



# Impact Evaluation of USAID's Community-Based Crime and Violence Prevention Approach in Central America: **Regional Report for El Salvador, Guatemala, Honduras and Panama.**

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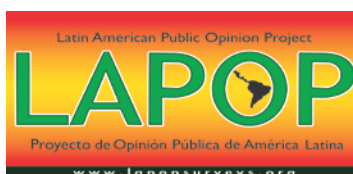
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**USAID**  
FROM THE AMERICAN PEOPLE

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### List of Acronyms

ADESCO	Asociación de Desarrollo Comunal (Community Development Association)
CARSI	Central America Regional Security Initiative
COCODES	Consejo Comunitario de Desarrollo (Community Development Committee, Guatemala)
CRE	Cluster Randomized Experiment
DG	Democracy and Governance
DID	Difference-in-Difference
IRB	Institutional Review Board (for the protection of human subjects)
NGO	Non-Governmental Organization
LAPOP	Latin American Public Opinion Project
Maras	Gangs
RE	Randomized Experimental (Design)
UNODC	United Nations Office on Drugs and Crime
USAID	United States Agency for International Development



### Executive Summary

#### *I. Background*

The countries of Central America — especially “the Northern Triangle” of Guatemala, El Salvador, and Honduras — are among the most criminally violent nations in the world. As part of the U.S. Government’s (USG) Central America Regional Security Initiative (CARSI), the U.S. Agency for International Development (USAID) has designed and implemented a set of programs to improve citizen security in Central America by strengthening community capacity to combat crime and by creating educational and employment opportunities for at-risk youth.<sup>1</sup> USAID’s crime prevention work has been implemented through its field Missions in five countries: El Salvador, Guatemala, Honduras, Nicaragua, and Panama.

**USAID’s crime prevention programs in Central America have been a success. The outcomes in the treatment communities improved more (or declined less) than they would have if USAID’s programs had not been administered.**

community-based crime prevention, in contrast to the traditionally more common law enforcement, or *mano dura* (“iron fist”), approach to addressing the widespread crime and violence permeating Central America. The crime prevention approach attempts to address the root causes of crime, rather than deal with crime after it has become endemic.

This multi-method, multi-country, multi-year evaluation was designed to contribute to an understanding of the effectiveness of USAID’s community-based crime and violence prevention approach. This package of interventions – that is, the “treatment” in this impact evaluation – includes activities such as planning by municipal-level committees; crime observatories and data collection; crime prevention through environmental design (such as improved street lighting, graffiti removal, cleaned up public spaces); programs for at-risk youth (such as outreach centers, workforce development, mentorships); and community policing. USAID’s community-based crime prevention projects are inherently cross-sectoral. That is, they integrate education and workforce development, economic growth and employment, public health, and governance interventions.

USAID/Washington, via its Cooperative Agreement with the Latin American Public Opinion Project (LAPOP) at Vanderbilt University,<sup>2</sup> asked LAPOP to design and carry out an impact evaluation of the crime prevention interventions under CARSI in Guatemala, El Salvador, Honduras<sup>3</sup>, and Panama.

This evaluation is part of a broader effort to determine the effectiveness of

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<sup>1</sup> See <http://www.whitehouse.gov/ondcp/central-america>, <http://www.state.gov/documents/organization/148416.pdf>.

<sup>2</sup> AID-598-A-00-06-00061.

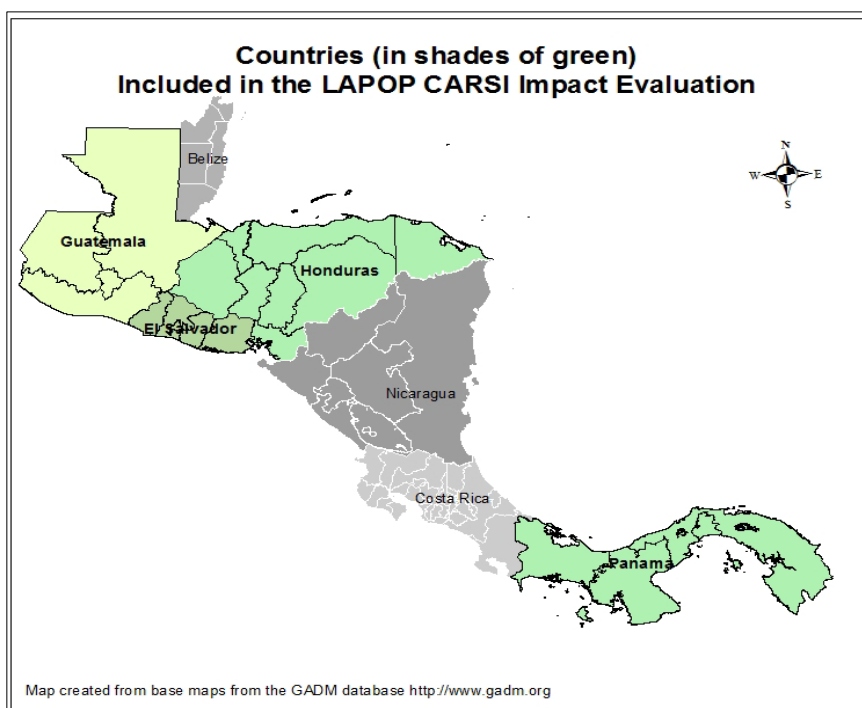
<sup>3</sup> The program in Honduras was delayed because of political unrest there in 2009, and therefore in this regional report the Honduras study includes only two rounds, rather than the three rounds carried out in Guatemala, El Salvador, and Panama. Variations in the methodology employed in Honduras and Panama were necessary in order to be responsive to changing USAID requirements. The individual country reports explain those differences.

## Impact Evaluation: Regional Report

This scientifically rigorous impact evaluation is based on recommendations found in the comprehensive study by the National Academy of Sciences (National Research Council 2008).<sup>4</sup> It presents a summary of the main findings for the region as a whole. For each of the four focus countries, a more extensive, detailed country-level report has been prepared and is available online at <http://www.vanderbilt.edu/lapop/carsi-study.php>.

### II. Main Findings

The main finding, on average, of this multi-year impact evaluation of the community-based<sup>5</sup> interventions is that *in several key respects the programs have been a success. Specifically, the outcomes in the treatment communities improved more (or declined less) than they would have if USAID's programs had not been administered.* We base this conclusion on the direct evidence we have from the extensive survey data gathered from more than 29,000 respondents living in 127 treatment and control neighborhoods and by 848 qualitative stakeholder interviews and 44 focus groups.



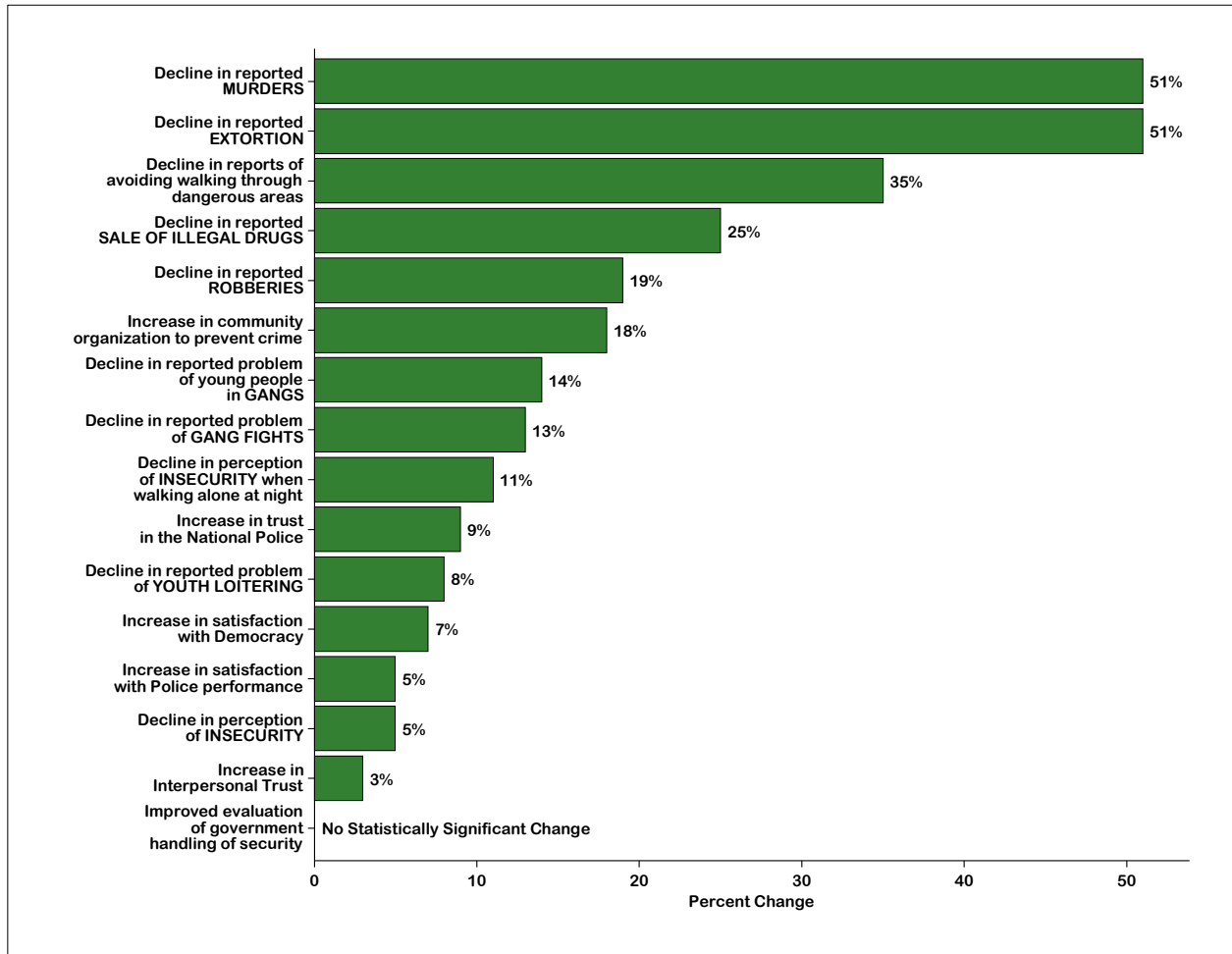
### Quantitative Findings:

The overall quantitative findings are summarized in Figure 1 below. It lists the ways in which the evaluated programs had an impact, and percentage change in each measured outcome attributable to the programs on the treated communities across the four countries under study.

<sup>4</sup> One of the authors of this report, Mitchell A. Seligson, was a member of the National Academy of Science committee that wrote the study cited above.

<sup>5</sup> Throughout this report, the term “community” is used interchangeably with “neighborhood.”

## Impact Evaluation: Regional Report



**Figure 1. Expected Impact of Community-based Crime Prevention Programs in Central America: Percent Change in Outcome, Counterfactual vs. Treatment**

The list of findings below provides greater detail and explanation than is found in the chart. The results are organized into five major categories that were established at the outset of the research, in which we hypothesize being able to measure impact. *The results are based on extensive survey data gathered in the treatment and control communities via probability samples of voting-aged adults, and are not results based on police reports. Therefore, the “reports” referred to below are reports made to the survey interviewers rather than police reports.* We use this approach because underreporting of crime to the police is common worldwide, and LAPOP research has shown that in the particular study at hand, on average in Central America, reporting of crimes to the authorities is inversely related to the incidence of crime.

**(1) The community-based crime prevention program under CARSI produces a significant reduction in the expected level of crime victimization and violence:**

- Compared to what we would expect to see without USAID interventions, 19% fewer surveyed residents reported being aware of robberies in their neighborhoods
- Compared to what we would expect to see without USAID interventions, 25% fewer surveyed residents reported being aware of illegal drug sales in their neighborhoods
- Compared to what we would expect to see without USAID interventions, 51% fewer surveyed residents reported being aware of extortion and blackmail in their neighborhoods
- Compared to what we would expect to see without USAID interventions, 51% fewer surveyed residents reported being aware of murders in their neighborhoods

**(2) The community-based crime prevention program under CARSI resulted in a significant increase in the expected level of citizens' sense of security:**

- Compared to what we would expect to see without USAID interventions, perceptions of insecurity in the neighborhood were 5% lower
- Compared to what we would expect to see without USAID interventions, residents were 11% less likely to report feeling unsafe when walking alone at night through their neighborhoods

**(3) The community-based crime prevention program under CARSI is responsible for a significant decrease in the expected level of neighborhood disorder, such as loitering and gang presence:**

- Compared to what we would expect to see without USAID interventions, perception of youth loitering as a problem was 8% lower
- Compared to what we would expect to see without USAID interventions, residents' perceptions of youth in gangs as a problem were 14% lower
- Compared to what we would expect to see without USAID interventions, residents' perceptions of gang fights as a problem were 13% lower
- Compared to what we would expect to see without USAID interventions, 35% fewer residents report being likely to avoid dangerous areas of the neighborhood because of fear of crime
- Compared to what we would expect to see without USAID interventions, residents' evaluations of their communities' organization for crime prevention were 18% higher

**(4) Satisfaction with police performance has increased significantly as a result of the community-based crime prevention program under CARSI:**

- Compared to what we would expect to see without USAID interventions, residents' satisfaction with police performance was 5% higher  
Compared to what we would expect to see without USAID interventions, residents' trust in the police was 9% higher



**(5) Indirect effects of the community-based crime prevention program under CARSI values include strengthening democratic values, which have increased significantly over the expected level in the absence of the program:**

- Compared to what we would expect to see without USAID interventions, residents' levels of interpersonal trust were 3% greater
- Compared to what we would expect to see without USAID interventions, residents' satisfaction with the functioning of democracy was 7% higher

As noted, the qualitative interviews produced many complementary findings that help explain and deepen our understanding of the quantitative results and the community context in which the programs were implemented. The key ones are as follows:

### *Qualitative Findings:*

#### **(1) The Role of Schools**

- Schools can play an important role in crime prevention. Some are creating better environments for at-risk youth with innovative *Convivencia Escolar* (School Harmony) programs, institutionalization of student leadership groups within schools, and the training of teachers and students in mediation and alternative conflict resolution.
- Some schools, particularly in El Salvador, have successfully reduced or eliminated home suspensions for unruly students, substituting in-school penalties and counseling. This helps ensure that students will not be left unsupervised at home, a condition that often leads to students turning to gangs for support and companionship.
- School expulsion policies affect both expelled students and students already enrolled in the schools to which the former are newly assigned. Expelled students may be assigned to distant schools, forcing them to live apart from their families. These expelled students may frighten students and parents at the receiving school, leading those students to leave the school, thus beginning a chain reaction of absenteeism and instability.
- Teachers and administrators are enthusiastic about the role of school-based, on-site psychologists in improving troubled students' behavior. As schools begin using less corporal punishment and more psychological counseling and mediation for conflict resolution, they are seeing positive results among troubled youths. Students divulge abuse and other problems to psychologists, opening the door to assistance.
- School directors and teachers play a vital role in uncovering child abuse and other domestic violence in the home, and they have been sensitive to frequent domestic violence situations that adversely affect their students' behavior. One repeatedly mentioned problem is teenage pregnancies, which often leads to female students dropping out of school. Some administrators said that they make allowances for students who have babies, doing whatever they can to enable these young girls to complete their high school education. In Guatemala, school directors' narratives reveal that incest appears to occur with alarming frequency, particularly in rural areas. Specifically, fathers have been found

to be having sexual relations with their under-age daughters, thereby fathering their daughters' babies.

### (2) Getting out of Gangs

- Police officers consistently reported that it was no longer possible for gang members to dissociate themselves from their gangs. In El Salvador for example, police officers reported that the only way out of a gang was in a coffin. Previously, gang members could leave the gangs by joining a church. Now, even if a former gang member becomes a pastor or matures into a middle-aged father with a regular job, he may be expected to perform services for the gang over the course of his life.

### (3) The Role of Family

- There is near universal agreement in the stakeholder interviews that the major factor associated with youths dropping out of school and joining violent gangs is the “broken home” (“*la familia desintegrada*”). Children in single-parent households, ones typically headed by mothers, often lack supervision and thus are more at risk of joining gangs. The risk is especially high when the single mother takes on a partner who is not the biological father of the children, a situation that frequently pushes the minor out of the house and into the arms of a gang.
- Gangs represent surrogate families for youths seeking friendship and protection.

### (4) The Role of Churches

- Churches of all denominations play an especially important role in crime and violence prevention. Their youth group programs, some of them funded by USAID, are seen by stakeholders as preventing youths from hanging out on street corners by getting them engaged in socially positive activities (recreational, religious, and job training).
- Evangelical pastors were considered by our stakeholders to be especially active in reaching out to youths already in gangs, in an effort to extract them from active membership. They also often serve as mediators between warring gangs, in order to help prevent bloodshed. In addition to pastors, there are also “Christian police officers” (*policías cristianos*, also known as *capellanes*, or chaplains), who evangelize in the prisons with the hope of counselling gang members before they are released from prison.
- The Catholic Church was seen as being effective in reducing crime levels as it engaged in well-established, age-graded programs, beginning in early childhood and continuing into adulthood. Some of those who have actively participated in the various youth programs graduate to becoming community leaders as young adults.

### (5) The Role of the Community

- Community development association leaders, often members of Municipal Crime Prevention Committees, play a key role in violence prevention efforts. They are willing to share intelligence with police officers, but only if they know and trust them. A dedicated police hotline can be very useful for getting the authorities to show up when a crime is either in progress or being planned, but only when the official answering the call was known to the association leaders.
- In Guatemala, many leaders of the local community development councils (COCODES) and municipal-level organizations (the municipal community development association COMUDES and the Municipal Crime Prevention), who are key players in violence prevention efforts, reported that they are working closely with the National Civil Police in various ways such as:
  - Acting as intermediaries
  - Reporting crimes-in-progress to the police
  - Serving as interpreters for police who do not speak or understand the particular indigenous language of the area
  - Working with local night patrol groups, to ensure that the suspects whom they rounded up are handed over to the police and not to angry mobs
  - Reporting domestic violence
- At-risk youth reported that vocational training was the most valuable of the various outreach activities, believing it to be the path to a good job and a self-sufficient future. They found computer literacy courses especially valuable, and some said that they would have liked more advanced courses than the ones that were given, and smaller class sizes. Many others expressed appreciation for the music and art programs of those centers, as well as the athletic outlets that they provide.

The Municipal Crime Prevention Committees comprise an innovative structure, one that is supported by USAID. Their success comes from their ability to galvanize the various stake-holding sectors of the targeted municipalities (specifically, the police, the school directors, the clergy, the community development association leaders, and health service providers) by incorporating representatives of each sector on every committee. These representatives become the link between the municipality and the various communities that have been selected for the crime prevention treatment, by reporting the Committees' plans to community stakeholders. Indeed, the CARSI interventions, or treatments, were themselves selected through input from the communities, by means of focus groups held with community leaders.

- A number of community association and municipal crime and violence prevention committee members in Guatemala and El Salvador reported that their efforts were hampered by political divisions between the municipal government and themselves. Specifically, whenever the mayor of the municipality was of a political party different from that of the majority of the committee members, support for the violence prevention programs would diminish, committee members told us. Municipal support for the

crime/violence prevention programs had become politicized in some of the municipalities.

### *III. Policy Recommendations*

The policy recommendations emerge from both the quantitative results (i.e., where the CARSI program has shown a significant impact), but are formulated drawing on the qualitative findings from the stakeholder interviews, paying special attention to the suggestions made by stakeholders. They are organized below into seven clusters of recommendations:

- **Make community-based crime and violence prevention programs a frontline weapon to improve citizen security, ideally prioritized over *mano dura* approaches**
  - The USAID approach to crime prevention under CARSI has been shown by the Vanderbilt LAPOP impact evaluation reported on here to reduce violence, crime, and fear of crime across communities at-risk in four countries in Central America and therefore seems to be an ideal way forward to make progress in the difficult task of reducing crime and violence in that region.
  - Public response to crime and violence prevention approaches should be widely accepted in the region as they have already garnered public support, as LAPOP's AmericasBarometer surveys have shown.
  
- **Improve community organization to address crime and violence**
  - Improve coordination between the municipal governments and their crime prevention committees and neighborhood-based actors.
  - Provide additional support to local, community-based crime prevention committees.
  - In municipalities where it is not already the case, the Municipal Crime Prevention Committee should have the representation and subcommittee participation of all at-risk communities in the municipality.
  
- **Increase family support to reduce risk factors**
  - Expand pre-school, after-school, weekend and summer vacation child care (day care facilities subsidized by government and/or NGO funds) for children living in single-parent households.
  - Make child care programs available at little or only symbolic cost to poor families for pre-school children.
  - Make after-school programs (like the type being offered through USAID-sponsored outreach centers) available to school-aged children.

- **Use schools to address risk factors associated with youths' involvement with crime and violence**
  - Evaluate the sexual/domestic abuse component of both the curriculum and the police talks at the schools.
    - Ensure that these components include information about the existing laws that are designed to protect children from violence in the home.
  - Educate school directors about the steps they can take to report child abuse to the appropriate authorities. Train these directors on how to compassionately handle victims and coordinate interventions with teachers and psychologists.
  - Expand the presence of school psychologists to monitor students for domestic or emotional problems, to provide counseling, and to mediate conflicts.
  - Expand opportunities for students to have leadership opportunities through school clubs and activities and to be trained in or conduct conflict mediation.
- **Increase security at school**
  - Encourage the Ministries of Education to make a greater investment in the “School Harmony” program as well as similar programs that reduce school violence.
  - Direct more resources to school security especially in the form of police protection.
  - Implement a “safe backpack” program (a routine checking of backpacks for weapons and narcotics) in high-crime schools.
- **Actively partner with religious organizations and support church-affiliated youth programs**
  - More funds (governmental and non-governmental) need to be invested in church youth programs. These programs appear to be successful in drawing youths away from crime-oriented peer groups, and in some instances they offer one of the few alternatives to gangs.
  - Consideration should be given to determining exactly how successful the clergy have actually been in rescuing people from gangs. If the claims made in the interviews conducted for this study are supported, then greater involvement of the clergy in at-risk communities should be encouraged.
- **Improve police response and assignment patterns**
  - Train police officers to be responsive not only to community leaders' reports of criminal activity (as is the case in some parts of Guatemala), but also to calls for help from ordinary citizens.
  - Community leaders should be given the phone numbers and web addresses of dedicated police hotlines to facilitate their access to the police. For leaders who do

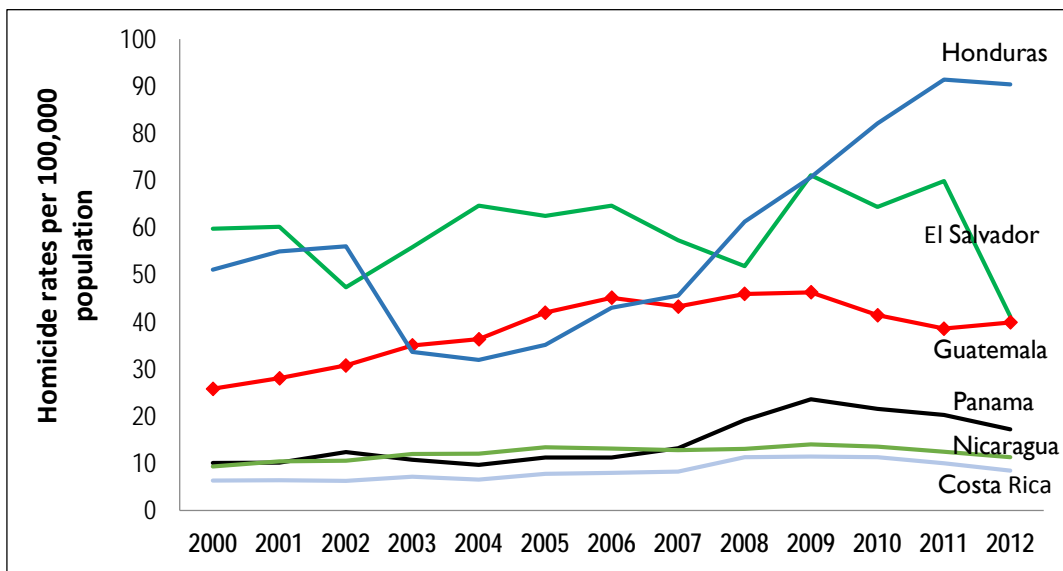
not trust such phone numbers, efforts should be made by the police to make the cell phone numbers of particular officers who are trusted by specific leaders available to them.

- Ensure that police officers get long-term assignments to communities so that they can develop trusting relationships with residents, increasing the chance that crime will be reported.
- In the case of Guatemala, greater efforts should be made to recruit bilingual men and women into the National Civil Police force, matching the indigenous language background of the officers with the native language spoken in given police precincts.

**Background: Crime and Violence Prevention in Central America**

This is a study of the effectiveness of USAID’s approach to crime and violence prevention in Central America, part of the U.S. Government’s broader Central America Regional Security Initiative (CARSI).<sup>1</sup> This section of the Central American regional report presents a brief background of the violence problem in Central America that motivated the initiation of the anti-violence program being studied.

While there is widespread agreement that the countries of Central America—especially the so-called “Northern Triangle of countries,” namely Guatemala, El Salvador, and Honduras—are extremely violent, there is no agreement on the precise overall rates of violence, nor on the rates for specific types of crime. Murder rates are the macabre “gold standard” in the field, because murders are thought to be universally reported. The United Nations Office on Drugs and Crime (UNODC) results for the region from 2000–2012 (the most recent available as of this writing) are presented in Figure 2.<sup>1</sup> The Northern Triangle countries (Guatemala, El Salvador, and Honduras) clearly have the highest murder rates, while much lower rates are found in Nicaragua, Costa Rica, and Panama. In contrast, the U.S. murder rate, according to that same source, has been holding steady at 4.7 per 100,000 population since 2010.



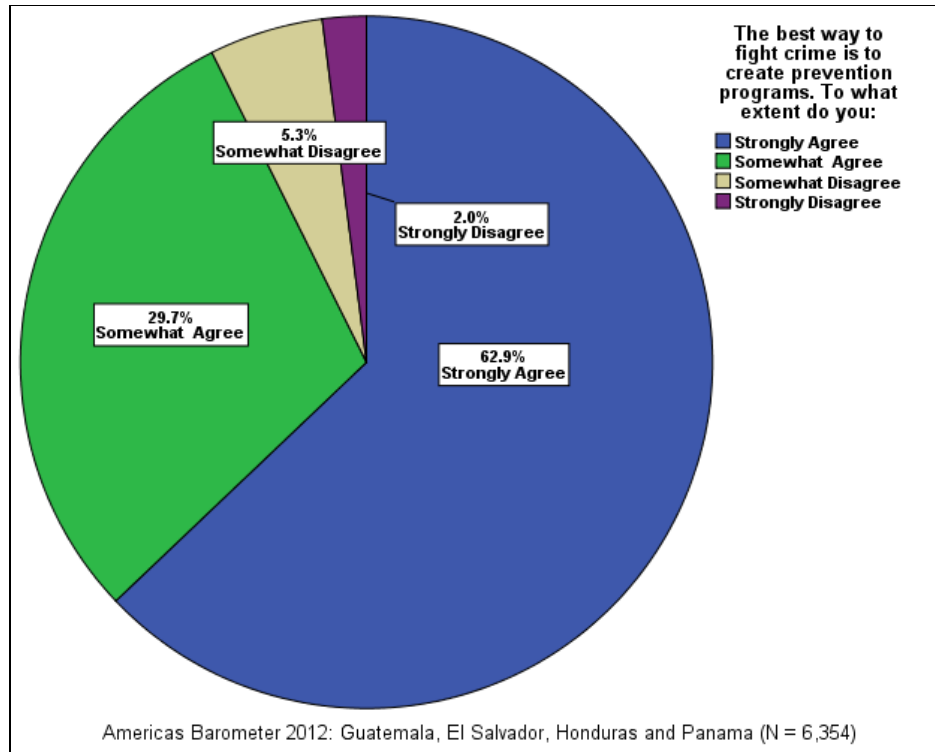
**Figure 2. Homicide Rates in Central America**

Source: United Nations Office on Drugs and Crime, Homicide Statistics 2000-2012

<sup>1</sup> This impact evaluation was designed by Abby Córdova and Mitchell Seligson, Director of the CARSI impact evaluation at LAPOP. Ms. Córdova was also responsible for the implementation of the project in the first two rounds in her role as a post-doctoral fellow at Vanderbilt University and staff member at LAPOP. Dr. Córdova left the project in July 2012 before the final round of the study was completed to take up an academic position at the University of Kentucky. We also wish to acknowledge the constant and dedicated support of Eric Kite, Vanessa Reilly, Jeremy Biddle, and Enrique Roig at USAID Washington, as well as the extensive cooperation we have received from USAID personnel in Central America. We also greatly appreciate the cooperation we received from the implementing partners and, most of all, from the countless public officials and citizens of Central America who gave freely of their time to make this impact evaluation possible. Finally, we appreciate the financial support provided by the Department of State for this study.

## Impact Evaluation: Regional Report

In the context of this high crime rate, the AmericasBarometer<sup>2</sup> surveys carried out by LAPOP demonstrate that crime prevention programs are popular in those countries. When asked the best way to fight crime, 92.6% of the voting-age adults in the four Central American countries on which our evaluation focuses responded that they strongly agree or somewhat agree with the statement that crime prevention programs constitute the most effective way to fight crime (see Figure 3).



**Figure 3. Crime Prevention is the Best Way to Fight Crime and Violence in CARSi countries**

Source: AmericasBarometer, LAPOP 2012.

The USG's overarching goals for CARSi include: (1) Disrupting the movement of criminals and contraband to, within, and between the nations of Central America; (2) supporting the development of strong, capable, and accountable Central American governments; (3) re-establishing effective state presence, services, and security in communities at risk; and (4) fostering enhanced levels of coordination and cooperation between the nations of the region, other international partners, and donors to combat regional security threats.<sup>3</sup>

USAID is the leading agency within the USG for the *prevention* of crime and violence. In this study, we focus our attention on USAID's *community-based* crime and violence prevention

<sup>2</sup> The AmericasBarometer surveys are national probability samples of voting-age adults regularly carried out by LAPOP in every independent mainland country in North, Central and South America, as well as several countries in the Caribbean. In the 2012 round, over 40,000 individuals were interviewed in 26 nations. The survey data and corresponding questionnaires are available for free download at [www.LAPOPsurveys.org](http://www.LAPOPsurveys.org).

<sup>3</sup> See, <http://www.state.gov/p/wha/rt/carsi/>



programs under CARSI, which have been at the center of USAID’s efforts in Central America.<sup>4</sup> These programs integrate education and workforce development, economic growth and employment, public health, and governance interventions.

By encouraging community involvement in the prevention of crime, USAID has sought to attenuate risk factors that are widely believed to increase community insecurity and vulnerability to gangs and related violence and, more deeply, to reduce the probability that at-risk youth will ultimately engage in criminal and violent activities. The USAID Missions in five Central American countries (Guatemala, El Salvador, Honduras, Nicaragua, and Panama) have administered and overseen the execution of USAID’s interventions funded under CARSI. USAID/Honduras, after a necessary delay following the 2009 coup in that country that resulted in the freezing of development assistance to it, began its CARSI program later than the other four countries. This study does not include Nicaragua, and thus looks only at Guatemala, El Salvador, Honduras, and Panama.

### IDENTIFYING AND ADDRESSING RISK FACTORS

Psycho-social, situational, and community crime prevention models emphasize different risk factors; therefore, they adopt different approaches to address them. The **psycho-social crime prevention model** focuses on the psychological and social conditions that make individuals vulnerable to crime and violence, such as living in dysfunctional families, domestic violence, underperformance in school, presence of gangs in the community, lack of open spaces for recreational activities, low quality of public services, and high rates of unemployment. Interventions, under this model, attempt to mitigate these risk factors by generating protective mechanisms that allow individuals to resist and become resistant to criminal and violent behavior.

The **situational crime prevention model**, on the other hand, emphasizes the physical and environmental conditions that generate opportunities for committing a crime, such as dark streets, lack of surveillance, abandoned lots, etc. Given that crime is typically concentrated in particular municipalities and neighborhoods, interventions under this model seek to affect the physical conditions of particular locations that would both lower the opportunities for as well as increase the risks of committing a crime.

Finally, the **community crime prevention** model focuses on the social norms, values and social networks that hold communities together. In communities where neighbors distrust one another and lack social cohesion, citizens are more vulnerable to criminal behavior. Interventions under this model seek to regenerate the social fabric and build greater social trust among neighbors.

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<sup>4</sup> For the purposes of this report, “USAID’s CARSI program” and similar language will refer to USAID’s crime and violence prevention interventions funded as part of the USG’s CARSI. While USAID’s prevention work extends beyond community-based interventions to include national-level institution-building and rule of law reforms in Central America, this impact evaluation focuses only on community-based prevention efforts.

USAID/Washington, via its Cooperative Agreement with LAPOP at Vanderbilt University, asked LAPOP to design and carry out an *approach* to evaluating CARSI-funded crime and violence prevention programs, rather than focusing on an individual project or implementing partner. The evaluation of the community-based prevention approach is part of a broader effort to establish the effectiveness of USAID interventions through scientifically rigorous studies and, more specifically, to establish the impact of democracy and governance (DG) programs through the types of studies recommended in the comprehensive study by the National Academy of Sciences (National Research Council 2008), which has now become a standard feature of USAID programming worldwide.<sup>5</sup> Other foreign assistance organizations and government policymakers have similarly recognized the importance of program evaluation (Sherman et al. 1998; Bamberger et al. 2010; Lowenthal and Bertucci, 2014).

While past studies have shown that USAID's DG assistance works by increasing democracy levels in recipient countries, there are few rigorous evaluations of how and under what conditions assistance works (Finkel *et al.* 2007; Azpuru et al. 2008; Finkel *et al.* 2008; Seligson *et al.* 2009; Carothers and Ottaway, 2005). Scores of high-quality evaluations have been done in the DG arena, but until very recently, most of them have been post-hoc and have not included both baseline and control groups, with the result that there has been no real way of knowing what the end-of-project conditions would have looked like in the absence of the program. USAID's programs offer a unique opportunity for carrying out such a study, and LAPOP is uniquely suited to perform the evaluation. LAPOP has more than 20 years of experience in carrying out policy-relevant surveys in Latin America and has conducted hundreds of country-based surveys, including many specialized studies designed to evaluate programs.

The implementation of scientifically rigorous evaluations of crime prevention programs is a particularly pressing issue for the Latin American region. Violent crime has increased sharply since democratic regimes replaced authoritarian ones beginning in the 1980s. The region currently has, and has had for some years, the highest rates of social violence and crime in the world outside of Sub-Saharan Africa (Casas-Zamora 2013). Increased insecurity poses high costs for Latin American economies through lost human and physical capital (e.g., PNUD 2005; CEPAL 2011; IDB 2012). Furthermore, as LAPOP surveys often find, fear of crime and crime victimization erode social cohesion and citizens' confidence in core institutions—both core elements for democratic stability. In the face of these problems, there have been numerous efforts to prevent crime among at-risk youth, especially in countries with a significant gang presence, violence, and crime. However, as many studies point out, despite these valuable efforts little is known about their true impact (Moser and Van Bronkhorst 1999; Moser, Winton, and Moser 2005) or consequently about how to prevent crime and violence effectively. In this sense, USAID's initiative to support a scientifically rigorous evaluation of its crime prevention interventions in Central America is of great importance for broadening academics' and policy makers' understanding of crime prevention, and in turn for promoting effective governance in the region.

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<sup>5</sup> USAID Evaluation Policy: *Learning from Experience*, Washington, D.C., USAID, January, 2011.

### The Design of the Study: A Multi-Site “Cluster Randomized Experiment” (CRE)

According to a major study undertaken for USAID by the National Academy of Sciences,<sup>1</sup> the goal of a scientifically rigorous evaluation design is to test the counterfactual: to be able to determine “not merely what happened following a given assistance program, but how much of what happened differs from what would be observed in the absence of that program” (National Research Council 2008: 44). To achieve that end, this study design is technically known as a “Cluster Randomized Experiment” (CRE).<sup>2</sup> This type of experimental design is widely considered to be among the

**The goal of a scientifically rigorous evaluation design is to test the counterfactual: how much of what happened differs from what would be observed in the absence of the program.**

most powerful, reliable, and accurate methods for establishing cause-and-effect in impact evaluations (Puddy and Wilkins 2011; Sherman 2012). The research design used by LAPOP for this evaluation scores a 5 (the highest level) on the Maryland Scale of Accuracy in the Design of Evaluation, indicating that the findings yielded by the study should be considered strong evidence for a cause-and-effect relationship (or lack of relationship; Sherman 2012).<sup>3</sup>

The CRE design is an especially appropriate research design for USAID’s community-based programs because they correspond perfectly to the group-based unit of assignment as the neighborhood grouping of individuals. To avoid the problem of contamination of control neighborhoods by applications in treatment neighborhoods, our CRE design uses non-contiguous clusters (e.g., neighborhoods or communities) that are then randomly assigned to each study condition (i.e., treated/non-treated). The literature regards CRE as the “best comparative design

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<sup>1</sup> One of the authors of this report, Mitchell A. Seligson, was a member of the committee of scholars who wrote the National Academy of Science study cited above.

<sup>2</sup> This design is also known in the literature as a “Group-Randomized Trial,” or a “Multi-Site Cluster Randomized Experiment.” Such studies are carried out in blocks composed of clusters, in our case neighborhoods (Spybrook, Raudenbush, Liu and Congdon 2008).

<sup>3</sup> As described by Murray (1998), a cluster randomized experiment has four distinguishing characteristics (note that in this study, the block or site corresponds to a country or municipality, and the cluster to a community):

- a) “The *unit of assignment* is an identifiable group rather than an individual. Such groups are not formed at random, but rather through some connection among their members.” This design is appropriate for this project, since the program is based on the community or neighborhood as the unit of analysis in each site or country.
- b) “Different units of assignment are allocated [randomly] to each *study condition* [either to a treatment or control group].”
- c) “*Units of observation* are members of the groups that serve as the units of assignment.” Thus, this type of experiment has a multilevel structure. In the case of this study, sites or countries are the highest aggregate level, units of assignment [neighborhoods] form an intermediate level, and individuals are the lowest aggregate level.
- d) CREs “typically involve only a limited number of assignment units in each study condition.”

available” when an intervention “operates at a [cluster] level, [and] manipulates the social or physical environment” (Murray 1998).<sup>4</sup>

In a study that includes a large number of assignment units (thousands of neighborhoods), randomization ensures that units assigned to treatment and control groups will, on average, be very similar before the intervention. This is a result of the well-known “law of large numbers,” in which a coin-toss will approach 50% heads and 50% tails as the number of tosses approaches infinity. For example, in a vaccine trial, there could be thousands of individuals who receive the vaccine and a similar group that does not. In large groups like this, the pre-vaccine immune levels should be very similar in both groups. However, in a study like the one reported here in which experiments involve a relatively small number of assignment units, the number of treatment areas is relatively limited, if for no other reason than the units are not individuals but neighborhoods in which we are sampling individuals. It is not feasible, of course, to fund an impact evaluation of thousands of communities, as the costs would be far too high for the limited resources available.

Differences in the averages for any given variable in the starting level of the treatment and control communities were expected for this study, and in fact that is what was found in the study. The number of communities was just too small to expect the means of treatment and control to have converged. Even after 100 coin tosses, there is only about an 8% chance of getting a 50/50 split, although getting to a 60/40 split is quite likely. Therefore, for studies such as the one LAPOP has undertaken, in which the number of neighborhoods is relatively small, other strategies are implemented in addition to randomization in order to minimize baseline differences between treatment and control groups and increase the internal validity of the study. When the number of assignment units is small, a “stratified” design can be used to help minimize differences between treatment and control communities. In a stratified design, units from relatively homogenous sub-groups (i.e., groups that share similar characteristics) are randomly assigned to either the treatment or control.

LAPOP used a CRE design with a stratified selection. Rather than selecting neighborhoods from one large pool in Guatemala, El Salvador, Honduras, and Panama, the sample was first stratified by country. This assured us that there were cultural and contextual similarities among the treated and controlled communities within each nation. We then further stratified by selecting neighborhoods by municipality, so that all of the treatment and control communities were concentrated in selected high-crime municipalities in each country. These levels of stratification helped reduce differences between treatment and control groups, but could not completely eliminate them. Once the stratification was complete, neighborhoods within municipalities in each country were assigned randomly to treatment and control groups.<sup>5</sup> Baseline differences across neighborhoods within municipalities were then accounted for or controlled for in the statistical analysis using the control variables in the surveys.

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<sup>4</sup> In this type of trial, the multilevel structure of the experiment determines its design and methods used to analyze the data; given the multilevel nature of CRE, the data analysis is more complex than in Randomized Experiments (RE). Standard errors must be adjusted to account for the study’s “design effect” (Kish 1995; Hayes and Moulton 2009).

<sup>5</sup> Communities were not randomly assigned to treatment or control groups in the case of Honduras. The USAID mission selected the communities in that country, thus reducing some of the strength of the Difference-In-Difference methodology.

### *Qualitative Neighborhood-level Survey of Stakeholders*

The purpose of the qualitative stakeholder survey is to gather qualitative information about the neighborhood by interviewing key persons knowledgeable about the neighborhood situation. LAPOP generated a semi-structured, open-ended questionnaire that was used for interviews with neighborhood stakeholders.<sup>6</sup> LAPOP conducted 848 *semi-structured interviews* and *focus groups* with community stakeholders and implementing partners. Between 60 and 100 individual interviews were conducted per country, per round with: (1) community leaders and members of Municipal Crime Prevention Committees; (2) school directors and teachers; (3) religious leaders (e.g., Evangelical pastors, Catholic priests, and church youth-group leaders); (4) police officers; (5) implementing partners; and (6) at-risk youth (18 and older<sup>7</sup>). In addition, 44 focus groups were carried out in the first round baseline study with members of these categories, with the exception of program implementers and at-risk youth, who were only interviewed one-on-one.

**The impact evaluation of community-based crime prevention programs used a mixed-methods approach involving over 29,000 quantitative survey interviews, 848 qualitative stakeholder interviews and 44 focus groups.**

### *The Samples*

At the outset of this project, the research team, after consulting the available literature, developed a series of hypotheses regarding the potential impact of a community-based violence prevention program. Based on those hypotheses, the individual questionnaires were constructed and interviews were carried out in the treated and control (i.e., non-treated) communities in Guatemala, El Salvador, Honduras and Panama. In this section, we present results testing those hypotheses for a wide range of measures that evaluate the effectiveness of USAID's crime prevention programs, evaluating the impact of those programs in those four countries. *It is important to note that whenever the term "reported" is used (e.g., "reported robberies"), the reference is to respondents reporting their experiences and perceptions to interviewers as part of this study, rather than to crimes reported to authorities.*

This impact evaluation was carried out in the municipalities shown in the maps below (Figure 4). The communities studied were located in the municipalities of (1) Chalchuapa, San Juan Opico, Santa Ana, and Zaragoza in El Salvador; (2) Esquipulas, Guatemala, and Tactic in Guatemala; (3) Choloma, La Ceiba, San Pedro Sula, and Distrito Central (Tegucigalpa) in Honduras; and (4) Colón, Panamá, and San Miguelito in Panama. The names of the individual neighborhoods are not provided in this regional report to protect the privacy of the respondents. The de-identified

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<sup>6</sup> The questionnaires can all be found online in the individual reports for each country.

<sup>7</sup> Human subject protection regulations make it very difficult to obtain IRB approval for interviewing children, so the voting age of adulthood was used as the cut-off.

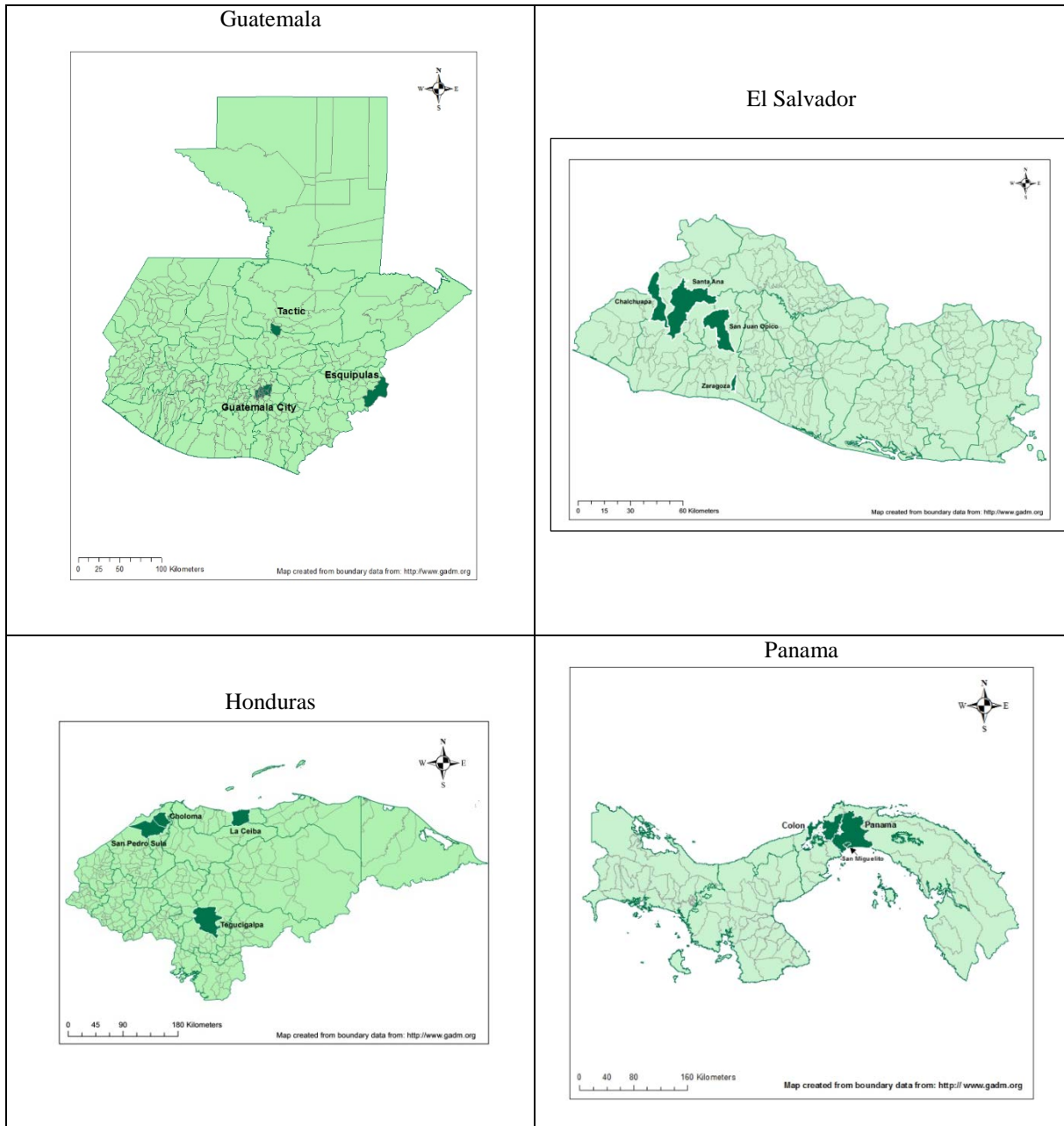
data will be placed on the Vanderbilt LAPOP website (<http://www.vanderbilt.edu/lapop/carsi-study.php>) at the conclusion of the project.

Because of the wide variation among communities encountered in this multi-country, multi-municipality study, it is difficult to generalize about the socio-economic and demographic characteristics and crime-related profile of the at-risk treatment and control communities included in it. Detailed descriptions of these characteristics are provided in each country report, which contain extensive documentation, including the quantitative and qualitative questionnaires used in each country. Since, the design of the study involved making a comprehensive list of all of the communities in each USAID-selected municipality and then limiting the study to the universe of the at-risk communities in each one,<sup>8</sup> we are able to provide the reader a general picture of these communities. Generally speaking, they were communities identified by local actors as being “at-risk” for crime and violence. These communities tended to have around 150-500 dwelling units (although larger in Honduras), in which some significant portion of the households had unfulfilled basic needs satisfied, including inadequate sewage disposal, limited or non-existent access to potable water in the homes, school-aged children not attending classes on a regular basis, overcrowding in homes, high rates of under- and unemployment, high rates of single-parent households, a high preponderance of domestic violence, and a comparatively high percentage of youths (10-17 year olds).

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<sup>8</sup> Note that the baseline study also included a sample of non-at-risk communities in those same USAID-selected municipalities in order to determine if the community selection process of at-risk communities did in fact produce communities that were structurally different from the non-at-risk. An analysis of those samples was carried out and did indeed reveal such differences.

## Impact Evaluation: Regional Report



**Figure 4. Impact Evaluation Sites in Central America, by Country**

In Table 1 a summary of the quantitative and qualitative interviews by country and round is provided.

## Impact Evaluation: Regional Report

**Table 1. LAPOP Impact Evaluation: Summary of Quantitative and Qualitative Interviews, by Country and by Round**

		Quantitative Interviews				Qualitative Interviews		
<b>Guatemala Neighborhoods: 21 Treatment; 19 Control; 20 Not-at-risk. Total = 60</b>								
Rounds	Fieldwork Dates	N of Not-at-Risk	N of Treatment	N of Control	Total N	Fieldwork Dates	Stakeholders	Focus Groups
Round 1	7/11/2011 – 2/16/2012	-	1,465	1,157	2,622	7/26/2011 – 3/11/2012	79	12
Not-at risk	03/21/12-06/11/12	1,233	-	-	1,233	-	-	-
Round 2	01/25/13-03/08/13	-	1,457	1,142	2,599	2/26/2013 – 4/26/2013	67	-
Round 3	02/04/14-03/26/14	-	1,451	1,239	2,690	1/6/2014 – 5/3/2014	118	-
<b>TOTAL</b>		1,233	4,373	3,538	9,144		264	12
<b>El Salvador Neighborhoods: 28 Treatment; 13 Control; 30 Not-at-risk. Total = 71</b>								
Rounds	Fieldwork Dates	N of Not-at-Risk	N of Treatment	N of Control	Total N	Fieldwork Dates	Stakeholders	Focus Groups
Round 1	4/28/2010 – 6/24/2010	-	1,724	675	2,399	5/19/2010 – 9/10/2010	122	4
Not at-risk	7/7/2010 – 2/16/2011	1,672	-	-	1,672	-	-	-
Round 2	9/1/2011 – 10/1/2011	-	1,702	671	2,373	12/2/2011 – 4/19/2012	80	-
Round 3	9/12/2013 – 10/5/2013	-	1,711	671	2,382	10/18/2012 – 2/20/2013	118	-
<b>TOTAL</b>		1,672	5,137	2,017	8,826		320	4
<b>Honduras Neighborhoods: 10 Treatment; 10 Control; 0 Not-at-risk. Total = 20</b>								
Rounds	Fieldwork Dates	N of Not-at-Risk	N of Treatment	N of Control	Total N	Fieldwork Dates	Stakeholders	Focus Groups
Round 1	11/21/2011 – 03/08/2012	-	1,115	1,112	2,227	-	-	-
Round 2	10/14/2013 – 11/10/2013	-	1,137	1,155	2,292	9/28/2013 – 10/20/2013	63	16



## Impact Evaluation: Regional Report

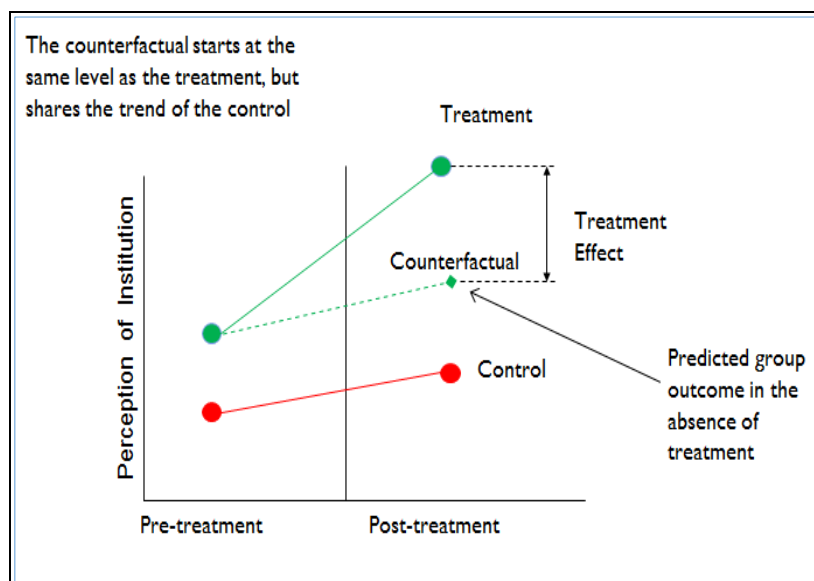
		Quantitative Interviews				Qualitative Interviews		
<b>TOTAL</b>			2,252	2,267	4,519		63	16
<b>Panama Neighborhoods: 6 Treatment; 20 Control; 20 Not-at-risk. Total = 46</b>								
Rounds	Fieldwork Dates	N of Not-at-Risk	N of Treatment	N of Control	Total N	Fieldwork Dates	Stakeholders	Focus Groups
Round 1	10/18/2010 – 12/5/2010	-	565	1,356	1,921	1/2/2011 – 4/23/2011	80	4
Not at-risk	5/15/2011 – 11/24/2011	1,327	-	-	1,327	-	-	-
Round 2	9/1/2011 – 11/2/2011	-	571	1,378	1,949	8/13/2012 – 10/17/2012	51	-
Round 3	6/4/2013 – 8/5/2013	-	560	1,375	1,935	5/24/2013 – 8/9/2013	70	-
<b>TOTAL</b>		1,327	1,696	4,109	7,132		201	4
<b>GRAND TOTALS</b>		4,232	13,458	11,931	29,621		848	44



### Findings

#### *How to Interpret the Results*

Detailed results of the impact evaluation for the region as a whole, including Panama, are presented in the tables below. Interpretation of those results is assisted by Figure 5.



**Figure 5. Illustration of Difference-in-Difference Estimation**

**The treatment is considered effective at the point of evaluation if outcomes in the treatment group improve more (or decline less) than they would have if the treatment had not been administered.**

This impact evaluation makes extensive use of the “Difference-in-Difference (DID) estimator,” which gives us a reliable estimate of the difference between the treated group at different points in time (such as before and after treatment) controlled for the obvious socio-economic and demographic variables. *The treatment is considered effective at the point of evaluation if outcomes in the treatment group improve more (or decline less) than they would have if the treatment had not been administered.* On the

other hand, a direct comparison between the treatment and control (which is also possible with the DID estimator) may not be straightforward because of differences in the composition of each group which can result from reliance on a limited sample rather than data from the entire universe. In this case, a sample of that size would have been all individuals in the selected municipalities and would have forced interviews with hundreds of thousands of people. Since sampling on this scale was not feasible, *we estimate a counterfactual case with the model parameters to simulate what the outcome would have been if no treatment had been administered. The treatment effect, which is the difference between the treatment and its counterfactual of no-treatment, is the central estimate we use for the quantitative component of*

the LAPOP impact evaluation of the crime prevention programs. The DID estimator uses information from the control group to predict the counterfactual.

The counterfactual case is the change in the control group over time, but at the same levels of the treatment group. Thus, the difference between the estimated counterfactual case and the treatment group is considered the “treatment effect.” The “treatment effect” is the outcome that can be said to have been caused by the intervention. Figure 5 is an illustration of the DID estimator. In Figure 5, the red and solid green lines represent the control group and treatment groups, respectively. In this example, the levels of the two groups differ prior to treatment. This type of difference is common, and indeed, unless the number of communities selected had been very large (in the hundreds), it would be unusual to expect treatment and control to have identical means. Fortunately, different starting levels do not pose a problem for the DID design. The differences in initial starting points are taken into account in the model by comparing each group with itself over time. The dashed green line represents the counterfactual case. The

difference between the counterfactual case and the treatment group is the effect of the intervention.

**The study draws statistical inferences about the effectiveness of the programs and the effect of the context in which the programs were implemented.**

Another advantage of the research design used by LAPOP in this impact evaluation is that the multilevel nature of the data gathered by LAPOP makes it possible for the outcome to be evaluated at the individual level while taking into account features of the neighborhood (i.e.,

the context) to determine the way in which the effectiveness of the programs varies across environments. Thus it is possible to identify the features of neighborhoods (or even countries in cross-national studies in which the number of countries is larger than we have in our current study) that contribute to the success of the program. Using multilevel modeling techniques, the study draws statistical inferences about the effectiveness of the programs and the effect of the context in which the programs were implemented. All statistical analysis in the project takes into account “clustering” (the similarities shared by individuals living in the same areas, such as neighborhoods within municipalities in each country; Hayes and Moulton (2009)).<sup>1</sup>

### *Summary Results of the Quantitative Survey Evidence*

An overall summary of the results of the impact evaluation is shown below in Table 2, and the detailed, variable-by-variable results are shown in the graphs that follow. The regional results (with and without Panama) are shown for each of the major clusters of variables that were selected at the outset of the study to be monitored for change. These results, expressed in percentage terms, are calculated as the difference between the treatment result and counterfactual result in the final year, divided by the counterfactual in the final year. The estimates of the

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<sup>1</sup> Standard errors and hypothesis tests are adjusted for this clustering, which is referred to as the “design effect.” Such studies must take into account that individuals belong to specific clusters (in this case, neighborhoods within municipalities in each country), and therefore corrected standard errors rather than the conventional t-test p-values need to be estimated and reported. Specifically, individual-level models include random intercepts for neighborhoods and municipalities. Models that include neighborhood or block-level contextual variables also include random intercepts for blocks within neighborhoods.

## Impact Evaluation: Regional Report

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hypothetical and treatment values shown in the line graphs are based on estimates from the full model that include all treatment and control group data from all rounds of the experiment. The figures reported in Table 2 are based on the predicted values from the final round of data collection.

## Impact Evaluation: Regional Report

**Table 2. LAPOP Impact Evaluation: Summary Results by Region and Country: Trends and Percentage Change Attributable to the Community-based Crime Prevention Program\***

Variable and Variable Name (in parentheses)	Trend	Region (excludes Panama)	Region (includes Panama)	El Salvador	Guatemala	Honduras
<b>CRIME VICTIMIZATION AND VIOLENCE</b>						
Reported** ROBBERIES (vicbar1a)	↓	↓ 30%	↓ 19%	↓ 25%	↓ 27%	↓ 35%
Reported SALE OF ILLEGAL DRUGS (vicbar3a)	↓	↓ 35%	↓ 25%	↓ 36%	↓ 50%	↓ 37%
Reported EXTORTION (vicbar4a)	↓	↓ 48%	↓ 51%	↓ 52%	↓ 43%	↓ 57%
Reported MURDERS (vicbar7a)	↓	↓ 50%	↓ 51%	↓ 40%	↓ 60%	↓ 43%
<b>PERCEPTION OF INSECURITY</b>						
Perception of insecurity (pese0)	↓	↓ 9%	↓ 5%	↓ 17%	↓ 22%	<b>NOT Statistically Significant</b>
Perception of insecurity when walking alone at night (fear4)	↓	↓ 16%	↓ 11%	↓ 13%	↓ 13%	↓ 15%

\* As noted in the text, individual results for Panama are not reported as the number of effectively treated communities fell below the minimal criterion.

\*\* “Reported” refers to reported during the course of the LAPOP survey, not “reported” to the police.

## Impact Evaluation: Regional Report

Variable and Variable Name (in parentheses)	Trend	Region (excludes Panama)	Region (includes Panama)	El Salvador	Guatemala	Honduras
<b>NEIGHBORHOOD DISORDER (INCLUDING YOUTH VULNERABILITY TO CRIME AND GANG ACTIVITY)</b>						
Youths hanging out on the streets (diso7)	↓	↓ 6%	↓ 8%	↓ 8%	↓ 10%	<b>NOT Statistically Significant</b>
Youths who are in gangs as a problem (diso8)	↓	↓ 14%	↓ 14%	↓ 14%	↓ 17%	↓ 17%
Gang fights as a problem (diso18)	↓	↓ 10%	↓ 13%	↓ 12%	↓ 15%	↓ 19%
Avoid walking through dangerous areas (fear10)	↓	↓ 37%	↓ 35%	↓ 40%	↓ 13%	↓ 36%
Community is organized to prevent crime (soco9)	↑	↑ 26%	↑ 18%	↑ 18%	↑ 16%	<b>NOT Statistically Significant</b>
<b>ROLE OF INSTITUTIONS: THE POLICE</b>						
Trust in the National Police (b18)	↑	↑ 10%	↑ 9%	<b>NOT Statistically Significant</b>	↑ 21%	<b>NOT Statistically Significant</b>
Satisfaction with police performance (pole2)	↑	↑ 11%	↑ 5%	↑ 11%	↑ 19%	<b>NOT Statistically Significant</b>

## Impact Evaluation: Regional Report

Variable and Variable Name (in parentheses)	Trend	Region (excludes Panama)	Region (includes Panama)	El Salvador	Guatemala	Honduras
<b>INDIRECT EFFECTS: DEMOCRATIC VALUES</b>						
Interpersonal Trust (it1)	↑	<i>NOT Statistically Significant</i>	↑ 3%	↑ 11%	↑ 6%	↑ 2%
Satisfaction with democracy (pn4)	↑	↑ 16%	↑ 7%	↑ 8%	↑ 15%	↑ 20%
Evaluation of government handling security (n11)	? ↓	<i>NOT Statistically Significant</i>	<i>NOT Statistically Significant</i>	↑ 8%	↓ 7%	<i>NOT Statistically Significant</i>



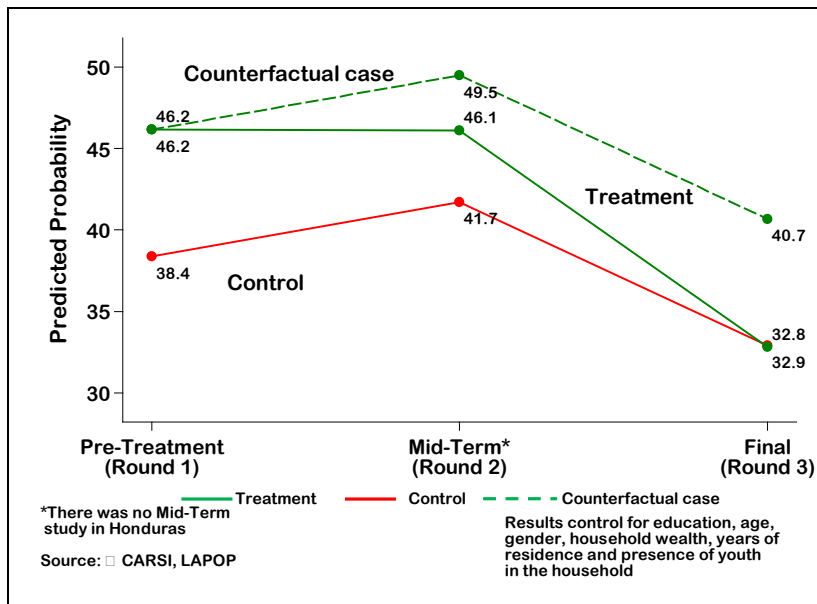
Below, the results are presented in greater detail for the key variables monitored in the study.

*Detailed Presentation of Results and Illustrative Qualitative Findings*

*I. Crime Victimization and Violence*

Robbery

Reported cases of robbery in the neighborhoods are shown in Figure 6. Results are based on answers to the following question: “Have robberies occurred over the last twelve months in [Name of Neighborhood]?”



Compared to what we would expect to see without USAID intervention, 19% fewer surveyed residents reported being aware of robberies, a difference that is statistically significant.

**Figure 6. Predicted Probability of Respondents Reporting Robberies Occurring in Their Neighborhood (vicbar1a)**

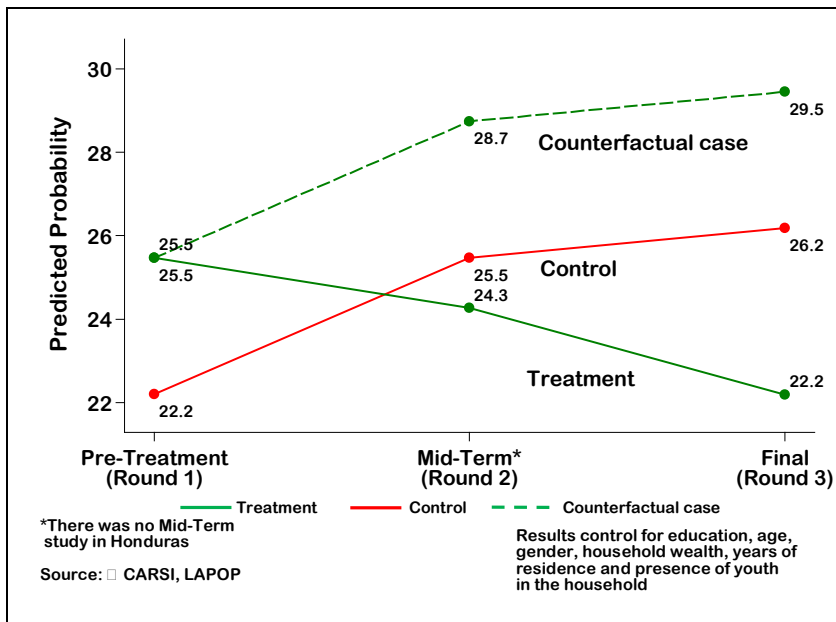
Figure 6 shows that in the treatment neighborhood, the probability of respondents recalling instances of robbery slightly decreased, while in the control neighborhood it increased between years 1 and 2. However, as the figure demonstrates, both the treatment and control neighborhoods show a decrease in the probability of respondents recalling instances of robbery between years 2 and 3. Regionally, 19% fewer surveyed residents reported cases of robberies than would be expected without USAID intervention. As noted in Table 2, the greatest decrease in reported robberies can be found in Honduras, with 35% fewer cases of robberies being reported to the interviewer conducting the LAPOP survey.

These quantitative results were echoed by the qualitative interviews as well. For example, the police chief of one of the municipalities of Guatemala, when asked if robberies had increased, decreased or stayed the same since the last round of evaluation interviews answered in the following way:

*Well, you need to understand that the culture of this municipality is, is quite diverse because I have realized during my time here that there are days when nothing happens; weeks, sometimes months go by, and then one day they start again, you know. On a single day there can be two or three robberies around there. But the tendency is declining. In reality, it has gone down because we had an average of two robberies a day last year. Well, thank God, between July and now I've seen that, that the number of complaints has gone down, and, and everything the people comment on about this, you know, about robberies. It has indeed gone down.*

Sale of Illegal Drugs

Reported cases of the sale of illegal drugs in the neighborhoods are shown in Figure 7. Results are based on answers to the following question: “Has the sale of illicit drugs occurred over the last twelve months in [Name of Neighborhood]?”



Compared to what we would expect to see without USAID interventions, 25% fewer surveyed residents reported being aware of the sale of illegal drugs, a difference that is statistically significant.

Figure 7. Predicted Probability of Respondents Reporting the Sale of Illegal Drugs in Their Neighborhood (vicbar3a)

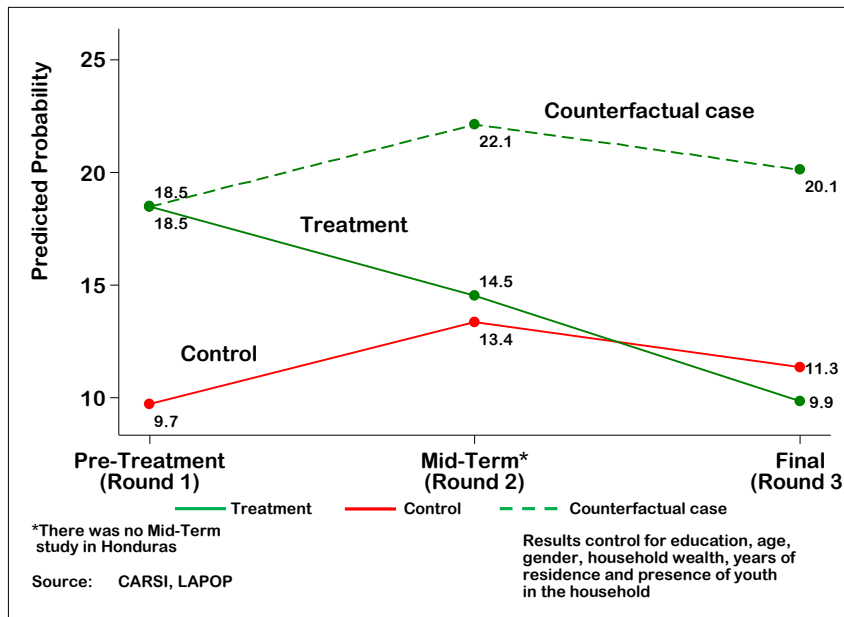
Figure 7 demonstrates that in the treatment neighborhoods, the probability of respondents recalling instances in which illegal drugs were sold decreased between years 1 and 2, while in the control neighborhoods it increased. This pattern continued through years 2 and 3 with an increase in the control neighborhoods and a decrease in the treatment neighborhoods. Regionally, 25% fewer surveyed residents reported being aware of robberies than would be expected without USAID intervention. As noted in Table 2, the greatest decrease in reported sales of illegal drugs can be found in Guatemala, with 50% fewer cases of reported sales as noted by the interviewers conducting the LAPOP survey.

A Guatemala City police officer, when asked about the sale of drugs since the midterm round of interviews, answered:

“Well, yes, thanks to the efforts of, of all our fellow officers and the station command, you see, I think that it has indeed gone down, uh huh.”

Extortion

Reported cases of extortion in the neighborhoods are shown in Figure 8. Results are based on answers to the following question: “Has extortion or blackmail occurred over the last twelve months in [Name of Neighborhood]?”



Compared to what we would expect to see without USAID intervention, 51% fewer residents reported being aware of cases of extortion, a difference that is statistically significant

Figure 8. Predicted Probability of Respondents Reporting Extortion or Blackmail Occurring in Their Neighborhood (vicbar4a)

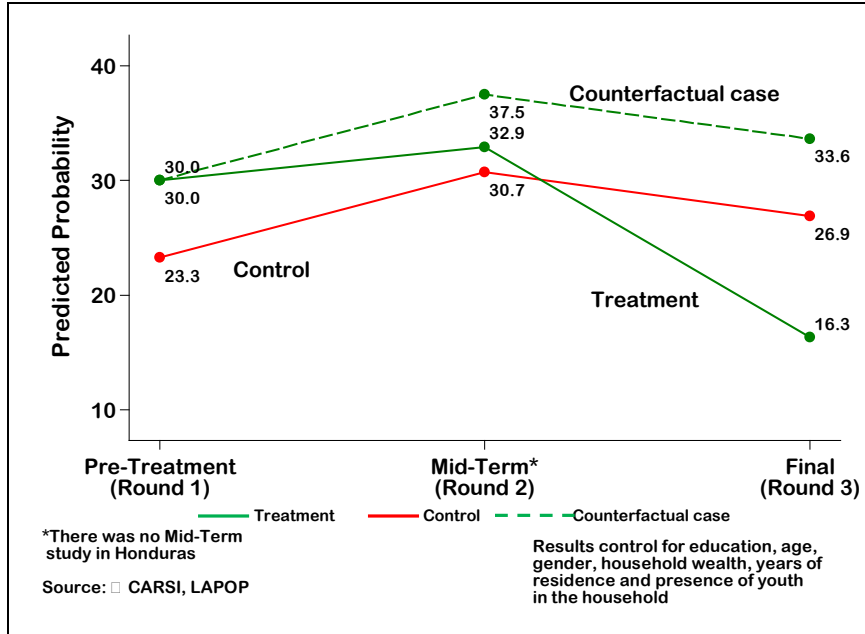
Figure 8 shows that in the treatment neighborhoods, the probability of respondents recalling instances of extortion or bribery decreased between years 1 and 2, while in the control neighborhoods it increased. However, between years 2 and 3, the probabilities of respondents reporting extortion or blackmail decreased in both the control and treatment neighborhoods. Regionally, 51% fewer surveyed residents reported being aware of extortion and blackmail than would be expected without USAID intervention. As noted in Table 2, the greatest decrease in reported cases of extortion or blackmail can be found in Honduras, with 57% fewer instances being reported to the interviewers conducting the LAPOP survey.

A Guatemalan community development leader, on being asked about extortion levels in her community, answered: “Here in the neighborhood it has decreased, it has decreased.”

The coordinator of a Salvadoran Municipal Crime Prevention Committee when asked about levels of extortion in the past twelve months, answered, “Uh, extortion, it’s decreased, but it continues nevertheless.”

Murder

Figure 9 shows reported cases of murders. Results are based on answers to the following question: “Has murder occurred over the last twelve months in [Name of Neighborhood]?”



Compared to what we would expect to see without USAID intervention, 51% fewer surveyed residents reported being aware of murders, a difference that is statistically significant

Figure 9. Predicted Probability of Respondents Reporting Murders Occurring in Their Neighborhood (vicbar4a)

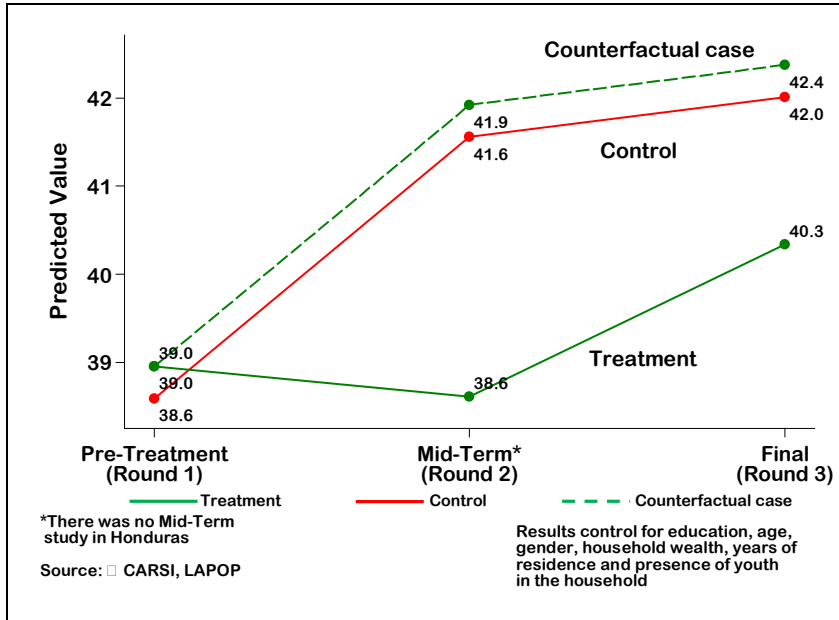
As can be seen in Figure 9, there was an increase in the probability of respondents recalling instances of murder between years 1 and 2 in both the treatment and control neighborhoods; and a decrease in both neighborhoods between years 2 and 3. Moreover, by the time of the final interviews, this probability was markedly lower in treatment neighborhoods than before the treatment was applied. Regionally, 51% fewer surveyed residents reported cases of murder than would be expected without USAID treatment. As noted in Table 2, the greatest decrease in reported cases of murder can be found in Guatemala, with 60% fewer instances as reported to the interviewer conducting the LAPOP survey.

One police officer in El Salvador highlighted the decrease in crime writ large by stating, “Currently, *I feel that we have lowered the crime rate substantially, compared to previous years, because now you certainly can enter certain neighborhoods, which before if you entered them, perhaps you were risking some type of mishap*”.

II. Perception of Insecurity

Perception of Insecurity

Figure 10 examines the feelings of insecurity in the communities. The following figure is based on the question: “In your opinion is this community very safe, somewhat safe, somewhat unsafe, or very unsafe?”



Compared to what we would expect to see without USAID interventions, perceptions of neighborhood insecurity were 5% lower, a difference that is statistically significant

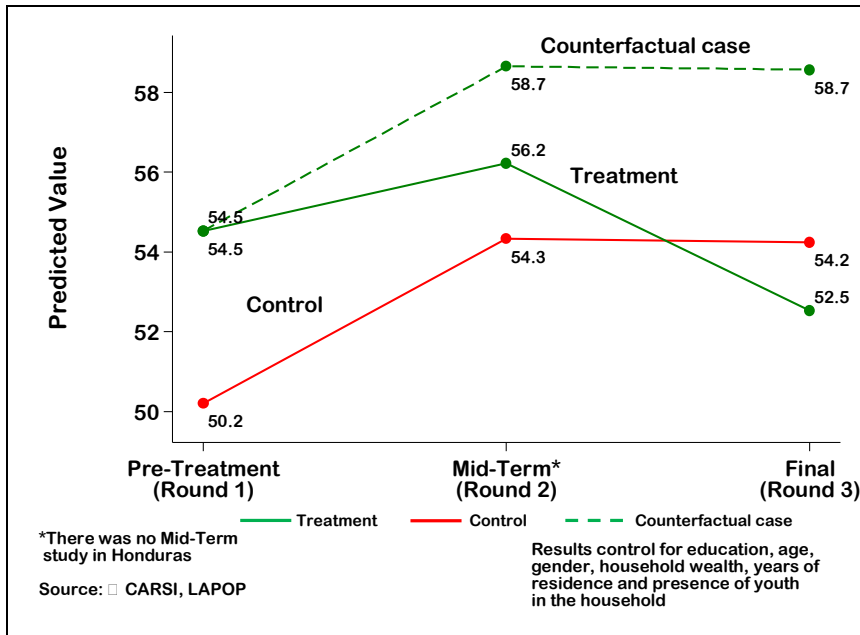
Figure 10. Perception of Insecurity (Predicted Value) (pese0)

Figure 10 shows that in the treatment neighborhood, the probability of respondents perceiving neighborhood insecurity decreased between years 1 and 2, whereas this probability increased in the control neighborhood. Between years 2 and 3, there was an increase in the probability of respondents perceiving insecurity in their neighborhoods in both the treatment and control neighborhoods. Regionally, the perception of neighborhood insecurity declined 5% more than would be expected without USAID treatment. As noted in Table 2, the greatest decline in the perception of insecurity was in Guatemala with a decrease of 22% as noted by the LAPOP interviewers.

The decline in the perception of insecurity was also apparent in the qualitative interviews. For example, one community leader in El Salvador remarked, *“Right now I’m almost 90 per cent safe because, I feel safe, well, because I know all the people and, and if anyone who’s unknown walks around (here), and if we see that he looks suspicious, we immediately call the police so that they investigate what it is that he’s doing and who he is, and so we resolve the problem right then.”* A patrolman in Tactic, referring to a particular treatment community, said the in the past year, *“to say that there hasn’t been much trouble is an understatement. In that place, crime has gone down a lot.”*

Walking Alone at Night

Figure 11 shows the perception of insecurity while walking alone at night. Results are based on answers to the following question: “Could you tell me how safe or unsafe you would feel walking alone in this neighborhood at night. Would you feel very safe, somewhat safe, somewhat unsafe, very unsafe?”



**Compared to what we would expect to see without USAID interventions, residents were 11% less likely to report feeling unsafe when walking alone at night, a difference that is statistically significant**

**Figure 11. Perception of Insecurity when Walking Alone at Night (fear4)**

Figure 11 shows that there was an increase in the probability of respondents feeling insecure when walking alone at night between years 1 and 2 in both the treatment and control neighborhoods. However, between years 2 and 3, the probability of respondents feeling insecure when walking along at night decreased in both the control and treatment neighborhoods (though very slightly in the control neighborhood). Regionally, there was an 11% decrease in the perception of insecurity when walking alone at night than would be expected without USAID intervention. As noted in Table 2, the greatest decrease in the perception of insecurity while walking alone at night can be found in Honduras with 15%.

An evangelical pastor in Guatemala echoed this decrease in the perception of insecurity while walking along at night, remarking, *“Fortunately, as I was saying, um, here in [NAME] we are blessed, you know. This is no more a very violent municipality nor are there a lot of groups that are always doing bad things, you see. So for the time being (laughs), well, a person can walk safely in the city, you see. Although there have been cases in which someone’s cell phone has been stolen, you see, the person was mugged, you know. But there are very few of these cases, so I think that in my personal judgment, well, in, in some way well, we can still walk around safely here in the city.”*

Insight into how and why the perception of insecurity has decreased was given by a Guatemalan community leader, a former member of a Community Crime Prevention Committee, said that crime has decreased a great deal, and with it, community fear of crime. In her words: *“Well,*

looking at, at the problem that, that we were experiencing in the neighborhood, you know, at, at the beginning when the neighborhood was a little underpopulated, well, there was a lot of crime; a lot of idle boys hanging out on street corners, giving the girls and all the other passersby a hard time. People were very fearful about coming here to the, to the, neighborhood. Up to now this problem is being eradicated, but people are still uneasy. It's like the fear is still in the back of their minds that the neighborhood is dangerous. It isn't anymore. You can come here before dawn, at night, at whatever time you want, and there's nothing to be afraid of. As a result of all the efforts that have been made to get rid of these little gangs, they're not here anymore. Not anymore, not anymore, we don't have crime here anymore. The community is very nice now."

She attributes the reduction in crime to strategies used by the Community Crime Prevention Committee (specifically, Committee night patrols), together with the support of the national police and the army.

III. Neighborhood Disorder (including youth vulnerability to crime and gang activity)

Youths Loitering

Figure 12 explores the perception of young people loitering on the streets. Results are based on answers to the following question: "Which of the following do you view as a very serious problem, somewhat serious, not so serious, not serious, or not a problem at all in your neighborhood? Young people or children in the streets doing nothing, roaming around in [Name of Neighborhood]."

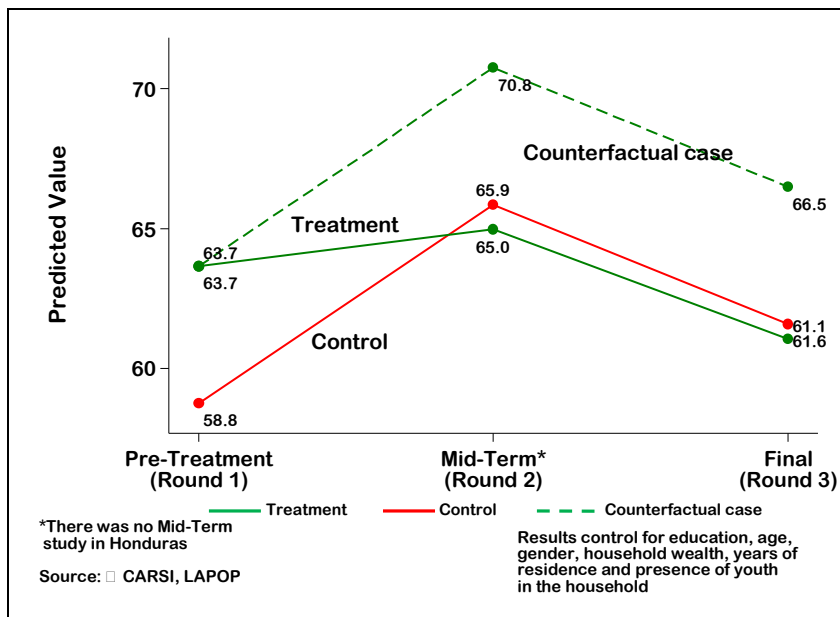


Figure 12. Youths Hanging out on the Street (diso7)

Figure 12 demonstrates that the perception of youth loitering as a serious problem increased between years 1 and 2 in both the treatment and control neighborhoods. However, between years 2 and 3, the probability of respondents perceiving youths loitering decreased in both the control



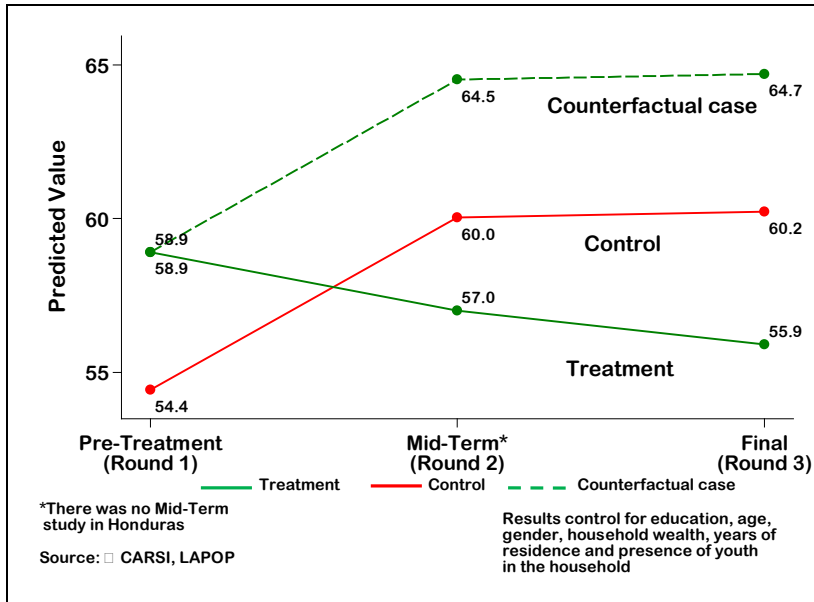
Compared to what we would expect to see without USAID interventions, perception of youth loitering as a problem was 8% lower, a difference that is statistically significant

and treatment neighborhoods. Regionally, there was an 8% decrease in the perception of young people loitering in the neighborhood than would be expected without USAID treatment. As noted in Table 2, the greatest decrease in the perception of youths hanging around on the streets being reported to the LAPOP interviewer can be found in Guatemala with 10%.

A coordinator at *Alianza Joven Honduras* explained the importance of the decrease in the perception of youths loitering, “At the Outreach Centers...all these children, they have been out on the streets for a good while, and lately, at 2 pm when we open our doors, they’re waiting at the gate. So they spend the whole afternoon here; they don’t go, they don’t go out on the streets. Before they were out on the streets, and they would jump up on the cars and do violent things; they’d break headlights, but not now. Now they come over here, and this is their entertainment place”.

Youths in Gangs

Figure 13 demonstrates the perception of youths in gangs as a problem. Results are based on answers to the following question: “which of the following is a very serious problem, somewhat serious, not so serious, not serious, or not a problem in your neighborhood? Young people or children that live in [Name of Neighborhood], who are in gangs or maras.”



Compared to what we would expect to see without USAID interventions, residents’ perceptions of youth in gangs as a problem were 14% lower, a difference that is statistically significant

Figure 13. Perception of Youths in Gangs as a Problem (Predicted Value) (diso8)

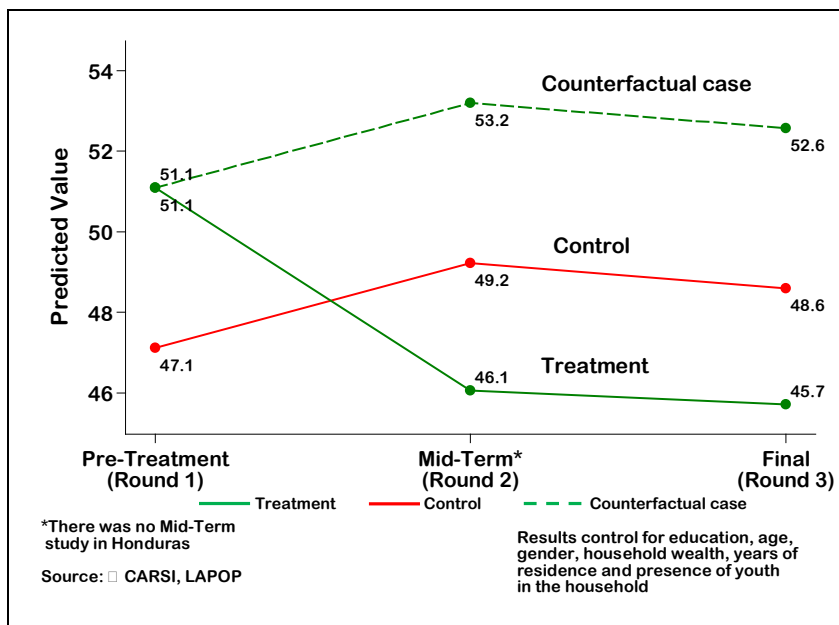
As can be seen in Figure 13, there was an increase in the probability of respondents holding the perception that youth in gangs was a problem in the control neighborhoods between years 1 and 2; conversely in the treatment neighborhoods there was a decrease in this perception between years 1 and 2. Between years 2 and 3, the decrease continued in the treatment neighborhood, and we observed a slight increase in the control neighborhood. Regionally, there was a 14% decrease in the perception of young people in gangs as a problem than would be expected without USAID intervention.



As noted in Table 2, Honduras and Guatemala both saw a 17% decrease in the perception in youth in gangs as a problem as reported to the interviewer conducting the LAPOP survey. One Outreach Center Coordinator in El Salvador remarked, *“Yes, there were a lot (of gangs) here before. We’d hear about the things they were doing all the time from the gang members themselves, but now not so much”*.

Perception of Gang Fights

Figure 14 explores the perception of gang fights as a problem. Results are based on answers to the following question: “which of the following is a very serious problem, somewhat serious, not so serious, or not a problem in your neighborhood? Gang fights”



Compared to what we would expect to see without USAID interventions, residents’ perceptions of gang fights as a problem were 13% lower, a difference that is statistically significant

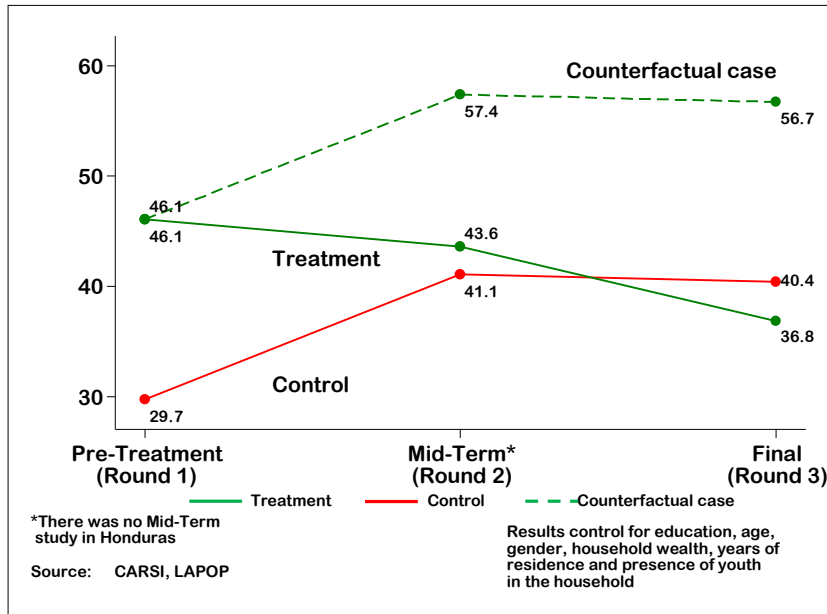
**Figure 14. Perception of Gang Fights as a Problem (Predicted Value) (diso18)**

As Figure 14 demonstrates, there was an increase in the probability of respondents holding the perception that gang fights were a problem in the control neighborhoods between years 1 and 2; conversely in the treatment neighborhoods there was a decrease in this perception between years 1 and 2. Between years 2 and 3, both the control and treatment neighborhoods had a decrease in the perception that gang fights were a problem. Regionally, there was a 13% decrease in the perception that gang fights were a problem than would be expected without USAID treatment. As noted in Table 2, the greatest decrease in this perception, as reported to the LAPOP interviewer is in Honduras at 19%.

Gangs fighting and other illegal activities was also the topic of our qualitative interviews. One PNUD program implementer in Honduras told us, *“We do, we do have some young people who, you see, they themselves have told me that when they were active gang members, that they were doing some kind of “work” for the gang. And when they came to the Outreach Center, they, they left the gang; they completely left their illegal activities behind.*

Avoiding Dangerous Areas

Figure 15 looks at certain measures taken to protect oneself from crime. Results are based on answers to the following question: “In order to protect yourself from crime, in the last twelve months, have you taken any measures such as avoiding walking through some areas in [Name of Neighborhood] because they can be dangerous?”



Compared to what we would expect to see without USAID interventions, 35% fewer residents reported being likely to avoid dangerous areas of the neighborhood because of fear of crime, a difference that is statistically significant

**Figure 15. Avoidance of Walking through Dangerous Areas (Predicted Value) (fear10)**

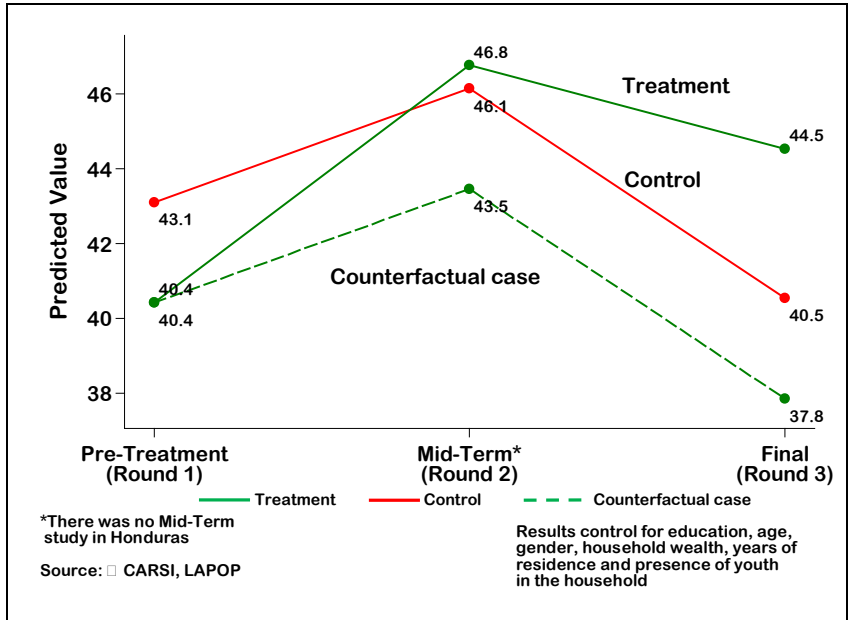
Figure 15 explores residents’ avoidance of dangerous areas while walking. In the control neighborhoods there is an increase in the probability that respondents would avoid dangerous areas of the neighborhoods because of fear of crime, while in the treatment neighborhoods there was a decrease in this probability between years 1 and 2. Both the treatment and control neighborhoods saw a decrease in this probability between years 2 and 3. Regionally, residents were 35% less likely to avoid dangerous areas of given neighborhoods because of fear of crime than would be expected without USAID intervention. In Honduras we see the greatest change with a 36% decrease in reports of avoiding walking through dangerous areas as noted by our LAPOP interviewers.

One community leader in Honduras explained some of the measures taken to decrease the avoidance of walking through dangerous areas, “*where I live, you know, what we’ve done is to set up a, a security committee, you see, that is specifically for, for, for the neighborhood, you see. Uh, we pay a monthly fee, and what we did was to hire private security which we’ve tried to, to, to follow the, the, the laws here. We needed to get the court people, the permits to operate from the police, and in fact, we’ve done that, you know...*”

Using the Community to Fight Crime

Figure 16 explores the perception that the community is organized to fight crime. Results are based on answers to the following question: “And now talking about [Name of Neighborhood],

to what extent would you say the neighbors of [Name of Neighborhood] are organized to prevent crime and violence?”



Compared to what we would expect to see without USAID interventions, residents’ evaluations of their communities’ organization for crime prevention were 18% higher, a difference that is statistically significant

Figure 16. Perception of Level of Community Organization to Prevent Crime (Predicted Value) (soco9)

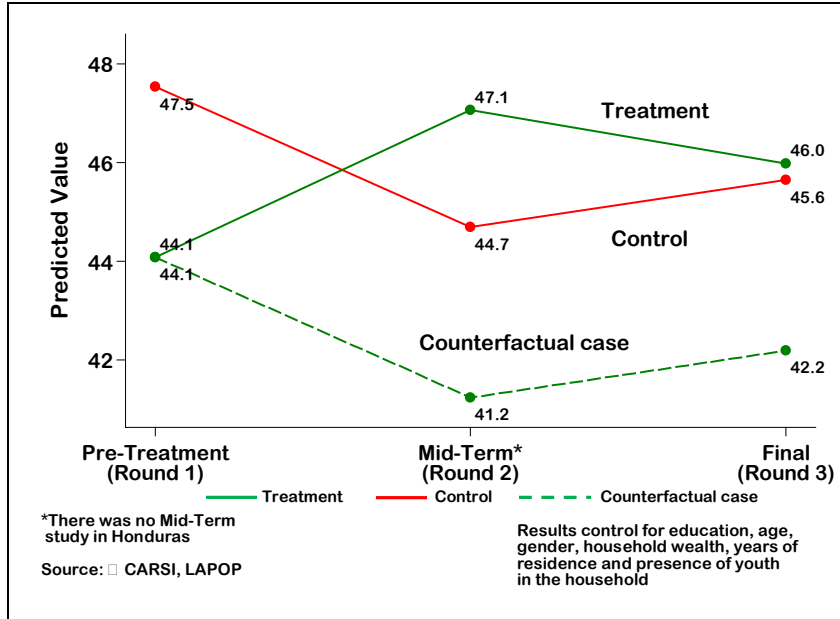
In this case, there was an increase between years 1 and 2 in both the treatment and control groups regarding the perception that the community is organized to fight crime. Between years 2 and 3, there was a decrease in both neighborhoods. Regionally, the perception that the community is organized to prevent crime increased 18% more than would be expected without USAID intervention. With regard to specific countries studied in this report, El Salvador saw the most change with an 18% increase in perceived levels of neighborhood collective action as reported to the LAPOP interviewer conducting the survey.

This increase in neighborhood vigilance and action was echoed in our qualitative data as well. One community leader in El Salvador noted, “we have, uh, the neighborhood, uh, well distributed.....We have a neighborhood watch board and from them we got information that people are, are more united, and now they’re talking about ADESCO, that the Outreach Center, that the community is more united.”

IV. Role of Institutions: The Police

Trust in the Police

Figure 17 explores the levels of trust in the national police. Results are based on answers to the following question: “To what extent do you trust the police?”



Compared to what we would expect to see without USAID interventions, residents' trust in the national police was 9% higher, a difference that is statistically significant

Figure 17. Trust in the National Police (Predicted Value) (b18)

Between years 1 and 2 there was an increase in the treatment neighborhoods and a decrease in the control neighborhoods in trust of the national police. Conversely, between years 2 and 3 there was a decrease in the treatment neighborhoods and an increase in the control neighborhoods regarding trust in the national police. Overall within the region, there was a 9% increase in the trust of the national police than would be expected without treatment. The country where there was the greatest increase in trust in the national police was Guatemala with a 21% increase in trust levels of the national police, as reported to the LAPOP interviewers.

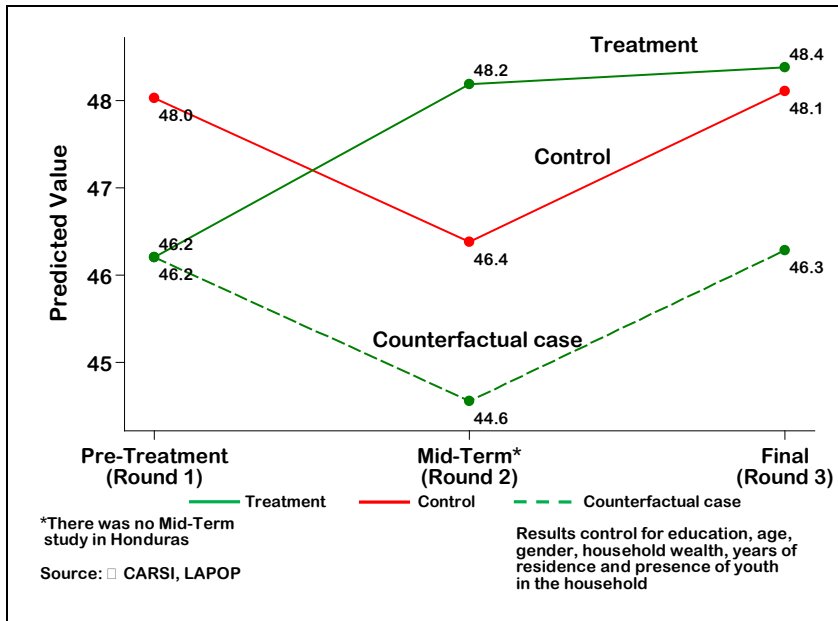
A young man in Guatemala (where we see the largest quantitative increase in the levels of trust) claimed, *“I trust the police.... I think that at least we have to give them the benefit of the doubt, right? “Well, yes, I do trust them because they do their job,” right? ...there are not enough of them to patrol all over [NAME]; there are too few of them. So, yes, at least we should have a little confidence in them; they at least deserve that; they’re working for that, aren’t they? They’re practically giving their lives. Sometimes they put themselves at risk too, right?”*

But views of the police were not all positive. For example, a member of a Salvadoran Municipal Commission for the Prevention of Crime and Violence, who formerly had served as president of his local community development association, on talking about the trustworthiness of the police, said the following:

*They’d come in their cars and round up the kids without having any evidence against them, you know, just to harass them, right? The police would beat the kids and maybe then they’d leave, you know. And that destroyed the project....*

Satisfaction with the Police

Figure 18 examines the level of satisfaction with police performance. This data is based on answers to the question: “In general, would you say you are very satisfied, satisfied, unsatisfied, or very unsatisfied with the performance?”



Compared to what we would expect to see without USAID interventions, residents' satisfaction with police performance was 5% higher, a difference that is statistically significant

Figure 18. Satisfaction with Police Performance (Predicted Value) (pole2)

Figure 18 displays the level of satisfaction with police performance. As the figure demonstrates, between years 1 and 2, there was a decrease in the control neighborhoods and an increase in the treatment neighborhoods regarding the level of satisfaction with police performance. Between years 2 and 3, however, there was an increase in both neighborhood groups (though the increase in the treatment group was slight). Regionally, satisfaction with police performance increased 5% more than would be expected without treatment. Specifically, Guatemala had the most dramatic increase in the level of satisfaction with the police performance with a 19% increase.

Our qualitative findings complement our quantitative findings on levels of satisfaction with police performance. One community leader in El Salvador remarked, “if you ask them to come, in two minutes they’re here. There’s a...special closeness between them (the police) and us (neighbors), and us and them, um, we think of them as...as community police, we, we have come...we have treated each other like family, to put it that way. Sometimes they’ll start playing, they play Nintendo, or anything else, for a while here...and they’re part of the community...always ready to help. We have their phone numbers, and any gathering we have, we just call them and they come...”

However, the qualitative interviews also uncovered less flattering views about police performance. A Guatemalan evangelical pastor who serves as a youth group leader was asked, “If you were a victim of a robbery or a mugging, how much confidence do you have that the police would catch the guilty party?” His answer was, “My God...maybe 10%, maybe I’d give it a 5% chance.” On being asked how confident they were that the police would capture someone

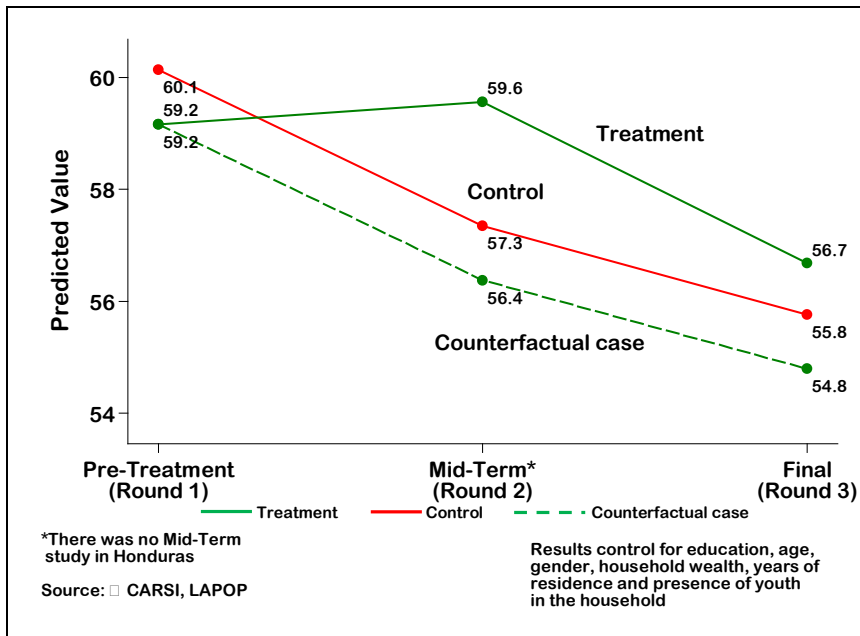
suspected of robbing or assaulting them, a Panamanian Catholic youth group clergyman said, “Uh, a lottery, it’s a lottery. It’s possible that he’d be captured quickly; it might be that he’d never be captured. That is to say, it’s luck. And I don’t know how to put it to you, if it’s luck or what, but it just depends.”

V. Indirect Effects: Democratic Values

The CARSI program focuses on the problems of violence and crime, and for that reason, most of our indicators look at violence and crime directly. However, violence and crime need to be cast in the broader context of democratic values, especially interpersonal trust, a value that at least since Putnam (1993) wrote his classic book, *Making Democracy Work*, has been the “social glue” that allows for successful, peaceful democratic rule. Therefore, we take a brief look at interpersonal trust, satisfaction with democracy more generally, and citizen evaluation of government handling of security, to tap into these possible impacts of crime prevention interventions under CARSI.

Interpersonal Trust

The following figure explores the role of interpersonal trust in the neighborhoods. The data below are based on the answers to the question: “Speaking of the people from around here, would you say that people are very trustworthy, somewhat trustworthy, very trustworthy, or untrustworthy?”



Compared to what we would expect to see without USAID interventions, residents’ levels of interpersonal trust were 3% greater, a difference that is statistically significant

Figure 19. Interpersonal Trust (Predicted Value) (it1)

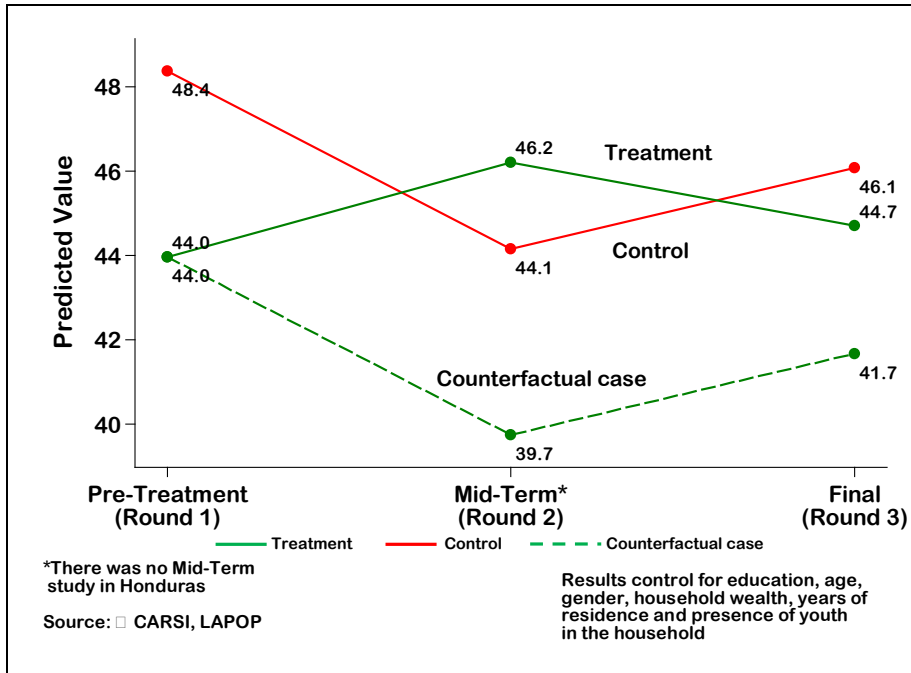
As can be seen in Figure 19, there was an increase in the treatment neighborhoods and a decrease in the control neighborhoods regarding interpersonal trust between years 1 and 2. Both groups, however, decreased in interpersonal trust between years 2 and 3. Overall, interpersonal trust was

3% higher than would be expected without USAID intervention. Specifically, El Salvador showed the greatest increase in interpersonal trust, with an 11% increase reported to LAPOP interviewers.

A COCODES president in Guatemala provided us with an example of how this interpersonal trust is embodied on a day-to-day basis. *“With our neighbors sometimes, uh, uh, we get together and, and, whatever happens, whether my door is locked, my neighbor will notice that. We have each other’s cell phone numbers. They’ll call and say ‘Hey..., look, this is happening.’ And since no one is there, ‘you’re not home,’ but ‘look, there’s a man who looks like he’s trying to open your door,’ something like that, you see? We neighbors communicate well among ourselves”*

Satisfaction with Democracy

Figure 20 demonstrates the changing levels of satisfaction with democracy in the countries surveyed. The data are based upon the answers to this question: “In general, would you say that you are very satisfied, satisfied, dissatisfied or very dissatisfied with the way democracy works in [country]?”



Compared to what we would expect to see without USAID interventions, residents’ satisfaction with the functioning of democracy was 7% higher, a difference that is statistically significant

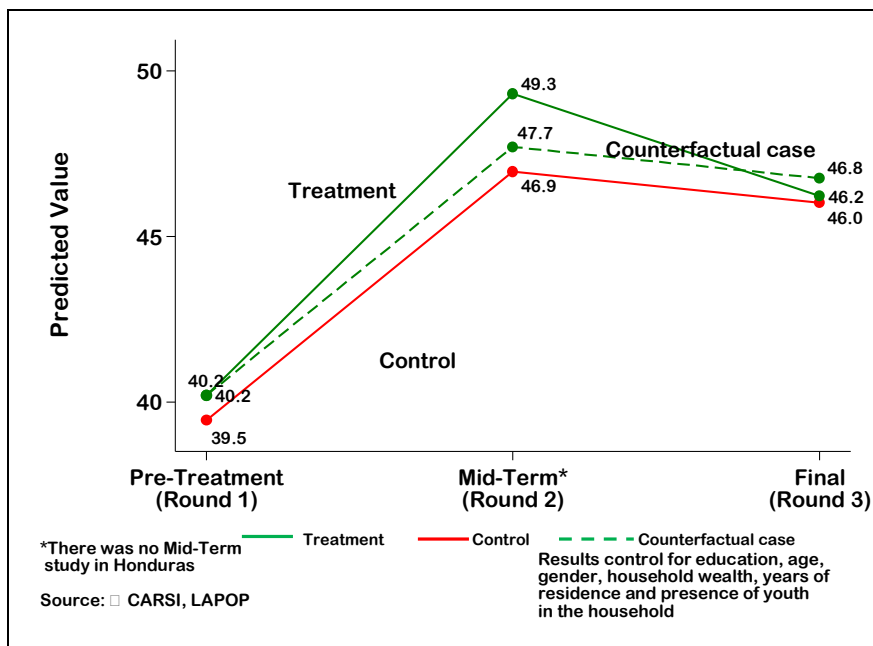
Figure 20. Satisfaction with Democracy (pn4)

Figure 20 shows that in the treatment neighborhoods, the probability of respondents expressing satisfaction with democracy increased between years 1 and 2 and decreased between years 2 and 3. In the control neighborhoods, however, this probability decreased between years 1 and 2 and increased between years 2 and 3. Regionally, there was a 7% increase in satisfaction with democracy than would be expected without USAID treatment. Honduras showed the greatest increase in respondents’ satisfaction with democracy with a 20% increase.

One community leader in Honduras explained his satisfaction with democracy claiming, “*what generates violence prevention—the opportunity to, to get an education, a job, resources, you know that it would, it would be the ideal path, but we would need things that, you know, they free us too; people are set free when there are educational opportunities, health care, and I wonder if they can see as far as that... True democracy happens when people have opportunities, you see, since in the midst of opportunity, a person’s path bends, and there you have a different scenario, but, but we, as a people, don’t even have these opportunities. They need to be built considering the limitations and starting from a commitment.....*”

Government Competency vis-à-vis Security

Evaluation of government handling of security is shown in Figure 21. Results are based on answers to the following question: “To what extent would you say the current administration improves citizen safety?”



**Evaluation of government handling of security did not increase significantly more than would be expected without intervention**

Figure 21. Evaluation of Government Handling Security (n11)

As shown in Figure 21, the respondents had favorable assessments of the government’s handling of citizen safety in both the control and treatment neighborhoods between years 1 and 2. Between years 2 and 3, however, there was a decrease in this assessment in both neighborhood groups. Regionally, the evaluation of government handling of security did not increase significantly than would be expected without USAID intervention. In comparison to the counterfactual case, assessments in the treatment communities were 8% higher in El Salvador, regarding attitudes toward government handling of security; conversely, they were 7% lower in Guatemala.



### *Community Stakeholder Perspectives*

The qualitative interviews provided a wealth of material related to each of the findings enumerated above. That material is rich and detailed, and is incorporated into each country report. In this regional summary, in the following paragraphs, we attempt to summarize the key views community stakeholders regarding each specific institution that can play an important role in crime and violence mitigation. Specifically, we summarize stakeholder views on: the schools, the police, the family, the churches, and the community.

#### **The Role of Schools:**

- There is widespread agreement among many of our stakeholders that the schools are playing an important role in crime prevention. Through the innovative *Convivencia Escolar* (School Harmony) program, which is formalized in El Salvador but is also present in less institutionalized ways in Guatemala and Panama, together with the institutionalization of various student leadership groups within the schools and the training of teachers and students in mediation and alternative conflict resolution, the schools are creating a better environment for at-risk youth. One improvement in the Salvadoran public school system is the reduction and/or elimination of home suspensions and the substitution of in-school penalties (e.g., assigning school maintenance work to such students) for students who have seriously violated school norms and regulations. Home suspensions are gradually being eliminated in some of the Guatemalan and Panamanian public schools as well. Forcing children to stay home, often in broken homes with no parents present to supervise their children, our stakeholders told us, is akin to throwing the kids into the proverbial “briar patch.” In schools that have the benefit of on-site psychologists, the in-school punishment has been transformed from the assignment of menial tasks to the administration of counseling. Many teachers and school administrators could not say enough good things about the role of school psychologists.
- The previously widespread practice of expulsion from school (which is allowed in Guatemala and Panama and, although currently prohibited *de jure* in El Salvador, *de facto* continues on in practice in that country), and the subsequent transfer to another school too far from the minor’s home to allow him/her to live with his/her parent(s), results in a further disintegration of home life for the child. The collateral damage of these *de facto* expulsions and transfers is that they frighten parents in the receiving schools. In instances of gang members, reassignment to a new school, we were told, often results in other students moving away from the school in which the gang members have been enrolled. Thus a vicious cycle of musical chairs begins, with well-behaved youths moving away from schools into which known gang members have been transferred. Furthermore, if the parents of the well-behaved children do not move with their offspring, then the latter also become separated from their nuclear families, producing additional second-order collateral damage.
- Teachers whose schools have had the benefit of school-based, on-site psychologists (in the case of El Salvador these psychologists were generally paid for by USAID funds, we were told) were highly enthusiastic about the results of this new resource. As teachers have been trained to forego corporal punishment and substitute the use of psychological counseling and

mediation for conflict resolution, they are seeing positive results in troubled youths. The teachers report that children and youths divulge child abuse and other problems to psychologists, which they had not been willing to do with their school teachers and directors, and that they see a marked change for the better in the behavior of many of these troubled students.

- School directors and teachers have been playing a vital role in uncovering child abuse in the home, and they have been sensitive to frequent domestic violence situations that adversely affect their students' behavior. One repeatedly mentioned problem is teenage pregnancies (often a reason for dropping out of school). In Guatemala, school directors' narratives reveal that incest is going on with alarming frequency, particularly in rural areas. Specifically, fathers have been found to be having sexual relations with their under-age daughters, thereby fathering their daughters' babies. School administrators have been reporting these instances to the appropriate judicial authorities. Some administrators said that they make allowances for students who have babies, doing whatever they can to enable these young girls to complete their high school education.

### The Role of the Police

- Police officers who were interviewed in each of the three rounds consistently reported to us that it was no longer possible for gang members to dissociate themselves from their gangs. In El Salvador for example, police reported that the only way out of a gang is in a coffin. This, they told us, contrasts with the previous situation, in which gang members could exit the gangs by joining a church for safety. Often they were attracted to Evangelical churches, so much so, we were told, that there have been several cases of former gang members becoming Evangelical pastors both in El Salvador and Panama. Some police officers interviewed, however, said that some of these reformed gang members now functioning as pastors continue to belong to their gang, *sub-rosa*, and continue to engage in illegal activities. As one police officer explained, a member never leaves a gang; even in middle age, when a gang member has a family and a regular job, they still may be required to perform services for the gang (generally non-violent services, such as money-laundering).

### The Role of Family

- A major factor associated with youth dropping out of school and joining violent gangs, according to many interviewees across all stakeholder groups, is what is universally referred to as the "broken home" ("*la familia desintegrada*"). More concretely, single-parent households, typically matrifocal, are frequently characterized by having older children taking care of younger siblings so that the mother can leave the house for work. Under these conditions, the poorly cared for children all too often end up joining gangs. We were told that the risk is especially high when the single-mother takes on a partner who is not the biological father of the children. Such a situation frequently, we were told, results in child abuse and/or intimate partner abuse, which then pushes the minor out of the house and into the arms of a gang. Our respondents told us repeatedly that gangs represent surrogate families for youths seeking friendship and protection.

### The Role of Churches

- The churches play an especially important role in crime and violence prevention. Their youth group programs, some of them funded by USAID, are seen as preventing youths from hanging out on street corners and getting them engaged in socially positive activities, some of them recreational (e.g., sports), some religious, and some empowering because they involve acquiring job training skills. Evangelical pastors were considered by our stakeholders to be especially active in reaching out to youth already in gangs in an effort to get them out. They also often serve as mediators between warring gangs, in order to prevent bloodshed. In addition to pastors, we were told of “Christian police officers” (*policías cristianos*, also known as *capellanes*, or chaplains), who evangelize in the prisons. This is a crime prevention measure, as it tries to turn around gang members before they are released from prison. The Catholic Church was seen as being effective in reducing crime levels, possibly because of its longstanding, well-established age-graded programs, beginning in early childhood and continuing into adulthood. Those who have gone through the various youth programs, we were told, end up being community leaders as young adults, and apparently they are more resistant to the lure of the gangs.

### The Role of the Community

- Many community development association leaders, comprising a key element in violence prevention efforts, reported that they were willing to share intelligence with police officers only if they knew them personally and trusted them. For these leaders, the dedicated police hotlines were very useful for getting the authorities to show up when a crime was either in progress or was rumored to be in the planning, but only when the official answering the call was known to them.

- In Guatemala, many leaders of the local community development associations (called COCODES) and municipal-level organizations (the municipal community development association COMUDES and the Municipal Crime Prevention Committee), key players in violence prevention efforts, reported that they had been working closely with the National Civil Police in various ways: they had been acting as intermediaries, reporting crimes in progress to the police (in the process often preventing or putting a halt to vigilante justice), and serving as interpreters for police who do not speak or understand the particular indigenous language of the area. They had been working with local night patrol groups, ensuring that the suspects whom they rounded up were handed over to the police and not to angry mobs, and sometimes negotiating with angry mobs when the situation had gotten out of control. They also reported domestic violence, when victims were either unwilling to do so themselves or felt that they would be unsuccessful in getting the police to come to their homes to help them.

- At-risk youth reported that of the various outreach center activities in which they had participated, the one that they found to be the most useful and valuable was vocational training, especially computer literacy skills. These youth saw training as their path to a good job and a more self-sufficient future. Many others expressed appreciation for the music and art programs of those centers, as well as the athletic outlets that they provide.

- The Municipal Crime Prevention Committees are an innovative structure, one that we were told is supported by USAID. They appear to be successful in galvanizing the various stake holding sectors of the targeted municipalities (specifically, the police, the school directors, the clergy, the community development association leaders [e.g., ADESCO in El Salvador], and health service providers) by incorporating representatives of each sector on every committee. These representatives, we were told, become the link between the municipality and the various communities that have been selected for the crime prevention treatment. They regularly report the Committees' plans to community stakeholders, thereby involving them in the planning process. Indeed, the community-based crime prevention interventions, or treatments, were selected through input from the communities, by means of focus groups held with community leaders. Perhaps because of the corporatist nature of the composition of the municipal committees (that is, representation by the various stake holding sectors enumerated above), to varying degrees, there is interaction and cooperation among the stake holding groups at the community level.
- At the same time, however, a number of community association and crime/violence prevention committee members in Guatemala and El Salvador reported that their efforts were hampered by political divisions between the municipal government and themselves. Specifically, whenever the mayor of the municipality was of a political party different from that of the majority of the committee members, support for the violence prevention programs would diminish. These committees would then seek financial support from other sources, to make up for the deficits produced by municipal lack of support, and would wait for the next electoral outcome, hoping that the person to fill the mayor's seat would be of the same political party as the one that they were backing. In short, municipal support for the crime/violence prevention programs had become politicized in some of the municipalities.

### Conclusions and Policy Recommendations

#### *Overview*

By using a variety of methods over four years, across four countries, in more than 100 neighborhoods, LAPOP has been able to conduct a wide-ranging impact evaluation of USAID's community-based crime prevention interventions in El Salvador, Guatemala, Panama, and Honduras. To arrive at the following conclusions, we used mixed-methods, meaning quantitative (individual surveys and systematic neighborhood observations) as well as qualitative (semi-structured interviews and focus groups with both community stakeholders and implementing partners of violence prevention programs) research tools. As a result of this intensive and extensive methodology, we have assembled rich datasets for each country, as well as the ability to make important comparisons throughout the region. What follows is a summary of the main quantitative and qualitative findings, along with the various policy recommendations that accompany these findings. For a more detailed analysis at the country level, a report has been prepared for each of the aforementioned countries and can be found at: <http://www.vanderbilt.edu/lapop/carsi-study.php>.

#### *Main Findings*

- **Crime Victimization and Violence**

- According to our study, there is strong evidence that USAID's crime prevention programs have been successful at reducing crime victimization. This can be observed in the quantitative data:
  - Compared to what we would expect to see without USAID interventions, 51% fewer surveyed residents reported being aware of extortion and blackmail in their neighborhoods Compared to what we would expect to see without USAID interventions, 51% fewer surveyed residents reported being aware of murders in their neighborhoods Compared to what we would expect to see without USAID interventions, 25% fewer surveyed residents reported being aware of illegal drug sales in their neighborhoods Compared to what we would expect to see without USAID interventions, 19% fewer surveyed residents reported being aware of robberies in their neighborhoods
- Our qualitative data bolsters this quantitative data:
  - One major finding was the important role schools can play in preventing violence by creating better environments for at-risk youth
  - On the other hand, one issue our stakeholders noted is that political divisions in the municipal violence prevention committees can hamper crime and violence prevention efforts

- **Perception of Insecurity**

- This impact evaluation concludes that the USAID programs have been successful at increasing citizens' sense of security. Quantitatively we conclude that:
  - Compared to what we would expect to see without USAID interventions, residents were 11% less likely to report feeling unsafe when walking alone at night through their neighborhoods
  - Compared to what we would expect to see without USAID interventions, perceptions of insecurity in the neighborhood were 5% lower
- The qualitative stakeholder interviews coincided in a decline in the perception of insecurity as can be observed by the following quotes:
  - Community leader (El Salvador): "Right now I'm almost 90 per cent safe because, I feel safe, well, because I know all the people and, and if anyone who's unknown walks around (here), and if we see that he looks suspicious, we immediately call the police so that they investigate what it is that he's doing and who he is, and so we resolve the problem right then."
  - A patrolman in Tactic, Guatemala, referring to a particular CARSI treatment community, said that in the past year, "to say that there hasn't been much trouble is an understatement. In that place, crime has gone down a lot."
  - Leader and participant of a municipal violence prevention programs (El Salvador): "I feel safe walking there, but five or six years ago at that hour (10 PM), I didn't."

- **Neighborhood Disorder**

- The data suggest that there was a significant decline in the perception of neighborhood disorder. For example:
  - Compared to what we would expect to see without USAID interventions, perception of youth loitering as a problem was 8% lower.
  - Compared to what we would expect to see without USAID interventions, residents' perceptions of youth in gangs as a problem were 14% lower
  - Compared to what we would expect to see without USAID interventions, residents' perceptions of gang fights as a problem were 13% lower.
- The community members also noted the decline in neighborhood disorder, especially the presence of gangs and youth loitering. That being said, our qualitative interviews pointed to root causes of the gang and youth problem, by highlighting ongoing problems:
  - "Broken homes" lead to youths dropping out of school and joining gangs.
  - Transferring students from school to school due to behavioral issues can create a system in which well-behaved children try to leave the school for another one where there is no gang violence, which can create a disruptive cycle of students moving from school to school.

- We found that community social control of disorder has improved significantly over what would be expected without treatment.
  - Compared to what we would expect to see without USAID interventions, 35% fewer residents report being likely to avoid dangerous areas of their neighborhood because of fear of crime.
  - Compared to what we would expect to see without USAID interventions, residents' evaluations of their communities' organization for crime prevention were 18% higher.
- **The Role of Institutions: The Police**
  - The quantitative data reveal that satisfaction with and trust in police performance has increased somewhat.
    - Compared to what we would expect to see without USAID interventions, residents' satisfaction with police performance was 5% higher.
    - Compared to what we would expect to see without USAID interventions, residents' trust in the police was 9% higher.
  - The qualitative data offered an interesting insight into the how this trust and satisfaction can result in better crime fighting.
    - Several community development association leaders noted that they were willing to share intelligence about various neighborhood issues with police officers only if they knew them personally and trusted them.
- **Indirect Effects: Democratic Values**
  - One indirect effect of the crime prevention interventions was some strengthening of democratic values, increasing them over the expected level in the absence of the programs. The statistical analysis found that:
    - Compared to what we would expect to see without USAID interventions, residents' satisfaction with the functioning of democracy was 7% higher.
    - Compared to what we would expect to see without USAID interventions, residents' levels of interpersonal trust were 3% greater.
- **Other Qualitative Findings**
  - Through our qualitative methods we found some additional evidence:
    - On-site school psychologists can prove to be invaluable for troubled students.
    - School directors can play a vital role in identifying and addressing sexual and domestic abuse situations, and the behavior that can be manifested as a result of such abuse.

### *Policy Recommendations*

The policy recommendations emerge from both the quantitative and qualitative findings, but are informed especially by suggestions made by stakeholders. They are organized below into seven clusters of recommendations:

- **Make community-based violence prevention programs a frontline weapon in reducing crime and violence.**
  - Improve coordination between the municipal governments and their violence prevention committees and neighborhood-based actors.
  - The Municipal Crime Prevention Committees should have representation and subcommittee participation of every at-risk community of the municipality.
- **Increase family support to reduce risk factors.**
  - Expand pre-school, after-school, weekend, and summer vacation child care (day care facilities subsidized by government and/or NGO funds) for children living in single-parent households.
  - Make child care programs available at little or only symbolic cost to poor families for pre-school children.
  - Extend availability of after-school programs (like the type being offered through USAID-sponsored outreach centers) to all at-risk school-aged children.
- **Use the classroom to raise awareness of the issues surrounding physical and sexual abuse in order to reduce cases of such abuse**
  - Evaluate the sexual/domestic abuse component of both the curriculum and the police talks at the schools.
    - Ensure that these components include information about the laws that protect children from violence in the home.
  - Educate school directors about the steps they can take to report child abuse to the appropriate authorities. Train these directors on how to compassionately handle victims and coordinate interventions with teachers and psychologists.
  - Expand the presence of school psychologists.
- **Increase security at school**
  - Encourage the Ministries of Education to make a greater investment in the School Harmony program as well as similar programs that reduce school violence.
  - Direct more resources to school security, especially in the form of police protection.
  - Implement a “safe backpack” program (a routine checking of backpacks for weapons and narcotics) in schools where there are high crime levels.



- **Improve community organization**
  - Community leaders should be given the phone numbers and web addresses of dedicated police hotlines to facilitate their access to the police.
  - For leaders who do not trust such phone numbers, efforts should be made by the police to make the cell phone numbers of particular officers who are trusted by specific leaders available to them.
  - Provide more support to local, community-based Crime Prevention Committees.
  
- **Partner with religious organizations where appropriate, particularly with church-affiliated youth programs**
  - More funds (governmental and non-governmental) need to be invested in church youth programs. These programs appear to be successful in drawing youths away from crime-oriented peer groups, and in some instances they offer one of the few alternatives to gangs.
  - Consideration should be given to determining exactly how successful the clergy have actually been in rescuing people from gangs. If the claims made in the interviews conducted for this study are supported, then greater involvement of the clergy in at-risk communities should be encouraged.
  
- **Train and improve the police force**
  - Train police officers to be responsive not only to community leaders' reports of criminal activity (as is the case in some parts of Guatemala), but also to calls for help from the population as a whole.
  - Ensure that police officers can stay in communities long enough to develop trusting relationships with residents, thereby increasing the chance that crime will be reported.
  - In the case of Guatemala, efforts should be made to recruit bilingual men and women into the National Civil Police force, matching the indigenous language background of the officers with the native language spoken in given police precincts.

### Summary

As noted in our main findings, we observed significant improvements, on average, in treated neighborhoods after CARSÍ community-based crime prevention programs had been implemented. The Difference-in-Difference estimator allowed us to conclude that these programs improved critical crime/violence-related aspects of the neighborhoods more than would have been expected in the absence of the programs. We especially note that we observed that these programs in general decreased crime and violence; increased levels of citizens' sense of security; decreased the perception of neighborhood insecurity; improved the level of community control of disorder; increased the level of satisfaction regarding the police; and strengthened democratic values.



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### Appendix: Some Methodological Notes

Full methodological details can be found in the country reports that accompany this regional report. Here we present only some key highlights that are relevant to the regional research.

#### *Panama and Honduras design differences from the other studies*

The model for this multi-country impact evaluation was based on randomized selection of treatment and control communities, within municipalities pre-selected by USAID as ones that were at-risk for high levels of criminal/gang activity.<sup>1</sup> USAID in each country selected the municipalities where interventions were to take place, picking those municipalities of special concern, based on accumulated evidence that these were high-crime, at-risk areas.<sup>2</sup> Once the USAID mission had determined the municipalities of interest, LAPOP went on to carry out a detailed study, including “pre-visits,” of neighborhoods within those municipalities to determine the list of those that would be eligible based on the pre-established criteria (detailed below). USAID was then given a long list of what LAPOP calls “eligible communities,” which were then approved, and at that point, LAPOP made a randomized selection of communities, half of which were to be designated as treatment communities, and half as control.

This same procedure was followed in Guatemala and El Salvador, and was part of the research design approved by USAID/Washington at the outset of the community-based crime prevention impact evaluation. In Honduras, however, the treatment communities were pre-selected by USAID, thus only the control communities were randomly selected in that country. In Panama, however, the procedure utilized varied, as explained below and because of that, the number of treated communities in Panama was insufficient to enable a separate quantitative study of the results for that country. Instead, the treated and control communities were pooled with the other countries in the study and are reported in the overall evaluation document. What is also included in the country report and summarized in this regional report are the results of the *qualitative* study, which are not affected at all by the issue of statistical significance. Nonetheless, since the Panama quantitative data are used in the overall report and needs to be documented somewhere, and since others may wish to analyze the data we collected, we provide a full description of the quantitative data file in this country report on Panama.

Once USAID/Panama informed LAPOP of the municipalities in which they wanted us to carry out our study, LAPOP then followed an elaborate procedure to select treatment-eligible neighborhoods in each municipality for the crime prevention programs, based on conditions that are well-documented in the literature (and enumerated below) as responsible for increasing the likelihood of crime and violence and therefore insecurity. These eligible neighborhoods are considered in this design to be “at-risk,” or highly vulnerable to becoming crime “hot spots.”

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<sup>1</sup> In addition, in each country except Honduras (for lack of funds), non-at-risk neighborhoods were selected to provide a baseline picture of what “healthy” neighborhoods look like. Those interviews were not repeated in rounds two and three of the study.

<sup>2</sup> That selection, however, was the only non-random component in the evaluation, yet it is one that presumably limits the external validity of the findings. In theory, at least, had other municipalities been chosen, the impacts could have been significantly different from the ones reported on here.

In the process of building a list of eligible neighborhoods in each municipality, the LAPOP researchers identified in Panama (as they did in El Salvador, Guatemala and Honduras) neighborhoods that were known by the police to be already largely controlled by gangs or other organized criminal groups. Those neighborhoods were then excluded from the study for the simple reason that they posed unacceptable levels of danger for LAPOP interviewers. LAPOP had no discretion in this decision for three reasons.<sup>3</sup>

First, the essence of human subjects regulation by the Federal government is that each study director must weigh risks vs. benefits. In the case of the CARS studies generally, sending interviewers into high crime neighborhoods in high crime countries carries with it considerable risks. LAPOP minimized that risk by excluding “hot spots,” thereby allowing us to assess the risk as acceptable.

Second, USAID/Washington in repeated messages over the course of this project has cautioned us about the risks and told us that the safety of the interviewers took precedence over carrying out the research itself. We would be reminded of that norm whenever we reported an instance in which one or more of our interviewers had been assaulted, robbed or threatened.

Third, even had conditions # 1 and # 2 had not been of concern, there was the practical problem of not being able to force our contractors to send interviewers into communities in which they felt unsafe. Indeed, Vanderbilt requires each contractor to sign an agreement containing an extensive security protocol. Whenever the survey firm feels that the risk is too high, they inform us and the interviews do not take place or are halted. Consider that *all* potential treatment communities received a “pre-visit” by our local survey firm, in which a questionnaire was filled out. The local survey firm therefore had on-the-ground experience in each potentially eligible community and was able to form a clear impression of communities that were at too high a risk. In actual fact, in the course of the impact evaluation, despite all of our precautions, the survey field teams did suffer from a number of unfortunate incidents. These ranged from simple muggings in which their Android smart phone data collection devices were stolen, to the receipt of verbal threats, to the physical assault, and threat of murder at gunpoint. We would not and could not push our contractors/interview teams to put themselves at any greater risk than they were already facing. Moreover, our local survey firm told us in no uncertain terms, that if we tried to force them to interview in hot spots, they would refuse to do so.

In the case of Panama, unlike the other countries in the impact evaluation in El Salvador and Guatemala, the issue of risk was interpreted differently by the USAID Mission and the LAPOP staff. In Panama, after LAPOP developed, based on the procedure explained below, its list of randomly selected communities, we were told by the chief of party of the implementing partner and by the USAID staffer responsible for the project in Panama, that they opposed our practice of randomizing the selection of communities to be treated. Randomization is, of course, a key element in the development of a valid impact evaluation based on treatment and control communities, and violation of random assignment can weaken the inferences to be drawn from

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<sup>3</sup> Therefore, the findings in this study apply to at-risk neighborhoods, but not to those already largely controlled by gangs. To avoid “contamination” effects (i.e., that control groups receive the treatment), the selection of geographically contiguous treatment and control groups was carefully avoided.



the study.<sup>4</sup> We were told that some of the selected treatment communities did not have the private sector allies needed for project success, or that the communities ought to be hot-spots. No matter what the reason, excluding communities that were picked at random from the eligible list immediately raises the issue of a potential for selection bias, by which the treated communities could, *a priori*, have a greater chance of exhibiting a positive impact of the treatment than randomly selected control communities. For example, if we had agreed to exclude communities that USAID did not feel it had the “private sector allies,” then we would have biased the sample toward those that were pre-determined to likely end up with better results. Selection bias of this nature undermines a foundational element of scientifically performed impact evaluations. Including, after the fact, hot-spots not only would have biased the sample, we would have been unable as a practical matter to force our field teams to carry out interviews in those areas.

Unfortunately, in the end, LAPOP, USAID and the implementing partner were unable to come to full agreement and as a result, several of the randomly selected treatment communities were removed from the treatment list. LAPOP had no alternative but to strike from the list of communities that had already been selected the ones were not going to be treated. To have included them in the sample would have been a waste of government funds since without treatment there is no possibility of measuring effect. As a result, LAPOP was left with only six communities that had both been randomly selected and that the implementing partner said that it was willing to treat. But, as a practical matter, even in some of those communities, as is shown below, the treatment was applied quite late in the timing of the impact evaluation, or not applied fully.

Following the assignment of the intervention to neighborhoods, LAPOP collected both qualitative and quantitative data in a total of 46 Panamanian neighborhoods (6 treatment and 20 control groups and 20 not-at-risk) in the provinces of Panamá and Colón, and within those two provinces, interviewed in three municipal districts: Panamá, San Miguelito and Colón.<sup>5</sup>

### *Data sources*

**Baseline and follow-up quantitative surveys:** The baseline data characterizes the population of study in both treatment and control groups in order to determine the starting condition, or baseline condition, from which we would measure change over time. Importantly, the baseline survey helps one to draw causal inferences about the effect of the interventions because it allows for comparison of groups before and after the intervention begins. The face-to-face individual level questionnaire developed by LAPOP (all available on-line at <http://www.vanderbilt.edu/lapop/carsi-study.php>) contain questions designed to measure outcomes of the programs in addition to socioeconomic, demographic, and other variables to be used as controls. The control variables enable us to statistically adjust the results for treated and untreated community and therefore make them more similar to each other than they would have

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<sup>4</sup> See the study, National Research Council (2008), *Improving Democracy Assistance: Building Knowledge through Evaluations and Research*. Washington, D. C., The National Academies Press.

<sup>5</sup> The number of clusters or neighborhoods was determined through a preliminary statistical power analysis carried out by Abby Córdova, with the assistance of scholars at the University of Michigan, to ensure the evaluation is able to identify an effect of the program if there is one. In addition, data from *non-at-risk* communities were collected from each of the three municipalities. These data were collected with the purpose of establishing a baseline of characteristics of low violence neighborhoods and evaluate if, after program implementation, at-risk neighborhoods start to mirror non-at-risk neighborhoods.

been by random chance. For example, a given community might have more young people in it than another, and since age is associated with many variables that affect crime, we wanted to be able to control for this difference.

On the other hand, there are unmeasured variables about each individual and neighborhood that we could not control for. This was not a problem with the design, but merely a limitation in any social science project because it is impossible to collect information on the infinite number of variables that define each individual (intelligence, life experience, presence of disease, reading ability, etc.) One adult per household (defined as voting age adult) was interviewed in person at his or her home. The survey participants within the household were selected by sample quotas based on the enumeration data collected earlier, in that way ensuring that the sample reflected the demographics of the neighborhood.

The mid-point (and final) evaluations were conducted in the same way as the baseline, except in Honduras, where there was only time for a baseline and one follow-up. We conducted both quantitative and qualitative interviews, and community observations. We went back to the same communities, both treatment and control as in round # 1. The sample however, was not a panel (i.e., we did not interview the same *individuals* as in round # 1). Doing so would have given us a panel design, with all of the problems inherent in such a design. Specifically, the problem of panel attrition (which could be high and of different magnitudes owing to the possibility of higher out-migration in the control communities), as well as respondent contamination. Furthermore, LAPOP, with decades of field experience in Central America, was convinced that it would be impossible to find many of the same people for re-interview, given the absence of clear street addresses, high internal and international migration rates, and rapid changes in cell phone numbers (cellphone number portability is problematical in Central America). As a result, if LAPOP had attempted a panel design, the resulting panel would have been much smaller in round 2 and smaller still in round 3. The panel would have been not only smaller, but different from the baseline, since those who could be found in their same homes in subsequent rounds of interviews, would have been different from those who could not have been found. Most importantly, the panel could have had different attrition rates in the treatment and control communities, thus making statistical comparisons extremely risky. Thus, the second and third rounds were conducted in the identical neighborhoods as was round one, but not the same households (although some of the same households and individual could have been interviewed just by random chance).

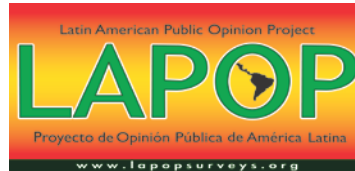
**Focus groups, neighborhood and local-level qualitative survey of stakeholders:** The purpose of the stakeholder interviews is to gather both qualitative information about the neighborhoods as well as more general information related to the problem of citizen security in the municipalities studied by interviewing key knowledgeable persons. LAPOP generated a series of close-ended questionnaires (questionnaires found on-line at <http://www.vanderbilt.edu/lapop/carsi-study.php>) that were used for interviews with neighborhood stakeholders. These interviews were carried out with: the local clergy, social workers, police and civil society association leaders, including members of the Municipal Crime Prevention Committees, and youth-at-risk (all over age 18 because of human subject regulations). In addition, interviews were also conducted with the implementing partners in order to better understand how their programs were being administered. The interviews took place in the place of work of these respondents, so we went to the schools to interview teachers, and to the police stations to interview the police. In some

cases, however, we had to find these people in their homes. While the selected interviewees were always linked to the communities, in many instances these stakeholders had broad responsibilities that transcended community boundaries.

**AmericasBarometer Surveys.** Another source of data we rely on are the Latin American Public Opinion Project (LAPOP) AmericasBarometer surveys. Every two years LAPOP carries out nationally representative surveys in 26 countries in Latin America. We have data for El Salvador for 2004, 2006, 2008, 2010, and 2012. These data do not have the wide variety of crime- and violence-related questions that our CARSI data have, but they do have blocks of identical items in some key areas. We use the AmericasBarometer data to look at national trends, and compare those trends to the CARSI data. That data, therefore, enables us check for trend variation.







## Impact Evaluation of USAID’s Community-Based Crime and Violence Prevention Approach in Central America: Regional Report for El Salvador, Guatemala, Honduras and Panama

This study is the first, detailed, evidence-based evaluation of USAID’s neighborhood-based approach to crime and violence prevention in Central America. The conclusions drawn in this report are based on more than 29,000 survey interviews and more than 800 qualitative interviews, across 4 countries, over multiple years. The research design used to conduct this evaluation was a mixture of qualitative and quantitative methods. This regional report utilizes the “difference-in-difference” statistical design which allowed us to conclude that the USAID approach improved critical crime/violence-related aspects of the neighborhoods more than would have been expected in the absence of the USAID intervention. These results clearly show that there is an alternative to the current “arms race” between law enforcement and gangs in Central America, and that is preventing crime and violence at the neighborhood level.

**The Latin American Public Opinion Project (LAPOP)** is a leader in the development, implementation, and analysis of data on individual opinions and behavior. As a center for excellence in survey research, LAPOP uses “gold standard” approaches and innovative methods to carry out targeted and national surveys; conduct impact evaluation studies; and produce reports on individual attitudes, evaluations, and experiences. Through years of polling and expanding a set of countries using sophisticated techniques, LAPOP has developed a treasure-trove of high quality data on citizens’ views and behaviors across the Americas. As a pioneer in cutting-edge methods, LAPOP is a resource for all those interested in public opinion data of the highest quality.

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