.1269)
Know of CeaseFire	-0.167 (.1624)	-0.486*** (.1554)
Intercept	3.914*** (.319)	4.672*** (.757)
Valid N	157	157

**Source:** Urban Institute analysis of surveys of group members in Belmont Cragin (D25) and Lawndale (D10).

**Notes:** Each column reports coefficients from a linear regression and standard errors are in parentheses. The coefficient for the Belmont Cragin group member variable can be interpreted as the change in the level of certainty of criminal justice punishment for shootings from being a Belmont Cragin group member as opposed to being a Lawndale comparison, all other things being equal. Positive values indicate that Belmont Cragin group members report higher levels of certainty of criminal justice punishment for shootings than Lawndale comparisons, whereas negative values indicate that they report lower levels of certainty of punishment for shootings.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

TABLE D.11

## Multivariate Linear Regression for Legal Acceptance, Belmont Cragin and Lawndale Group Members

Variable title	2013 coefficient (standard error)	2014 coefficient (standard error)
Belmont Cragin group member	0.342 (.3326)	0.416* (.2418)
Age	-0.0385 (.1669)	-0.206 (.1593)
Male	0 (omitted)	-0.899 (1.26)
Hispanic	-0.0517 (.3507)	-0.282 (.254)
Education	0.511** (.2205)	0.0138 (.2175)
Married	0.903* (.5131)	-0.115 (.4657)
Has child	0.125 (.228)	0.287 (.2246)
Currently employed	-0.0396 (.2681)	0.235 (.2175)
Tenure in neighborhood (in months)	-0.00401*** (.001241)	-0.00114 (.001235)
Quality of life	0.277*** (.1001)	-0.143 (.1205)
Know of Chicago Violence Reduction Strategy or call-in	0.486* (.2337)	0.294 (.2168)
Know of Project Safe Neighborhoods	-0.0136 (.2422)	0.283 (.2265)
Know of CeaseFire	-0.354 (.2976)	-0.0265 (.2772)
Intercept	1.793*** (.5775)	4.414*** (1.35)
Valid N	154	157

**Source:** Urban Institute analysis of surveys of group members in Belmont Cragin (D25) and Lawndale (D10).

**Notes:** Each column reports coefficients from a linear regression and standard errors are in parentheses. The coefficient for the Belmont-Cragin group member variable can be interpreted as the change in the level of legal acceptance from being a Belmont Cragin group member as opposed to being a Lawndale comparison, all other things being equal. Positive values indicate that Belmont Cragin group members report higher levels of legal acceptance than Lawndale comparisons, whereas negative values indicate that they report lower levels of legal acceptance.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$



TABLE D.12

**Multivariate Logistic Regression for Engagement in Criminal Activities,  
Belmont Cragin and Lawndale Group Members**

Variable title	2013 coefficient (standard error)	2014 coefficient (standard error)
Belmont Cragin group member	-0.353 (.5214)	-0.431 (.5397)
Age	-0.458* (.2706)	1.072** (.4366)
Male	0 (.)	0 (.)
Hispanic	0.854 (.5635)	0.692 (.593)
Education	-0.299 (.3632)	-0.801 (.574)
Married	-0.147 (.7945)	-3.159*** (1.084)
Has child	0.751* (.3811)	0.791 (.6073)
Currently employed	-0.480 (.4386)	0.495 (.5486)
Tenure in neighborhood (in months)	-0.000226 (.001996)	-0.00342 (.003134)
Quality of life	-0.117 (.1648)	-0.305 (.2801)
Know of Chicago Violence Reduction Strategy or call-in	-0.235 (.3839)	-0.477 (.5088)
Know of Project Safe Neighborhoods	0.352 (.4003)	0.474 (.5784)
Know of CeaseFire	0.509 (.4805)	0.870 (.5883)
Intercept	1.697* (.9493)	1.696 (1.466)
Valid N	155	154

**Source:** Urban Institute analysis of surveys of group members in Belmont Cragin (D25) and Lawndale (D10).

**Notes:** Each column reports coefficients from a logistic regression and standard errors are in parentheses. The coefficient for the Belmont Cragin group member variable can be interpreted as the change in the log-odds of engagement in criminal activities from being a Belmont Cragin group member as opposed to being a Lawndale comparison, all other things being equal. Positive values indicate that Belmont Cragin group members are more likely than Lawndale comparisons to report engagement in criminal activities, whereas negative values indicate that they are less likely to report engagement in criminal activities.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

TABLE D.13

**Multivariate Linear Regression for Safety of Area Landmarks/Areas,  
Belmont Cragin and Lawndale Group Members**

Variable title	2013 coefficient (standard error)	2014 coefficient (standard error)
Belmont Cragin group member	-0.492** (.2067)	0.335** (.1546)
Age	0.169 (.1048)	0.0906 (.1011)
Male	0 (.)	-1.490* (.8)
Hispanic	-0.0207 (.218)	-0.426*** (.1625)
Education	0.0962 (.1374)	0.0130 (.1383)
Married	0.293 (.324)	0.344 (.2956)
Has child	-0.0501 (.1433)	-0.296** (.143)
Currently employed	0.215 (.1686)	-0.000194 (.1382)
Tenure in neighborhood (in months)	-0.000230 (.0007767)	0.00151* (.000789)
Quality of life	0.450*** (.06263)	0.319*** (.07647)
Know of Chicago Violence Reduction Strategy or call-in	-0.0909 (.1476)	0.160 (.1378)
Know of Project Safe Neighborhoods	-0.0660 (.1511)	0.221 (.1438)
Know of CeaseFire	0.102 (.1832)	-0.00220 (.1763)
Intercept	1.238*** (.3598)	2.969*** (.8572)
Valid N	157	156

**Source:** Urban Institute analysis of surveys of group members in Belmont Cragin (D25) and Lawndale (D10).

**Notes:** Each column reports coefficients from a linear regression and standard errors are in parentheses. The coefficient for the Belmont Cragin group member variable can be interpreted as the change in the level of safety of area landmarks from being a Belmont Cragin group member as opposed to being a Lawndale comparison, all other things being equal. Positive values indicate that Belmont Cragin group members report higher levels of safety of area landmarks than Lawndale comparisons, whereas negative values indicate that they report lower levels of safety of area landmarks.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

TABLE D.14

**Multivariate Logistic Regression for Victimization Experiences in the Neighborhood,  
Belmont Cragin and Lawndale Group Members**

Variable title	2013 coefficient (standard error)	2014 coefficient (standard error)
Belmont Cragin group member	0.170 (.7418)	-0.801 (.5734)
Age	-0.652* (.385)	-0.152 (.3787)
Male	0 (.)	0 (.)
Hispanic	0.181 (.7532)	0.666 (.6135)
Education	0.00510 (.4646)	-0.0491 (.4908)
Married	-0.307 (1.05)	0 (.)
Has child	-0.136 (.4847)	0.448 (.5039)
Currently employed	0.831 (.5512)	-0.0767 (.5273)
Tenure in neighborhood (in months)	0.00218 (.002886)	-0.00161 (.002873)
Quality of life	-0.286 (.2309)	-0.137 (.2665)
Know of Chicago Violence Reduction Strategy or call-in	-0.159 (.5055)	0.406 (.491)
Know of Project Safe Neighborhoods	-0.503 (.5391)	-0.294 (.5265)
Know of CeaseFire	-1.781*** (.5406)	0.883 (.8235)
Intercept	1.421 (1.236)	-1.238 (1.462)
Valid N	150	134

**Source:** Urban Institute analysis of surveys of group members in Belmont Cragin (D25) and Lawndale (D10).

**Notes:** Each column reports coefficients from a logistic regression and standard errors are in parentheses. The coefficient for the Belmont Cragin group member variable can be interpreted as the change in the log-odds of victimization experiences from being a Belmont Cragin group member as opposed to being a Lawndale comparison, all other things being equal. Positive values indicate that Belmont Cragin group members are more likely than Lawndale comparisons to report victimization experiences, whereas negative values indicate that they are less likely to report victimization experiences.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

TABLE D.15

**Multivariate Logistic Regression for Knowledge of People Who Have Been Recently Victimized,  
Belmont Cragin and Lawndale Group Members**

Variable title	2013 coefficient (standard error)	2014 coefficient (standard error)
Belmont Cragin group member	-1.036* (.5859)	0.162 (.5151)
Age	-0.151 (.3139)	-0.502 (.3312)
Male	0 (.)	0 (.)
Hispanic	0.981 (.6196)	0.204 (.5382)
Education	-0.813* (.4356)	-0.700 (.4741)
Married	-0.0345 (.8953)	-1.647* (.9143)
Has child	-0.795* (.4306)	1.208** (.5238)
Currently employed	-0.320 (.4774)	-0.741* (.4439)
Tenure in neighborhood (in months)	0.00284 (.002374)	0.00473* (.00259)
Quality of life	0.000785 (.1888)	-0.223 (.2512)
Know of Chicago Violence Reduction Strategy or call-in	-0.469 (.447)	-0.688 (.4591)
Know of Project Safe Neighborhoods	0.269 (.4605)	-0.370 (.4809)
Know of CeaseFire	0.618 (.5384)	0.251 (.547)
Intercept	2.951*** (1.143)	3.382** (1.35)
Valid N	157	155

**Source:** Urban Institute analysis of surveys of group members in Belmont Cragin (D25) and Lawndale (D10).

**Notes:** Each column reports coefficients from a logistic regression and standard errors are in parentheses. The coefficient for the Belmont Cragin group member variable can be interpreted as the change in the log-odds of having knowledge of people who have been recently victimized from being a Belmont Cragin group member as opposed to being a Lawndale comparison, all other things being equal. Positive values indicate that Belmont Cragin group members are more likely than Lawndale comparisons to report knowledge of people who have been recently victimized, whereas negative values indicate that they are less likely to report knowledge of people who have been recently victimized.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

TABLE D.16

**Multivariate Linear Regression for Concern about Becoming Victims of Violence,  
Belmont Cragin and Lawndale Group Members**

Variable title	2013 coefficient (standard error)	2014 coefficient (standard error)
Belmont Cragin group member	0.343 (.2487)	-0.244 (.1945)
Age	-0.188 (.126)	-0.192 (.1303)
Male	0 (.)	-0.924 (1.012)
Hispanic	0.0870 (.2623)	0.259 (.2049)
Education	0.173 (.1654)	-0.352** (.176)
Married	-0.00300 (.3898)	-0.205 (.3742)
Has child	-0.0796 (.1724)	0.289 (.1837)
Currently employed	0.153 (.2028)	-0.00420 (.1767)
Tenure in neighborhood (in months)	0.000505 (.0009345)	-0.000834 (.0009922)
Quality of life	-0.266*** (.07536)	-0.0854 (.09877)
Know of Chicago Violence Reduction Strategy or call-in	-0.0465 (.1776)	-0.0941 (.1743)
Know of Project Safe Neighborhoods	0.115 (.1817)	-0.0983 (.1824)
Know of CeaseFire	-0.227 (.2204)	0.324 (.2285)
Intercept	3.196*** (.4329)	4.589*** (1.087)
Valid N	157	155

**Source:** Urban Institute analysis of surveys of group members in Belmont Cragin (D25) and Lawndale (D10).

**Notes:** Each column reports coefficients from a linear regression and standard errors are in parentheses. The coefficient for the Belmont Cragin group member variable can be interpreted as the change in the level of concern about violence against them from being a Belmont Cragin group member as opposed to being a Lawndale comparison, all other things being equal. Positive values indicate that Belmont Cragin group members report higher levels of concern about violence against them than Lawndale comparisons, whereas negative values indicate that they report lower levels of concern about violence against them.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

TABLE D.17

**Multivariate Linear Regression for Concern about Violence against Family,  
Belmont Cragin and Lawndale Group Members**

Variable title	2013 coefficient (standard error)	2014 coefficient (standard error)
Belmont Cragin group member	-0.0259 (.2491)	-0.284 (.2016)
Age	-0.136 (.1263)	-0.189 (.1351)
Male	0 (.)	-0.418 (1.049)
Hispanic	-0.0730 (.2627)	0.289 (.2124)
Education	0.153 (.1656)	-0.170 (.1825)
Married	0.123 (.3905)	0.183 (.388)
Has child	-0.257 (.1727)	0.190 (.1905)
Currently employed	0.309 (.2031)	0.103 (.1832)
Tenure in neighborhood (in months)	-0.000671 (.000936)	-0.0000578 (.001029)
Quality of life	-0.180** (.07548)	-0.116 (.1024)
Know of Chicago Violence Reduction Strategy or call-in	0.123 (.1779)	0.113 (.1807)
Know of Project Safe Neighborhoods	0.195 (.1821)	0.0749 (.1891)
Know of CeaseFire	-0.287 (.2208)	0.176 (.2369)
Intercept	3.213*** (.4336)	3.512*** (1.128)
Valid N	157	155

**Source:** Urban Institute analysis of surveys of group members in Belmont Cragin (D25) and Lawndale (D10).

**Notes:** Each column reports coefficients from a linear regression and standard errors are in parentheses. The coefficient for the Belmont Cragin group member variable can be interpreted as the change in the level of concern about violence against family from being a Belmont Cragin group member as opposed to being a Lawndale comparison, all other things being equal. Positive values indicate that Belmont Cragin group members report higher levels of concern about violence against family than Lawndale comparisons, whereas negative values indicate that they report lower levels of concern about violence against family.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

TABLE D.18

**Multivariate Linear Regression for Frequency of Precautionary Behaviors Out of Concern for Safety, Belmont Cragin and Lawndale Group Members**

Variable title	2013 coefficient (standard error)	2014 coefficient (standard error)
Belmont Cragin group member	0.0750 (.1919)	-0.0755 (.1636)
Age	-0.126 (.09725)	-0.0420 (.1098)
Male	0 (.)	-0.832 (.8428)
Hispanic	0.0649 (.2024)	0.331* (.1721)
Education	0.152 (.1276)	-0.117 (.1486)
Married	-0.197 (.3008)	-0.289 (.3119)
Has child	0.0487 (.133)	0.220 (.1536)
Currently employed	-0.118 (.1565)	-0.00172 (.148)
Tenure in neighborhood (in months)	0.0000271 (.000721)	-0.000122 (.0008263)
Quality of life	-0.131** (.05814)	-0.00492 (.08242)
Know of Chicago Violence Reduction Strategy or call-in	0.0284 (.1371)	0.202 (.1451)
Know of Project Safe Neighborhoods	0.0544 (.1402)	0.101 (.1522)
Know of CeaseFire	-0.245 (.1701)	-0.0263 (.1907)
Intercept	2.987*** (.334)	3.355*** (.9068)
Valid N	157	154

**Source:** Urban Institute analysis of surveys of group members in Belmont Cragin (D25) and Lawndale (D10).

**Notes:** Each column reports coefficients from a linear regression and standard errors are in parentheses. The coefficient for the Belmont Cragin group member variable can be interpreted as the change in the level of frequency of precautionary behaviors out of concern for safety from being a Belmont Cragin group member as opposed to being a Lawndale comparison, all other things being equal. Positive values indicate that Belmont Cragin group members report higher levels of frequency of precautionary behaviors out of concern for safety than Lawndale comparisons, whereas negative values indicate that they report lower levels of frequency of precautionary behaviors out of concern for safety.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

TABLE D.19

**Multivariate Linear Regression for Certainty of Criminal Justice Punishment for Shootings,  
Austin and Roseland Community Residents**

Variable title	2012 coefficient (standard error)	2014 coefficient (standard error)
Austin community residents	0.0862 (0.1039)	-0.1280 (0.1071)
Age	0.1700*** (0.0469)	0.1390*** (0.0501)
Male	0.0491 (0.1051)	0.1510 (0.1048)
Black	-0.4150* (0.2401)	-0.3070 (0.2569)
Education	0.1830*** (0.0675)	0.0496 (0.0688)
Married	0.0764 (0.1266)	-0.1520 (0.1354)
Has child	-0.1840 (0.1453)	0.2170 (0.1374)
Currently employed	-0.1150 (0.1046)	0.0015 (0.1088)
Tenure in neighborhood (in months)	-0.0007* (0.0004)	-0.0004 (0.0003)
Quality of life	0.4560*** (0.0464)	0.5360*** (0.0471)
Know of Chicago Violence Reduction Strategy or call-in	0.2080* (0.1107)	0.0345 (0.1062)
Know of Project Safe Neighborhoods	0.0161 (0.1118)	0.0729 (0.1095)
Know of CeaseFire	-0.1440 (0.1400)	0.0554 (0.1999)
Intercept	1.3520*** (0.3318)	1.239*** (0.3909)
Valid N	290	215

**Source:** Urban Institute analysis of surveys of community residents in Austin (D15) and Roseland (D5).

**Notes:** Each column reports coefficients from a linear regression and standard errors are in parentheses. The coefficient for the Austin community resident variable can be interpreted as the change in the level of certainty of criminal justice punishment of a shooting from being an Austin community resident as opposed to being a Roseland comparison, all other things being equal.

Positive values indicate that Austin community residents report higher levels of certainty of punishment of a shooting than Roseland comparisons, whereas negative values indicate that they report lower levels of certainty of punishment for a shooting.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$



TABLE D.20

**Multivariate Logistic Regression for Victimization Experiences,  
Austin and Roseland Community Residents**

<b>Variable title</b>	<b>2012 coefficient (standard error)</b>	<b>2014 coefficient (standard error)</b>
Austin community residents	-0.0210 (0.3291)	-0.7970 (0.5521)
Age	-0.1230 (0.1439)	-0.3530 (0.2449)
Male	0.2290 (0.3353)	0.8460 (0.6169)
Black	-0.1570 (0.7062)	0 (omitted)
Education	-0.2600 (0.2257)	-0.3820 (0.4295)
Married	-0.3990 (0.4286)	-0.2370 (0.8923)
Has child	0.0920 (0.4499)	-0.5230 (0.6500)
Currently employed	-0.0680 (0.3260)	-1.4830** (0.7302)
Tenure in neighborhood (in months)	-0.0002 (0.0012)	0.0010 (0.0017)
Quality of life	-0.2380 (0.1481)	-0.8010*** (0.2563)
Know of Chicago Violence Reduction Strategy or call-in	-0.0700 (0.3373)	0.8340 (0.5693)
Know of Project Safe Neighborhoods	-0.2060 (0.3446)	0.0145 (0.5798)
Know of CeaseFire	0.7540 (0.4922)	0.1530 (1.194)
Intercept	-0.2080 (1.0630)	1.709 (1.654)
Valid N	264	202

**Source:** Urban Institute analysis of surveys of community residents in Austin (D15) and Roseland (D5).

**Notes:** Each column reports coefficients from a logistic regression and standard errors are in parentheses. The coefficient for the Austin community resident variable can be interpreted as the change in the log-odds of reporting victimization experiences from being an Austin community resident as opposed to being a Roseland comparison, all other things being equal. Positive values indicate that Austin community residents are more likely than Roseland comparisons to report victimization experiences, whereas negative values indicate that they are less likely to report victimization experiences.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

TABLE D.21

**Multivariate Logistic Regression for Knowledge of People Who Have Been Recently Victimized,  
Austin and Roseland Community Residents**

Variable title	2012 coefficient (standard error)	2014 coefficient (standard error)
Austin community residents	-0.5680** (0.2849)	0.3600 (0.3151)
Age	-0.3340*** (0.1289)	-0.3350** (0.1491)
Male	-0.0043 (0.2861)	0.3040 (0.3071)
Black	-0.0592 (0.6395)	0.0399 (0.7714)
Education	0.0620 (0.1822)	0.1510 (0.2040)
Married	-0.4600 (0.3233)	0.0067 (0.3878)
Has child	-0.4880 (0.4308)	-0.2130 (0.4204)
Currently employed	0.2380 (0.2863)	-0.4760 (0.3212)
Tenure in neighborhood (in months)	-0.0002 (0.0009)	0.0011 (0.0010)
Quality of life	-0.3310*** (0.1262)	-0.1960 (0.1395)
Know of Chicago Violence Reduction Strategy or call-in	0.1810 (0.3041)	0.1760 (0.3163)
Know of Project Safe Neighborhoods	0.5570* (0.3145)	0.1370 (0.3259)
Know of CeaseFire	0.8000** (0.3592)	0.9340 (0.5713)
Intercept	2.6890*** (0.9159)	0.6010 (1.154)
Valid N	292	216

**Source:** Urban Institute analysis of surveys of community residents in Austin (D15) and Roseland (D5).

**Notes:** Each column reports coefficients from a logistic regression and standard errors are in parentheses. The coefficient for the Austin community resident variable can be interpreted as the change in the log-odds of reporting knowledge of people who have been recently victimized from being an Austin community resident as opposed to being a Roseland comparison, all other things being equal. Positive values indicate that Austin community residents are more likely than Roseland comparisons to report having knowledge of people who have been recently victimized, whereas negative values indicate that they are less likely to report having knowledge of people who have been recently victimized.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

TABLE D.22

**Multivariate Linear Regression for Frequency of Precautionary Behaviors Out of Concern for Safety, Austin and Roseland Community Residents**

Variable title	2012 coefficient (standard error)	2014 coefficient (standard error)
Austin community residents	0.0196 (0.0904)	0.1330 (0.1156)
Age	0.0685* (0.0406)	0.0428 (0.0543)
Male	-0.3690*** (0.0913)	-0.3150*** (0.1134)
Black	0.5140** (0.2097)	0.5180* (0.2795)
Education	-0.1940*** (0.0589)	-0.1040 (0.0740)
Married	-0.1370 (0.1089)	0.0276 (0.1464)
Has child	0.1720 (0.1256)	-0.1790 (0.1494)
Currently employed	0.0863 (0.0911)	0.0264 (0.1174)
Tenure in neighborhood (in months)	0.0002 (0.0003)	0.0003 (0.0004)
Quality of life	-0.2060*** (0.0402)	-0.2610*** (0.0509)
Know of Chicago Violence Reduction Strategy or call-in	-0.0568 (0.0965)	-0.1140 (0.1149)
Know of Project Safe Neighborhoods	-0.0262 (0.0976)	0.0625 (0.1187)
Know of CeaseFire	-0.2260* (0.1213)	0.0751 (0.2046)
Intercept	3.1090*** (0.2901)	2.9850*** (0.4190)
Valid N	294	220

**Source:** Urban Institute analysis of surveys of community residents in Austin (D15) and Roseland (D5).

**Notes:** Each column reports coefficients from a linear regression and standard errors are in parentheses. The coefficient for the Austin community resident variable can be interpreted as the change in the level of frequency of precautionary behaviors out of concern for safety from being an Austin community resident as opposed to being a Roseland comparison, all other things being equal. Positive values indicate that Austin community residents report higher levels of frequency of precautionary behaviors out of concern for safety than Roseland comparisons, whereas negative values indicate that they report lower levels.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

TABLE D.23

**Multivariate Linear Regression for Willingness to Participate in Crime Control Activities,  
Austin and Roseland Community Residents**

Variable title	2012 coefficient (standard error)	2014 coefficient (standard error)
Austin community residents	0.2210* (0.1234)	-0.3470** (0.1352)
Age	0.3010*** (0.0554)	0.1660** (0.0638)
Male	-0.3070** (0.1243)	-0.1990 (0.1327)
Black	0.1450 (0.2853)	-0.4870 (0.3285)
Education	0.0694 (0.0801)	0.1150 (0.0868)
Married	0.2770* (0.1482)	0.1170 (0.1721)
Has child	0.3180* (0.1718)	0.1040 (0.1755)
Currently employed	-0.0327 (0.1243)	0.3540** (0.1380)
Tenure in neighborhood (in months)	-0.0002 (0.0004)	-0.0001 (0.0004)
Quality of life	0.1080* (0.0551)	0.1390** (0.0594)
Know of Chicago Violence Reduction Strategy or call-in	0.2850** (0.1314)	0.1690 (0.1350)
Know of Project Safe Neighborhoods	0.2210* (0.1333)	0.2230 (0.1395)
Know of CeaseFire	0.0389 (0.1650)	0.0276 (0.2402)
Intercept	1.4420*** (0.3959)	2.6610*** (0.4897)
Valid N	292	221

**Source:** Urban Institute analysis of surveys of community residents in Austin (D15) and Roseland (D5).

**Notes:** Each column reports coefficients from a linear regression and standard errors are in parentheses. The coefficient for the Austin community resident variable can be interpreted as the change in the level of willingness to participate in crime control activities from being an Austin community resident as opposed to being a Roseland comparison, all other things being equal. Positive values indicate that Austin community residents report higher levels of willingness to participate in crime control activities than Roseland comparisons, whereas negative values indicate that they report lower levels of willingness to participate in crime control activities.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

TABLE D.24

**Multivariate Linear Regression for Certainty of Criminal Justice Punishment for Shootings,  
Belmont Cragin and Lawndale Community Residents**

Variable title	2013 coefficient (standard error)	2014 coefficient (standard error)
Belmont Cragin community resident	0.110 (.114)	0.202 (.1366)
Age	0.156*** (.0479)	-0.0587 (.05432)
Male	0.0344 (.113)	0.0303 (.1239)
Hispanic	0.0657 (.1217)	-0.0892 (.1349)
Education	-0.0724 (.07445)	0.157* (.08283)
Married	-0.195 (.1393)	-0.00730 (.1353)
Has child	0.0522 (.1432)	0.247 (.1692)
Currently employed	-0.0285 (.1185)	-0.180 (.1266)
Tenure in neighborhood (in months)	-0.000132 (.0003546)	0.000509 (.000426)
Quality of life	0.357*** (.04824)	0.516*** (.05812)
Know of Chicago Violence Reduction Strategy or call-in	0.00246 (.1247)	-0.0414 (.1301)
Know of Project Safe Neighborhoods	0.0744 (.1288)	-0.0696 (.1298)
Know of CeaseFire	-0.00418 (.1407)	-0.183 (.1465)
Intercept	1.755*** (.3177)	1.657*** (.3169)
Valid N	225	230

**Source:** Urban Institute analysis of surveys of community residents in Belmont Cragin (D25) and Lawndale (D10).

**Notes:** Each column reports coefficients from a linear regression and standard errors are in parentheses. The coefficient for the Belmont Cragin community resident variable can be interpreted as the change in the level of certainty of criminal justice punishment for a shooting from being a Belmont Cragin community resident as opposed to being a Lawndale comparison, all other things being equal. Positive values indicate that Belmont Cragin community residents report higher levels of certainty of criminal justice punishment for a shooting than Lawndale comparisons, whereas negative values indicate that they report lower levels of certainty.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

TABLE D.25

**Multivariate Logistic Regression for Victimization Experiences,  
Belmont Cragin and Lawndale Community Residents**

Variable title	2013 coefficient (standard error)	2014 coefficient (standard error)
Belmont Cragin community resident	0.119 (.5104)	0.395 (.4945)
Age	-0.0678 (.2225)	-0.0135 (.1873)
Male	0.326 (.4924)	0.175 (.4436)
Hispanic	0.442 (.5179)	0.900* (.5086)
Education	0.0700 (.3159)	0.0820 (.307)
Married	0.813 (.6422)	-1.401** (.6045)
Has child	-1.472** (.6261)	0.0148 (.5838)
Currently employed	0.411 (.5453)	-0.657 (.4657)
Tenure in neighborhood (in months)	0.000396 (.001599)	-0.00227 (.001656)
Quality of life	-0.740*** (.2326)	-0.238 (.2007)
Know of Chicago Violence Reduction Strategy or call-in	1.381** (.6209)	0.0764 (.4603)
Know of Project Safe Neighborhoods	-1.030* (.6115)	-0.00553 (.4578)
Know of CeaseFire	0.529 (.6991)	1.185** (.5934)
Intercept	-0.456 (1.359)	-1.829 (1.132)
Valid N	221	213

**Source:** Urban Institute analysis of surveys of community residents in Belmont Cragin (D25) and Lawndale (D10).

**Notes:** Each column reports coefficients from a logistic regression and standard errors are in parentheses. The coefficient for the Belmont Cragin community resident variable can be interpreted as the change in the log-odds of victimization experiences from being a Belmont Cragin community resident as opposed to being a Lawndale comparison, all other things being equal. Positive values indicate that Belmont Cragin community residents are more likely than Lawndale comparisons to report victimization experiences, whereas negative values indicate that they are less likely to report victimization experiences.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

TABLE D.26

**Multivariate Logistic Regression for Knowledge of People Who Have Been Recently Victimized,  
Belmont Cragin and Lawndale Community Residents**

Variable title	2013 coefficient (standard error)	2014 coefficient (standard error)
Belmont Cragin community resident	0.129 (.3086)	-0.676* (.3776)
Age	-0.153 (.1302)	-0.323** (.1499)
Male	0.480 (.3083)	0.190 (.3371)
Hispanic	-0.0419 (.333)	0.587 (.3824)
Education	0.134 (.2045)	0.219 (.2299)
Married	-0.228 (.3718)	0.199 (.3675)
Has child	-0.775* (.4025)	-0.198 (.4765)
Currently employed	-0.0898 (.3198)	0.0722 (.3378)
Tenure in neighborhood (in months)	0.000275 (.0009659)	0.000813 (.001171)
Quality of life	-0.442*** (.1348)	-0.420** (.166)
Know of Chicago Violence Reduction Strategy or call-in	0.366 (.3393)	-0.479 (.3486)
Know of Project Safe Neighborhoods	0.178 (.3469)	0.870** (.3671)
Know of CeaseFire	0.389 (.3778)	0.564 (.3772)
Intercept	1.957** (.8802)	2.528*** (.9452)
Valid N	225	231

**Source:** Urban Institute analysis of surveys of community residents in Belmont Cragin (D25) and Lawndale (D10).

**Notes:** Each column reports coefficients from a logistic regression and standard errors are in parentheses. The coefficient for the Belmont Cragin community resident variable can be interpreted as the change in the log-odds of knowledge of people who have been victimized in the prior 12 months from being a Belmont Cragin community resident as opposed to being a Lawndale comparison, all other things being equal. Positive values indicate that Belmont Cragin community residents are more likely than Lawndale comparisons to report knowledge of people who have been recently victimized, whereas negative values indicate that they are less likely to report knowledge of people who have been recently victimized.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

TABLE D.27

**Multivariate Linear Regression for Frequency of Precautionary Behaviors Out of Concern for Safety, Belmont Cragin and Lawndale Community Residents**

Variable title	2013 coefficient (standard error)	2014 coefficient (standard error)
Belmont Cragin community resident	0.0594 (.1195)	-0.0913 (.1166)
Age	-0.103** (.05018)	0.0545 (.04637)
Male	-0.213* (.1183)	-0.000599 (.1056)
Hispanic	-0.0471 (.1274)	0.271** (.1151)
Education	-0.0219 (.07798)	0.0477 (.0706)
Married	0.310** (.1459)	-0.179 (.1152)
Has child	0.130 (.15)	0.0228 (.1445)
Currently employed	-0.140 (.1242)	-0.0941 (.1078)
Tenure in neighborhood (in months)	0.000520 (.0003715)	-0.000473 (.0003625)
Quality of life	-0.224*** (.05053)	-0.198*** (.04933)
Know of Chicago Violence Reduction Strategy or call-in	0.0610 (.1306)	-0.0328 (.1108)
Know of Project Safe Neighborhoods	0.246* (.1349)	-0.0161 (.1108)
Know of CeaseFire	-0.0585 (.1474)	0.225* (.1248)
Intercept	3.133*** (.3328)	2.638*** (.2706)
Valid N	225	231

**Source:** Urban Institute analysis of surveys of community residents in Belmont Cragin (D25) and Lawndale (D10).

**Notes:** Each column reports coefficients from a linear regression and standard errors are in parentheses. The coefficient for the Belmont Cragin community resident variable can be interpreted as the change in the level of frequency of precautionary behaviors out of concern for safety from being a Belmont Cragin community resident as opposed to being a Lawndale comparison, all other things being equal. Positive values indicate that Belmont Cragin community residents report higher levels of frequency of precautionary behaviors out of concern for safety than Lawndale comparisons, whereas negative values indicate that they report lower levels of frequency of precautionary behaviors out of concern for safety.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$



TABLE D.28

**Multivariate Linear Regression for Willingness to Participate in Crime Control Activities,  
Belmont Cragin and Lawndale Community Residents**

Variable title	2013 coefficient (standard error)	2014 coefficient (standard error)
Belmont Cragin community resident	0.225 (.1387)	-0.118 (.1465)
Age	0.184*** (.0583)	0.163*** (.05781)
Male	0.0017 (.1373)	-0.0422 (.1321)
Hispanic	0.371** (.1479)	0.118 (.1449)
Education	0.0331 (.0899)	0.161* (.0883)
Married	0.0740 (.1691)	0.236 (.144)
Has child	0.169 (.174)	0.0763 (.1807)
Currently employed	-0.131 (.1439)	-0.185 (.1351)
Tenure in neighborhood (in months)	0.0001 (.0004)	-0.00112** (.0005)
Quality of life	0.0653 (.0585)	0.0283 (.0616)
Know of Chicago Violence Reduction Strategy or call-in	0.0761 (.1513)	-0.228 (.1391)
Know of Project Safe Neighborhoods	0.0058 (.1566)	0.0789 (.1391)
Know of CeaseFire	0.402* (.17)	0.0253 (.1558)
Intercept	2.228*** (.3858)	3.593*** (.3374)
Valid N	226	230

**Source:** Urban Institute analysis of surveys of community residents in Belmont Cragin (D25) and Lawndale (D10).

**Notes:** Each column reports coefficients from a linear regression and standard errors are in parentheses. The coefficient for the Belmont Cragin community resident variable can be interpreted as the change in the level of willingness to participate in crime control activities from being a Belmont Cragin community resident as opposed to being a Lawndale comparison, all other things being equal. Positive values indicate that Belmont Cragin community residents report higher levels of willingness to participate in crime control activities than Lawndale comparisons, whereas negative values indicate that they report lower levels of willingness to participate in crime control activities.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

TABLE D.29

**Multivariate Linear Regression for Community Cooperation with Police,  
Austin and Roseland Law Enforcement Officers**

Variable title	2012 coefficient (standard error)	2014 coefficient (standard error)
Austin law enforcement officer	0.0544 (0.1151)	-0.1120 (0.0875)
Age	0.1150 (0.0925)	-0.1020 (0.0782)
Male	-0.1130 (0.1195)	-0.0325 (0.1140)
Nonwhite	0.1430 (0.1074)	0.1570* (0.0906)
Education	0.1220 (0.0812)	0.0629 (0.0647)
Tenure at Chicago Police Department (total months)	-0.0002 (0.0012)	0.0021* (0.0011)
Tenure in district (total months)	-0.0010 (0.0010)	-0.0012 (0.0010)
Patrol officer	0.1170 (0.1340)	-0.0754 (0.1045)
Know of Chicago Violence Reduction Strategy or call-in	0.0943 (0.1101)	0.1490 (0.1362)
Know of Project Safe Neighborhoods	-0.0820 (0.1151)	0.0040 (0.0867)
Intercept	1.5730*** (0.4701)	2.2690*** (0.3207)
Valid N	121	125

**Source:** Urban Institute analysis of surveys of law enforcement officers in Austin (D15) and Roseland (D5).

**Notes:** Each column reports coefficients from a linear regression and standard errors are in parentheses. The coefficient for the Austin law enforcement officer variable can be interpreted as the change in the level of reported community cooperation with police from being an Austin law enforcement officer as opposed to being a Roseland comparison, all other things being equal. Positive values indicate that Austin law enforcement officers report higher levels of community cooperation with police than Roseland comparisons, whereas negative values indicate that they report lower levels of community cooperation with police.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

TABLE D.30

**Multivariate Linear Regression for Community Cooperation with Police,  
Belmont Cragin and Lawndale Law Enforcement Officers**

Variable title	2013 coefficient (standard error)	2014 coefficient (standard error)
Belmont Cragin law enforcement officer	0.3360*** (0.0880)	0.2140** (0.0952)
Age	0.1410* (0.0838)	0.0998 (0.0839)
Male	0.1060 (0.1081)	-0.0728 (0.1190)
Nonwhite	-0.1150 (0.0834)	0.0019 (0.0925)
Education	0.0493 (0.0666)	-0.1150 (0.0854)
Tenure at Chicago Police Department (total months)	-0.0019** (0.0010)	0.0010 (0.0011)
Tenure in district (total months)	0.0021*** (0.0008)	-0.0023** (0.0010)
Patrol officer	-0.0283 (0.0952)	0.1570 (0.1252)
Know of Chicago Violence Reduction Strategy or call-in	-0.1530 (0.1164)	0.1170 (0.1206)
Know of Project Safe Neighborhoods	-0.1210 (0.0843)	0.0910 (0.1021)
Intercept	1.936*** (0.3287)	2.262*** (0.4098)
Valid N	150	167

**Source:** Urban Institute analysis of surveys of law enforcement officers in Belmont Cragin (D25), and Lawndale (D10).

**Notes:** Each column reports coefficients from a linear regression and standard errors are in parentheses. The coefficient for the Belmont Cragin law enforcement officer variable can be interpreted as the change in the level of community cooperation with police from being a Belmont Cragin officer as opposed to being a Lawndale comparison, all other things being equal. Positive values indicate that Belmont Cragin officers report higher levels of community cooperation with police than Lawndale comparisons, whereas negative values indicate that they report lower levels of community cooperation with police.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

# Notes

1. A gang audit emerges from conversations between police, community stakeholders, researchers, and other experts about which gangs/groups have conflicts with whom, which groups are present on which blocks or areas, where group members spend time, and recent shootings and violent disputes between gangs. For a more thorough discussion of the gang/group audit process, see Andrew V. Papachristos, "What Is a 'Gang Audit'?", *The Blog, Huffington Post*, July 5, 2012 (updated September 4, 2012, accessed February 1, 2017), [http://www.huffingtonpost.com/andrew-papachristos/what-is-a-gang-audit\\_b\\_1651386.html](http://www.huffingtonpost.com/andrew-papachristos/what-is-a-gang-audit_b_1651386.html).
2. For more information on the reasoning behind use of the term "group," see NNSC (2016, 2).
3. Andrew V. Papachristos was at the University of Massachusetts Amherst when the evaluation began and changed his organizational affiliation to Yale University during the study period.
4. For more detail on the use of social network analysis in VRS, see Margolis and Williamson (2011).
5. A component is a completely connected unit, or graph, in which members can all reach each other but cannot reach members outside the unit.
6. The presence of a single large component is a common property of many networks. See Papachristos (2014).
7. We gathered a sufficiently large sample of residents and police officers at wave 2 because our survey efforts did not rely on address data from CPD. But, for balance, findings from the outcome evaluation for group members, community residents, and police officers use the first and third survey waves only.
8. The City of Chicago Department of Family Services set aside 40 slots for VRS call-in attendees in its Enhanced Neighborhood Clean-Up Program, an intensive transitional jobs program running from June 1, 2013, to December 31, 2014.
9. For more detail on the group-level analysis and results, see Papachristos and Kirk (2015). The section summarizes the results originally published there.
10. Project Safe Neighborhoods and Chicago CeaseFire/Cure Violence are two antiviolenence efforts in Chicago that are distinct and independent from Chicago VRS, but could nonetheless influence members' self-reported perceptions and behaviors.
11. Chicago CeaseFire is now known as Cure Violence.
12. Surveyed group members were more familiar with PSN and Chicago CeaseFire/Cure Violence than VRS. Most of those surveyed in the treatment and comparison districts at all waves knew about Chicago CeaseFire/Cure Violence (ranging from 67 percent to 91 percent).
13. Because the police officer surveys occurred at roll call meetings and refusal rates were low, receptivity and response rate variation by district is a lesser concern for the police officer surveys.
14. See Desmond, Papachristos, and Kirk (2016) for an example of how powerfully such events can impact community willingness to work with law enforcement.

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