Cost-Effectiveness for Peacebuilding Exploring the Possibilities



Frontier Design Group was founded on International Peace Day to use the tools of design and systems thinking to address the world's most complex and persistent human and national security challenges. We balance rigorous, data-driven analysis of complex systems with the creativity of design tools to build innovative solutions for our clients.

We have served a variety of public and private organizations including the United States Institute of Peace, Alliance for Peacebuilding, US Agency for International Development, the Omidyar Group, the Social Innovation Fund, the Council on Foreign Relations, and United Way Worldwide.

For more information visit www.fdg-llc.com.

Steve Sheamer
Lead Author and Research Director
steve@fdg-llc.com

Alexa Courtney Senior Research Advisor alexa@fdg-llc.com

> Noah Sheinbaum Research Analyst noah@fdg-llc.com

September 2017





Acknowledgments

Our research team would like to thank the following individuals who provided valuable inputs and insights throughout the course of this effort. The views, findings, and recommendations expressed in this report are those of the authors and do not necessarily reflect the views of the individuals recognized below. Any errors or omissions are the responsibility of the authors alone.

Milt Lauenstein, Co-founder and principal funder of the Purdue Peace Project Melanie Greenberg, President and CEO, Alliance for Peacebuilding Stacey Connaughton, Director of the Purdue Peace Project Johannes Schreuder, United Nations Peacebuilding Support Office Jessica Berns, Jessica Berns Consulting



Executive Summary

In this report, we examine whether it is possible to conduct cost-effectiveness analysis (CEA) given the nascent state of effectiveness data within the community. Although the data is not perfect, our conclusion is that the necessary data is publicly available and sufficient to test CEA as an analytical method in the peacebuilding context. We recommend piloting the use of CEA as a tool to provide peacebuilders with empirical data about cost and effectiveness to guide decision-making and resource allocation. We provide an in-depth discussion of CEA and its application to the peacebuilding context.

We also discuss many of the challenges associated with this effort in our research findings and provide recommendations to overcome them. Our major research findings are discussed in-depth and listed below:

- 1. Previous studies looked at the macro-economic benefits of peacebuilding without assessing the cost-effectiveness of individual peacebuilding programs or interventions.
- 2. There is no standard for what constitutes an effective peacebuilding program and no common measures to validate effectiveness.
- 3. There is no standard typology and corresponding measures for the types of violence and conflict that peacebuilders seek to address.
- 4. Many if not most peacebuilding programs do not directly measure levels of violence as an indicator of effectiveness.
- 5. There is significant overlap between peacebuilding, peacekeeping, peace and security oriented development, humanitarian assistance, conflict mitigation, violence prevention, and governance. This presents a challenge for researchers seeking to identify peacebuilding programs and corresponding data.
- 6. There is a high degree of data transparency and a wealth of publicly available cost, violence, and effectiveness data.
- 7. Peacebuilding data is widely distributed, with some aggregation for cost and violence data, but no aggregation of effectiveness data.

Based on our research findings and experience in the peacebuilding and cost analysis communities, we recommend the following

- Develop a publicly available, curated database of common effectiveness measures and quantitative program indicators that includes historical data from completed programs.
- 2. Establish standard program indicators (measures of effectiveness) for programs with similar theories of change.
- 3. Develop a typology of conflict and violence and a corresponding set of measures for the M&E community to use.
- 4. Conduct joint research and collaboration between organizations focused on reducing all forms of conflict and violence. Efforts to address interpersonal violence, organized crime, and gangs may provide important insights for the peacebuilding community.
- 5. Educate peacebuilders about cost-effectiveness and build their knowledge, skills, and abilities to perform their own CEAs on their programs.



Table of Contents

Background	5
Research Objectives	6
Research Methodology Overview	6
Research Library	6
Previous Research on Peacebuilding Cost-Effectiveness	7
What's Missing	7
Concerns About Cost-Effectiveness	7
An Overview of Cost-Effectiveness Analysis for Peacebuilding	8
CEA Example from Education	10
Program Selection Criteria for Peacebuilding Cost-Effectiveness Analysis	11
Program Selection Process	12
Research Findings	14
Recommendations for the Peacebuilding Community:	20
Next Steps and Future Research	22
About the Authors	23
References	24



Background

For many years, peacebuilding donors and funders have been asking for data and evidence demonstrating that peacebuilding programs work and that their investments are providing an appropriate return. From 2005 to 2014, global battle-related deaths increased from 12,153 to 104,755 and the number of active armed conflicts increased from 32 to 42 per the Uppsala Conflict Data Program. Over this same period, Organisation for Economic Co-operation and Development countries spent \$386B in official development assistance in the countries involved in these conflicts. Despite this substantial investment by the international community, global conflict not only persisted but escalated. The increasing level of conflict in the world, combined with tightening government budgets, has again drawn attention to development and peacebuilding spending with many policymakers advocating for a reallocation of resources from peacebuilding to defense and intelligence to reduce violent conflict.

This increased attention and scrutiny is a challenge the peacebuilding community has faced for many years. Skeptical politicians, resource constrained appropriators, donors and researchers have asked for empirical evidence to substantiate global conflict prevention, mitigation, and reduction interventions. The community responded to these pressures by committing financial and intellectual resources to monitoring and evaluation (M&E) efforts that measure both program outputs (*did we do what we said we would do*) and outcomes (*did the program have the intended impact*). M&E practices have matured significantly in the last several years, catalyzed in part by initiatives like the Peacebuilding Evaluation Consortium³, resulting in more rigorous approaches to evaluation, codification of relevant tools, and the creation of a vibrant community of practice with global participation.

M&E seeks to determine if a program was successful by determining the extent to which desired program outputs and outcomes were achieved. However, this view of success ignores the questions of whether program objectives were achieved at a reasonable cost, money was wasted or if funding would have been more effectively spent elsewhere. To determine if a program was successful, it should not only meet program objectives, but also do so at a reasonable cost to the funder or donor. A successful program should not only be effective but also cost-effective.

Unfortunately, there is scarce information about what kinds of peacebuilding and violence prevention activities achieve the greatest impact for the dollars spent. With scarce resources, donors seek to fund the most effective, expeditious ways of reducing violent conflict. Yet today there is insufficient empirical evidence to help practitioners and funders decide where their money will have the greatest impact. With the level of armed conflict on the rise, it is increasingly important to have objective evidence⁴ to guide the allocation of scarce resources.

¹ UCDP Armed Conflict and Battle-Related Deaths Version 17.1, http://ucdp.uu.se/?id=1

² Official OECD ODA Statistics, http://www.oecd.org/dac/stats/idsonline.htm

³ The Peacebuilding Evaluation Consortium, now in its third iteration, is a collaborative venture purposefully designed to leverage the different strengths of policy/advocacy (via Alliance for Peacebuilding), implementation (via Search for Common Ground and Mercy Corps), and learning partners (via CDA Collaborative) to advance the field of peacebuilding design, monitoring, and evaluation.

⁴ Objective evidence refers to information based on facts that can be examined, evaluated, and proven by analysis, measurement, and/or observation. See 3ie's peacebuilding evidence gap map for an in-depth discussion of objective evidence in peacebuilding. http://www.3ieimpact.org/media/filer_public/2015/04/14/evidence_for_peace_egm_report.pdf



Research Objectives

This research, made possible by the support of Mr. Milt Lauenstein, was conducted over a period of six weeks and focused on developing hard evidence to support the allocation of peacebuilding resources. This included evaluating the quality and availability of peacebuilding cost and effectiveness data and identifying programs with sufficient data to pilot a methodology for analyzing the cost-effectiveness of peacebuilding programs.

Our long-term goal is to enable the use of both cost and effectiveness data to more efficiently and effectively allocate scarce resources to reduce the level of violent conflict in the world. This research project is a modestly funded preliminary effort and our hope is that it encourages future research aimed at this important goal.

Research Methodology Overview

Frontier Design Group undertook an accelerated literature review and consultations with peacebuilding academics and researchers to evaluate the current state of peacebuilding cost-effectiveness research and the availability of data in the public domain to enable future research. This included researching, reviewing, and cataloging:

- a. Cost-Effectiveness Research: prior studies on peacebuilding cost-effectiveness and analogous research from other fields including health, education, and development.
- b. Effectiveness Research: research on the effectiveness of peacebuilding and violence prevention activities including systemic studies, assessment methodologies and results.
- c. Program Impact Evaluation Databases: review of publicly available impact evaluations with an emphasis on evaluations that used objective evidence and measurable program indicators
- d. Violence Datasets: datasets that track the levels of violence and number of violent events globally and in specific locations relevant to peacebuilding.
- e. Cost Databases: databases that track funding and expenditures on peacebuilding, development, and conflict prevention programs.

The research also included consultations with researchers and practitioners from various organizations in the peacebuilding field including: the Alliance for Peacebuilding, Copenhagen Consensus Center, the Abdul Latif Jameel Poverty Action Lab (J-PAL), Innovations for Poverty Action (IPA), the U.S. Institute of Peace (USIP), the Armed Conflict Location & Event Data Project (ACLED), American University's School of International Service, The School of Conflict Management, Peacebuilding and Development at Kennesaw State University, the Purdue Peace Project, and more.

Research Library

All research is publicly available on the Frontier website. This includes links to all relevant research and information on each source including statements about the relevance to peacebuilding cost-effectiveness. Access to the full research library can be requested at the following link: http://fdg-llc.com/access_request_369478/.



Previous Research on Peacebuilding Cost-Effectiveness

Some limited research has been conducted on the overall cost-benefit of peacebuilding at a macroeconomic level. These studies highlight the benefits of preventive efforts, and stake the claim that more resources devoted to peacebuilding activities would result in less conflict, more peace, and significant cost savings. Previous studies used cost-benefit analysis⁵ (CBA) to estimate and monetize the cost of conflict and compare it to the cost of peacebuilding, concluding that peacebuilding spending resulted in anywhere from \$2 to \$17 of economic benefit for every dollar spent.⁶

What's Missing

Although the macroeconomic studies conclude that peacebuilding spending results in a positive net economic benefit, few (if any) studies examined the allocation of resources across different peacebuilding activities. Peacebuilding programs are typically centered on a Theory of Change (ToC) with interventions evaluated against distinct and self-contained program indicators (measures of effectiveness). Peacebuilders often lack the necessary data to look *across* interventions and programs, to gauge collective or systemic effectiveness, and determine the optimal allocation of resources.⁷ To answer the question of where peacebuilding funders and donors can get the most "bang for their buck" in terms of measurable impact, requires research that compares different types of interventions and programming to identify specific interventions (or categories of interventions) that maximize impact and outcomes for each dollar spent in particular contexts. This will inform decision-making about the allocation of resources between different alternatives and is best achieved using cost-effectiveness analysis⁸ (CEA).

Concerns About Cost-Effectiveness

While previous studies evaluated the macro-economic costs of conflict, the concept of program-level cost-effectiveness is new to many in the peacebuilding community. Understandably, there are many questions about its value, its application to peacebuilding, and how findings would be used. Peacebuilders' valid concerns about the application of cost-effectiveness to their work fall into two primary categories related to *findings* and *processes*.

Findings: At a time when the community is working hard to empirically demonstrate the impact of peacebuilding programs and protect dedicated scarce resources, it can feel tangential at best and threatening at worst to focus on measuring the value or cost-effectiveness of peacebuilding programs. In the current political climate, some worry about diverting precious time and money from a perceived

⁵ Cost-benefit analysis (CBA) assesses programs by determining whether total societal welfare has increased because of a given project or program. It requires monetizing both the costs and benefits of any program, and comparing them to each other.

⁶ See IEP (2017), Dunne (2012), Chalmers (2004).

⁷ Some systematic evaluations have been done by the International Initiative for Impact Evaluation (3IE) to assess the strength of empirical evidence for various interventions.

⁸ Cost-effectiveness analysis (CEA) offers an alternative to benefit-cost analysis that relates the cost of a given alternative to specific measures of program objectives. CEA does not require the monetization of benefits, just the ability to look across similar indicators of effectiveness. It requires determining consistent units of outcome, and calculating the cost per unit of outcome of each program.



existential battle for the future of peacebuilding to a nascent area of research that might expose ineffective spending.

However, rigorous cost analysis⁹ often helps strengthen the case for more resources. Moreover, for mission-driven and impact-hungry practitioners, cost analysis enables better decision making about where to spend each dollar across a program or portfolio to increase impact and results. This creates a virtuous cycle of improved resource allocation leading to better objective results and more funding.

Processes: Many scholars and practitioners in the peacebuilding field ground their practice in systems-based approaches. Pioneers from the peacebuilding field, such as Rob Ricigliano, have developed, applied, and refined essential systems thinking approaches based on deep experience within this community. To transform interconnected social, political, and economic interests that drive violent conflict, one must adopt a complexity-aware approach. Systems thinking offers an invaluable mindset and toolkit under these circumstances.

Complexity is not a reason to avoid cost analyses but it will require us to do so in systems-sensitive ways. In fact, CEA has been leveraged in other complex, adaptive systems such as health care, global development, and education. As we examine a portfolio of peacebuilding programs to determine their cost-effectiveness, we should include a spectrum of activities and programs that range from complicated (e.g. community-oriented media programs to counter hate speech) to more costly and complex (e.g. adaptive problems and programs such as support to transitional justice programs). While a complex transitional justice program, such as support to prosecutors to convict a war criminal, might cost millions of dollars over several years, it may serve as a powerful deterrent to future warlords and conflict entrepreneurs, creating important ripple effects across a conflict eco-system.

In complex situations like peacebuilding, cost is rarely the only factor in deciding between courses of action. Oftentimes the costlier option is the most prudent and the tools of cost analysis can demonstrate this while making the case for additional funding based on data and objective evidence.

An Overview of Cost-Effectiveness Analysis for Peacebuilding

The goal of this research is to develop objective evidence to more efficiently and effectively allocate scarce peacebuilding resources. Previous CBA studies concluded at a macro-level that peacebuilding is likely to be cost effective if it reduces the likelihood of conflict; even if it only modestly reduces the likelihood. However, none of these studies looked at specific peacebuilding programs or interventions to determine which ones were the most effective or cost-effective. Further research into the cost-benefit of peacebuilding and conflict prevention at a macro-economic level is unlikely to advance the conversation about how to best allocate resources among peacebuilding interventions.

What is currently needed is research that compares different peacebuilding strategies to identify specific interventions that maximize the impact and outcomes for each dollar spent. This is the kind of research that informs decision-making about the allocation of resources between different alternatives and is best achieved using cost-effectiveness analysis (CEA).

⁹ Cost analysis is a term used to describe the broader field of study that includes cost estimating and forecasting, should-cost analysis, and business case development. Cost-effectiveness analysis is a subset of cost analysis.



This requires a bottom-up approach to evaluating the cost and effectiveness of peacebuilding programs by looking at individual interventions in specific contexts as opposed to a top-down approach that might miss important, specific local and programmatic details. Below is a summary of the differences between CEA and CBA.¹⁰

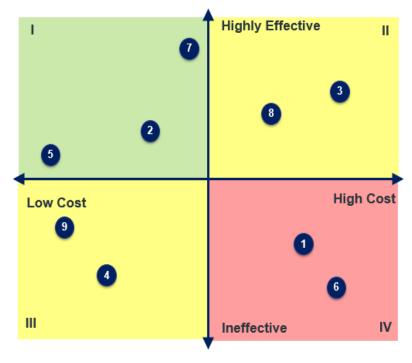
Cost Benefit Analysis assesses service programs by determining whether total societal welfare has increased (in the aggregate, people have been made better off) because of a given project or program.

- Determine the benefits of a proposed or existing program and place a dollar value on those benefits.
- (2) Calculate the total costs of the program.
- (3) compare the benefits and the costs.

Cost-Effectiveness Analysis is an alternative to benefit-cost analysis that relates the cost of a given alternative to specific measures of program objectives. Does not produce a "net benefit" number, with benefits exceeding costs or costs exceeding benefits.

- (1) Determine the units of outcome (e.g. reduction in battle deaths)
- (2) Calculate the total costs of the program.
- (3) Calculate the cost per unit outcome.

The goal of cost-effectiveness analysis is to determine the allocation of resources that maximizes impact and effectiveness. Costly and ineffective activities should be eliminated in favor of lower cost, more effective activities. The figure to the right is a simple illustration of this principle. Those that are both effective and cost efficient (quadrant I) may warrant more funding and expanded implementation. Those that fall into quadrant IV (high cost and ineffective) should be eliminated so that resources are not wasted and can be re-allocated. Activities that fall into quadrant II and III warrant further investigation. For highly effective but costly activities, steps might be taken to reduce costs on those programs to make



them more cost efficient. For low cost activities that are not achieving the desired outcomes, additional funding may increase their effectiveness making them better options than more costly alternatives.

Our recommendation to use CEA instead of CBA is based on the way that peacebuilding programs measure outcomes and the difficulty and effort required to monetize the benefits of individual peacebuilding programs. We reviewed over 50 impact evaluations that included quantitative measurements of program outcomes and compared baseline measurements to post-intervention measurements. Very few programs include measurable outcomes that can be readily converted to a monetary value (which CBA requires). Common peacebuilding program measures like improvements in

¹⁰ Adapted from James Kee [1999]. http://www.hfrp.org/evaluation/the-evaluation-exchange/issue-archive/methodology-15/at-what-price-benefit-cost-analysis-and-cost-effectiveness-analysis-in-program-evaluation



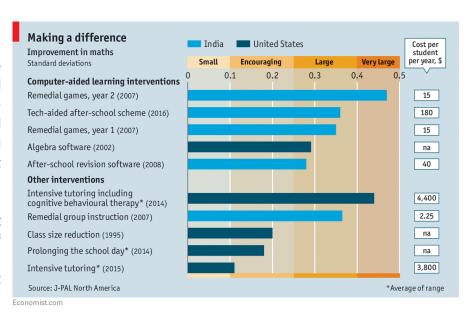
social cohesion, attitudes towards government, perceptions of security, and improvements in dispute resolution are difficult, if not impossible to monetize.

Previous peacebuilding CBAs¹¹ used measures like GDP loss, loss of life, cost of refugees and humanitarian assistance to calculate the cost of conflict and corresponding benefits of peacebuilding. However, changes in these macro-level measures are almost impossible to attribute to individual peacebuilding programs. Of the program-level impact evaluations that we reviewed, very few measured changes in the number of deaths, refugees, or economic activity that could be readily monetized. If program benefits, like improved social cohesion or perceptions of security can't be monetized, then CBA is not possible at the program or intervention level.

CEA does not require benefits to be monetized but instead compares a unit of outcome to the costs required to achieve a change in the unit of outcome. This is particularly useful for fields like peacebuilding where outcomes are difficult to monetize. The health care, education, and development fields face a similar challenge and represent good analogous case studies for peacebuilding. As an example, it is very difficult to place a monetary value on improvements in test scores or student attendance, decreased hunger, or improved wellness. Fortunately, these fields have developed approaches and resources that can be leveraged to develop standards for conducting CEA in the peacebuilding community.

CEA Example from Education

A good example of the potential benefit of CEA is illustrated by a study conducted by J-PAL in the education field and recently featured in the Economist. 12 The figure to the right shows that a computer-aided intervention learning (remedial games) that cost \$15 per student was more effective at improving student math scores than intensive tutoring programs that cost \$3,800 and \$4,400 per student. If policy-makers only considered effectiveness without looking at cost, they might view the "remedial games" and "intensive tutoring



including cognitive behavioral therapy" as equally effective. But including costs shows that the remedial games were just as effective at less than 1% of the cost of tutoring. This insight has the potential to vastly increase the impact of limited education dollars.

¹¹ See Dunne (2012), Paul Collier's work on the cost of conflict and https://en.wikipedia.org/wiki/Cost_of_conflict.

¹² https://www.economist.com/news/briefing/21725285-reformers-are-using-new-software-personalise-learning-technology-transforming-what-happens



Table 1 below contains a list of analogous CEA resources that we found most applicable to peacebuilding.

Title (Author)	Organization	Description	Year
Give Well's Cost-Effectiveness Analyses (N/A)	Give Well	Comprehensive discussion of Give Well's approach to cost-effectiveness including methods and models.	2017
At What Price? BCA and CEA in Program Evaluation (Kee, J)	Harvard Family Research Project	Provides an overview of the differences between CBA and CEA including examples of each and a discussion of when to use each.	1999
Comparative CEA to Inform Policy in Developing Countries (Dhaliwal, Duflo, Glennerster, Tulloch)	JPAL	Discusses how to conduct CEA in education. Although it doesn't address conflict, includes a detailed discussion of challenges and considerations that are relevant to peace-building such as lack of standard impact measures, spillover effects, and scale.	2012
Guiding the Development and Use of CEA in Education (Levin, Belfield)	Center for Benefit- Cost Studies of Education	Discusses the application of CEA to education and draws on examples from health.	2013
WHO Cost-Effectiveness Analysis (Multiple)	World Health Organization	Two guides for conducting CEA in the health field.	2003
CEA for Priority Setting (Musgrove, Rushby)	Book Excerpt	Comprehensive discussion of CEA in health.	2006

Table 1. Analogous Literature on Cost-Effectiveness Analysis

Program Selection Criteria for Peacebuilding Cost-Effectiveness Analysis

Cost-effectiveness analysis measures the level of change in an intended outcome and the costs that were required to produce that outcome. The result is a measure of outcome per dollar spent. To conduct a CEA, you must therefore have a measurable outcome that is directly attributable to a program or intervention and know the costs that were expended to achieve that outcome. For peacebuilding programs, we identified four necessary criteria shown in the figure below.

I. Clear Articulation of Relevant Goal / ToC

Does the program / intervention have a clearly stated Theory of Change or goal relevant to peacebuilding?

II. Objective Program Indicators

Are objective program indicators identified and measured at different stages (baseline and post-intervention)?

Are changes directly attributable to the program?

III. Data Availability and Access

Are effectiveness and costrelated data sets available? Was an independent evaluation done? Is the underlying data accessible?

IV. Scalability and Repeatability

Is the intervention both scalable and repeatable?
Is the context generalizable or only relevant in a narrow context or region?

Selection Criteria for Conducting Peacebuilding CEAs



Program Selection Process

One of our research objectives was to determine if there were any peacebuilding programs with sufficient data to conduct program-level Cost-Effectiveness Analysis. Selecting an initial set of programs to conduct CEA required first identifying candidate programs for potential analysis. We identified 11 different publicly available repositories containing over 12,000 program evaluations. These repositories contained a mix of peacebuilding, development, conflict mitigation, and humanitarian assistance programs. To further narrow our search, we used the search terms conflict, violence, and peacebuilding to identify programs that were relevant to the peacebuilding community. This narrower search yielded over 1,200 results.

Given the limited duration of our research it was not feasible to review all 1,200 program evaluations (ranging from 10-100 pages each) to identify a sufficient pool of candidate programs. To further narrow our search, we evaluated the programs in the 3ie peacebuilding evidence gap map.¹³ These programs were screened by 3ie to include only programs that have objective evidence of effectiveness (Criteria II). We also consulted researchers and peacebuilding practitioners for additional programs including the Alliance for Peacebuilding report "Violence Reduction: Evidence from Around the World".¹⁴

This more limited evaluation yielded 31 programs that met all selection criteria except for the availability of cost data. Following this initial screen, we catalogued programs by ToC and categories of indicators to determine if the programs were similar enough to enable comparison. Given the primary focus was to identify programs and interventions that can be directly attributed to a reduction in violent conflict, we selected 12 of the 31 programs that evaluated effectiveness across at least two of four violence-related categories: 1. Justification for the use of violence; 2. Dispute resolution; 3. Intensity of violence; and 4. Perception of security.

The final step in the analysis was to determine the availability of cost data for these 12 programs. We found publicly available cost data for 9 of the 12 selected programs. For the remaining 3 programs, we contacted the researchers to request the cost data for the program. To date, we have not received any non-public cost data for those 3 programs. Table 2 lists the programs that were selected and includes links to the effectiveness and cost data.

Program Name	Description	Effectiveness Data	Cost Data
Plateau Will Arise (PWA) project - Nigeria	Create an improved climate of peace, strengthen the role of the State in providing security and support the Peaceful Elections Campaigns for the 2015 Presidential elections.	https://www.sfcg.org/wp- content/uploads/2016/03/PW A-I-Final-Evaluation- Report.pdf	http://aiddata.org/d ashboard#/project/ 906000225353
Conciliation in Nigeria through Community based Conflict Management and Cooperative Use of Resources (CONCUR)	Program in Nigeria to build capacity of local leaders to resolve community conflicts in an inclusive, sustainable manner	Final evaluation report pending public release	http://aiddata.org/d ashboard#/project/ 118498905

¹³ http://gapmaps.3ieimpact.org/evidence-maps/evidence-peacebuilding-evidence-gap-map

¹⁴ http://www.allianceforpeacebuilding.org/2017/03/violence-reduction-evidence-from-around-the-world/



Program Name	Description	Effectiveness Data	Cost Data
DDR in Congo	Community led disarmament, demobilization and reintegration (DDR) project carried out in Democratic Republic of Congo from 2008 to 2011.	https://www.peacedirect.org/us/wp- content/uploads/sites/2/2011/ 11/Coming-Home.pdf	Included in evaluation report.
Liberia Community Empowerment Program (CEP)	CEP was designed under the assumption that communities at risk of, or affected by, violent conflict could benefit from education on dispute resolution, human rights, and "skills for constructive living".	https://www.poverty- action.org/sites/default/files/p ublications/blattman_hartman _blair_can_we_teach_peace ipa_liberia_0.pdf	http://mptf.undp.org /factsheet/fund/PB0 00
Ethno-Religious Violence in Plateau and Niger	A project promoting accountability for ethno-religious violence in Plateau and Niger states	https://www.sfcg.org/wp- content/uploads/2015/07/NG R_EV_March-15_Project- Promoting-Accountability-for- Ethno-Religious-Violence.pdf	https://www.state.g ov/f/evaluations/all/ 269673.htm
Commander's Emergency Response Program (Iraq)	Labor components of CERP in Iraq	http://www.nber.org/papers/w 17297.pdf	http://projects.wash ingtonpost.com/200 8/iraq-cerp/
Stabilizing Vulnerable Communities through the Promotion of Inter- community Dialogue and Economic Cooperation (SVC)	The program built the capacity of community leaders to peacefully manage tensions and rebuild community cohesion in Bangui and Bouar. Central African Repbulic.	http://pdf.usaid.gov/pdf_docs/ PA00KXGV.pdf	Included in evaluation report.
National Solidarity Program (NSP) in Afghanistan	NSP seeks to improve the access of rural villagers to basic services and to create a foundation of village governance based on democratic processes and female participation.	http://www.worldbank.org/en/news/feature/2013/09/29/world-bank-releases-randomized-impact-evaluation-of-afghanistans-national-solidarity-programme	http://www.projects. worldbank.org/P11 7103/national- solidarity-program- iii?lang=en&tab=pr ocurement&subTab =contractdata
Agricultural training and capital program for Liberian ex-fighters	Increasing returns to lawful employment (e.g., Providing agricultural skills and capital increased returns to lawful employment) can reduce participation in violence	http://www.enterprise- development.org/wp- content/uploads/Can_employ ment_reduce_lawlessness_a nd_rebellion_Blattman_Anna n.pdf	Included in evaluation report.
Reconciliation in Sierra Leone	A post-conflict reconciliation program in Sierra Leone	http://www.3ieimpact.org/med ia/filer_public/2016/12/22/ow2 253-sierra-leone- reconciliation-gfr.pdf	Not publicly Available
Anti-Electoral Violence in Nigeria	A grassroots campaign conducted against political-electoral violence in Nigeria (RCT)	http://isps.yale.edu/sites/defa ult/files/page/2013/06/vicente 4.25.09_notes.pdf	Not publicly Available
Working with men to prevent intimate partner violence in Cote D'Ivoire	Working with men to prevent intimate partner violence in Cote D'Ivoire (RCT)	https://openknowledge.worldb ank.org/bitstream/handle/109 86/20747/926590WP0Box38 0StudyNo20Cotedlvoire.pdf? sequence=1	Not publicly Available

Table 2. Selected Peacebuilding Programs for CEA



Research Findings

Frontier's initial research was focused on evaluating previous studies on peacebuilding costeffectiveness, assessing the availability and quality of peacebuilding cost and effectiveness data, and conducting interviews with peacebuilding academics and researchers for ideas and lessons learned. The following is a summary of seven major findings, followed by five recommendations for consideration.

1. Previous studies looked at the macro-economic benefits of peacebuilding without assessing the cost-effectiveness of individual peacebuilding programs or interventions.

We found only three comprehensive studies that looked at the cost-effectiveness of peacebuilding and conflict prevention summarized in Table 3 below. All three studies used Cost-Benefit Analysis to estimate a Benefit-Cost Ratio that compared the cost of conflict to the cost of conflict prevention from a macro-economic perspective.

Title (Author)	Organization	Description	Findings	Year
Spending to Save? An Analysis of the Cost- effectiveness of Conflict Prevention (Chalmers, M)	Centre for International Cooperation and Security	Evaluates cases of conflict prevention and finds that conflict prevention is (or would have been) a cost-effective investment for the international community in all the case studies chosen, even allowing for large margins of error in the estimation of costs and benefits. Case studies include Western Balkans, Afghanistan, Rwanda, Uzbekistan and Sudan.	A spend of £1 on conflict prevention will, on average, generate savings of £4.1 to the international community (with a range of 1.2 to 7.1).	2004
An Economic Analysis of the Challenge of Armed Conflicts (Dunne, J Paul)	Copenhagen Consensus	Discusses the costs of conflict and the benefits of various conflict mitigation approaches. Summary of macro-level cost-benefit analysis on global conflict.	Estimated Benefit-Cost Ratios ¹⁵ Prevention: 11.2 to 17.3 Intervention: 4.8 to 7.2 Reconstruction: 2.9 to 4.9	2012
Measuring Peacebuilding Cost effectiveness (Multiple)	Institute for Economics and Peace	Macro-economic analysis of the costs of conflict and the cost-benefit ratio of peacebuilding spending using Rwanda as an example.	Each dollar invested in peacebuilding will lead to a \$16 decline in the cost of conflict. 16	2017

Table 3. Previous Studies on Peacebuilding Cost-Benefit

Each study mentioned the issue of proving that peace would not have been achieved (or war averted) in the absence of peacebuilding spending. The researchers attempted to account for this uncertainty by using probabilistic models¹⁷ that varied the likelihood and cost of conflict. However, there was no empirical basis (other than expert opinion) for determining the likelihood of peacebuilding activities preventing conflict. Since the cost of conflict is so high and the historical cost of interventions are comparatively low, all three studies concluded that peacebuilding, conflict prevention, and conflict intervention are all cost-

¹⁵ The Benefit-Cost Ratio (BCR) is the total of all monetary benefits divided by the total of all costs incurred to achieve those benefits. A BCR greater than 1.0 means that the benefits exceed the costs and is generally considered favorable.

¹⁶ The IEP report qualifies this ratio by stating that it applies assuming peacebuilding commitments from the international community were at least \$27 per capita.

¹⁷ Probabailistic models incorporate random variables and probability distributions into the model of an event or phenomenon. While a deterministic model gives a single possible outcome for an event, a probabilistic model gives a probability distribution (or range of outcomes) as a solution. http://www.statisticshowto.com/probabilistic/



effective. All studies assumed that peacebuilding and conflict prevention spending was the reason that war was avoided, peace was achieved, or the likelihood of conflict was reduced without providing sufficient empirical evidence to substantiate these assumptions.

Because each of these studies were conducted at a macro-level, they also provide no insight into allocating resources between different peacebuilding interventions. Even if peacebuilding spending did produce the assumed results, there is no analysis of what kind of peacebuilding interventions are the most effective or cost-effective.

2. There is no standard for what constitutes an effective peacebuilding program and no common measures to validate effectiveness.

To determine if a program is cost-effective requires an agreed upon definition of effectiveness. It is problematic to deem peacebuilding programs effective based exclusively on the realization of their ToCs, regardless of their impact on conflict and violence. Looking only at levels of violence as a measure of effectiveness also has shortcomings (see research finding #3 for a detailed discussion).

Instead, we suggest that effectiveness should consider both factors – the extent to which the program met its objectives *and* the change in conflict and violence. If a program doesn't explicitly measure violence, there are publicly available violence datasets¹⁸ that can provide insight into changes in levels of violence.

In addition to a lack of violence measures, we also noted a lack of common measurements even among programs with the same ToC. Among 19 different peacebuilding programs with measurable outcomes, each of which focused on preventing and reducing conflict, we identified 98 distinct measures. The most common measure, "Success rate managing conflicts non-violently", was measured for 9 of the 19 programs. 80% of the program measures were shared by 3 or fewer of the 19 programs.

This lack of common measures makes it difficult to make effectiveness comparisons between programs. Even programs with the same ToCs and objectives use different measures, making it difficult to compare programs and identify the most effective approaches. More measurement is not necessarily needed (we found individual programs with over 100 distinct measures) but more consistency of measurement across the evaluation community is required if we hope to compare a variety of programs and interventions across disparate contexts.

3. There is no standard typology and corresponding measures for the types of violence and conflict that peacebuilders seek to address.

There is no established or widely recognized and agreed upon typology of violence to categorize peacebuilding interventions and identify standard measures of conflict and/or violence. This lack of standard measures makes it difficult to compare the effectiveness of programs that seek to directly reduce violence and conflict. Violence typologies in other fields range from the World Health Organization's

¹⁸ Caution should be exercised when using publicly available datasets. Some regions have incomplete, inaccurate, or missing data. Other datasets are based on extrapolation, unverified reporting, or other methods that may skew the data. Researchers we consulted generally regarded the ACLED dataset (https://www.acleddata.com/) as the most reliable. Regionally, Latin America was identified as having high quality violence data for researchers.



framework (self-directed, interpersonal, and collective violence)¹⁹ to Johan Galtung's construct (direct, structural, and cultural violence),20 to a more specific range of nine distinct forms of violence and abuse (physical, sexual, emotional, psychological, spiritual, cultural, verbal, financial and neglect).²¹

Consultations with researchers revealed that some in the peacebuilding community believe that interpersonal violence such as organized crime or intimate partner violence are far more prevalent and costly than collective armed conflict.²² Others focused their efforts on collective violence between groups in the context of war or formal conflict. Measures of violence and conflict vary widely including tracking deaths, number of protests, strategic developments, number of major events, and territorial disputes.²³

The table below summarizes the types of violence and measures that were most common across the various categories of programs and most relevant to peacebuilding. This categorization is not mutually exclusive / collectively exhaustive; there is some overlap between categories. We selected programs for peacebuilding CEA evaluation that focused on addressing these types of violence (either directly or indirectly).

Violence Category	Types of Violence		Measures
Collective	War (internal and external) Armed Conflict State-perpetrated violence Overt political violence Protests	Genocide Organized Crime Torture Terrorism Territorial Changes	Fatalities / Wounded "Battle" Deaths # of Events / Attacks Disability Affected Life Years (DALY)
Interpersonal	Homicide Rape / Sexual Abuse Violence Against Women	Child Abuse Assault	# of Events / Attacks

Table 4. Categories and Measures of Violence

Many researchers referenced the groundbreaking work being done by Cure Violence, which borrows from an epidemiological based approach to analyze the spread of gang violence and/or interpersonal violence.24 Several researchers described similarities between actors in armed conflict and gangs/criminal organizations, noting activities such as the imposition of taxes and bribes, use of violent intimidation and recruiting tactics. A clear benefit of looking at gangs and criminal organizations when measuring levels of violence is the accuracy and availability of data. In many countries with large-scale active conflicts, accurate violence data is non-existent. However, many countries affected by organized

¹⁹ WHO, "Definition and Typology of Violence," http://www.who.int/violenceprevention/approach/definition/en/.

²⁰ Harvard, "Typologies of Violence and Peace," https://rlp.hds.harvard.edu/typologies-violence-and-peace.

²¹ Violence Prevention Institute, "Defining Violence and Abuse," https://www.gov.nl.ca/VPI/types/.

²² See Fearon and Hoeffler (2014)

²³ The ACLED Codebook provides a definition of some of these terms as defined by ACLED, though these may differ from other organizations. http://www.acleddata.com/wp-content/uploads/2017/01/ACLED_Codebook_2017.pdf

²⁴ Cure Violence's cutting edge work to treat the drivers of violence instead of its symptoms has been circulated extensively in Washington, D.C. and other policy capitals as a promising example of effective programming, supported by quantified data on the reduction in instances of violence. http://cureviolence.org/



crimes and gangs have accurate and detailed data and crime statistics to support the measurement of violence.

Based on the similarities between actors in armed conflicts and gangs/criminal organizations, we recommend further exploration of whether and how these groundbreaking approaches to violence reduction by organizations like Cure Violence might apply to more traditional peacebuilding contexts aimed at large-scale armed conflicts.

4. Many - if not most - peacebuilding programs do not directly measure levels of violence as an indicator of effectiveness.

Surprisingly few peacebuilding programs that focus on the prevention and/or reduction of conflict include a direct measure of violence as a program indicator. Most programs have a Theory of Change (ToC) that does not directly address conflict but instead focuses on concepts of social cohesion, justice, governance, or measures of progress in education, employment, infrastructure, etc. Many program indicators measure changes in these conditions rather than explicit changes in patterns of conflict or violence. For programs that do include measures of violence, many evaluators measure changes in *perception* of violence or attitudes toward violence or feelings of insecurity rather than the actual expression of violence.

As many in the peacebuilding community appreciate, there are valid concerns to measuring violence as the sole indicator of program effectiveness due to several factors, including issues of scale, timeline, spillover, and attribution.

- Scale: A peacebuilding program may have a very small scale or narrow focus relative to broad-based conflict dynamics. Violence may increase for a wide variety of reasons, irrespective of the peacebuilding program's efficacy. For example, violent actors may have access to more resources and/or capacity than peacebuilding actors or programs.
- Timeline: Many peacebuilding programs are focused on long-term outcomes and their investments may take time to take root, resulting in a delay in violence reduction. Programs may not have an immediate impact on the levels of violence and/or a program may be completed before any reduction in violence is achieved.
- Spillover: If violence is effectively addressed in a specific area, it may manifest somewhere else in the conflict system. Programs may successfully reduce violence in their area of influence without necessarily realizing a net overall reduction in violence. Or, violence may spread to multiple locations or evolve its characteristics as it intensifies, independent of a program's focus.
- Attribution: There may be an increase or decrease in violence due to factors other than the peacebuilding program. While a program's contribution to violence reduction may be monitored and evaluated, in large complex environments, attribution is extremely difficult to determine. The many overlapping actors and multiple interventions conducted by an ecosystem of stakeholders make it challenging to measure attributable changes in the levels of conflict.

These common challenges suggest the inherent tension in determining "effective" programs: clear progress against intermediate indicators that support specified ToCs vs. clear effects reducing levels of conflict and violence.



5. There is significant overlap between peacebuilding, peacekeeping, peace and security oriented development, humanitarian assistance, conflict mitigation, violence prevention, and governance. This presents a challenge for researchers seeking to identify peacebuilding programs and corresponding data.

We noted considerable overlap between peacebuilding, peacekeeping, peace and security oriented development, humanitarian assistance, conflict mitigation, violence prevention, and governance. Many of the programs that we evaluated contained a mix of interventions that could fall under one or many of these categories and very few programs were explicitly labeled as peacebuilding programs.

Although there was no consensus among the researchers that we consulted, most generally agreed with the UN Peacebuilding Support Office's definition. This definition is multi-faceted and has evolved over time and states that peacebuilding seeks to "address the root causes of violent conflict and supporting indigenous capacities for peace management and conflict resolution", "avoid relapse into conflict", "reassemble the foundations of peace", "reduce the risk of lapsing or relapsing into conflict" and "lay the foundations for sustainable peace". The Alliance for Peacebuilding website includes ten additional and distinct definitions of peacebuilding. To appropriately bound the research objectives and provide a clear scope for program selection, we focused on programs explicitly seeking to prevent or reduce conflict and violence. The selected definitions of peacebuilding that follow provided the frame for the program interventions that we studied.

Peacebuilding is a process that facilitates the establishment of durable peace and tries to prevent the recurrence of violence by addressing root causes and effects of conflict through reconciliation, institution building, and political as well as economic transformation......

Conflict Information Consortium, CU

[Peacebuilding] includes activities designed to prevent conflict through addressing structural and proximate causes of violence, promoting sustainable peace, delegitimizing violence as a dispute resolution strategy, building capacity within society to peacefully manage disputes, and reducing vulnerability to triggers that may spark violence.

OECD

Peacebuilding is a term used within the international development community to describe the processes and activities involved in resolving violent conflict and establishing a sustainable peace. It is an overarching concept that includes conflict transformation, restorative justice, trauma healing, reconciliation, development, and leadership, underlain by spirituality and religion.

School of Conflict Analysis and Resolution, GMU

Peacebuilding involves a range of measures targeted to reduce the risk of lapsing or relapsing into conflict by strengthening national capacities at all levels for conflict management, and laying the foundations for sustainable peace and development.

UN PBSO

http://www.allianceforpeacebuilding.org/2013/08/selected-definitions-of-peacebuilding/

²⁵ UN Peacebuilding: an Orientation, http://www.un.org/en/peacebuilding/pbso/pdf/peacebuilding_orientation.pdf

²⁶ Alliance for Peacebuilding, "Selected Definitions of Peacebuilding,"



6. There is a high degree of data transparency and a wealth of publicly available cost, violence, and effectiveness data.

One of the objectives of this phase of our research was to evaluate the availability and quality of cost and effectiveness data in the public domain. In many industries, this type of information is closely guarded, considered proprietary or sensitive, and extremely difficult to obtain. Though peacebuilding is an industry with market incentives and natural competitors, we discovered more transparency and willingness to share data than other industries. In a survey to members of the Alliance for Peacebuilding, nearly two-thirds of member organizations said they were willing to share their cost data with an honest broker (half without restrictions and half with some safeguards in place such as anonymization, etc).

This unusual level of transparency and willingness to share data is an important enabler for the peacebuilding community to conduct analysis like CEA that establishes a much-needed base of evidence for peacebuilding programs. There is concern among many peacebuilders that cost-effectiveness cannot be examined until there is better data on effectiveness or that the cost data is too sensitive to do meaningful analysis at scale. However, we found there is more than sufficient publicly available cost and effectiveness data to begin CEA research and a willingness among the community to share even more data to further the effort.

In less than two weeks, we identified 11 sources of impact evaluations (effectiveness) including over 1,200 program evaluations directly associated with conflict and violence; 11 sources of peacebuilding cost data at the program level of detail; and 13 sources of violence data.²⁷ We also found program-level cost data for 9 of the 12 programs that we identified as early candidates for CEA evaluation.

7. Peacebuilding data is widely distributed, with some aggregation for cost and violence data, but no aggregation of effectiveness data.

Although there is a lot of publicly available data, it is dispersed across different organizations and databases. There are some databases that integrate data from multiple sources. For example, AidData²⁸ integrates cost data "from a number of sources, including the OECD's Creditor Reporting System, annual reports and project documents published by donors, web-accessible database and project documents, and spreadsheets and data exports obtained directly from donor agencies." Open Situation Room Exchange incorporates violence data from multiple sources including ACLED and GDELT.²⁹

However, peacebuilding effectiveness data (often gleaned from impact evaluations) has not been aggregated into a searchable, research-friendly format and provided as a global, public good. The 11 different repositories of peacebuilding program evaluations we reviewed contain program evaluations in word document or .pdf format that ranged from 10 to over 100 pages in length. Some evaluations included quantitative program indicators but others were entirely subjective in nature or were focused on lessons learned rather than empirical results.

²⁷ All of these data sources are listed in our research library; http://fdg-llc.com/access request 369478/

²⁸ http://aiddata.org/

²⁹ PeaceTech Lab's Open Situation Room Exchange (OSRx), http://www.osrx.org/



Identifying programs that have quantitative measures, including a baseline and post-intervention measurement, is time consuming given the length of each program evaluation and the total number of publicly available evaluations (1,200+ related to conflict and violence). If evaluation data was treated as a public good and easily aggregated in a searchable database, it would have taken us a few hours instead of two weeks to parse the data and identify candidate programs for research. If the peacebuilding community expects to conduct effectiveness and CEA research at any scale, an important first step will be aggregating quantitative program indicators in a searchable database and enabling unrestricted access to that data.

Recommendations for the Peacebuilding Community:

As a result of the aforementioned findings and discussion, the research team offers the following recommendations to the peacebuilding community to enable research into effectiveness, cost-effectiveness, and violence / conflict reduction.

1. Develop a publicly available, curated database of common effectiveness measures and quantitative program indicators that includes historical data from completed programs. Screening and analyzing each impact evaluation for comparability is a time and labor-intensive endeavor that limits replicability and scalability of research. While violence and cost datasets exist in the form of searchable, real-time updated resources, there are no comparable datasets for effectiveness. Any effectiveness database should distil the program indicators against which each program was evaluated, to uncover programs that use comparable measures and are candidates for further evaluation.

2. Establish standard program indicators (measures of effectiveness) for programs with similar theories of change.

The lack of agreement on cross-program indicators of effectiveness hinders the comparability of programs and therefore the scalability of effectiveness and CEA approaches. Just like USAID's *Theories of Change and Indicator Development in Conflict Mitigation and Management* offered a comprehensive distillation of common families of ToCs³⁰, a similar effort should be made to establish and institutionalize standards and guidelines for peacebuilding indicators. The State Department has established a set of Standard Foreign Assistance Indicators³¹ that are input and output oriented but few measure impact, outcomes, and effectiveness.

3. Develop a typology of conflict and violence and a corresponding set of measures for the M&E community to use.

One of the primary goals of peacebuilding is the prevention and reduction of conflict and violence. Yet, there is no clear definition of what constitutes conflict / violence and how to measure it consistently. As a result, many programs don't measure conflict or violence at all and those that do often use different measures making comparability difficult. There is a large body of violence data that spans many years; this data could be analyzed with program indicators to determine the degree of correlation between program indicators and violence. This broader analysis would potentially

³⁰ http://pdf.usaid.gov/pdf_docs/Pnads460.pdf

³¹ https://www.state.gov/f/indicators/



substantiate the prevailing Theories of Change and identify program indicators that are the best predictors of changes in violence.

4. Conduct joint research and collaboration between organizations focused on reducing all forms of conflict and violence. Efforts to address interpersonal violence, organized crime, and gangs may provide important insights for the peacebuilding community.

A recent study by the Copenhagen Consensus stated that 20-25 countries (about one of eight independent states) are typically affected each year by destructive civil wars, and the wars typically involve only a small part of the country. In contrast, about a third of countries had a homicide rate of over 10 per 100,000, which the WHO considers to be an epidemic level of violence.³² As governments and organizations experiment, adapt, and learn about how to effectively reduce violence, there is great potential for the peacebuilding community to benefit from efforts to tackle interpersonal violence and vice versa.

5. Educate peacebuilders about cost-effectiveness and build their knowledge, skills, and abilities to perform their own CEAs on their programs.

Although the peacebuilding community has focused on measuring impact and effectiveness through enhanced M&E in recent years, the idea of including cost as a measure of program effectiveness is new to the community. There are some organizations that see the need and are working on incorporating CEA and/or CBAs as part of their program evaluations but the vast majority of peacebuilders are unfamiliar with these concepts and the potential benefits. Educating the community on the techniques and benefits of cost analysis is a necessary step to instituting CEA as a decision-making tool.

21

³² Anke Hoeffler and James Fearon, "Post-2015 Consensus: Conflict and Violence Assessment," August 22, 2014, http://www.copenhagenconsensus.com/sites/default/files/conflict_assessment_- hoeffler_and_fearon_0.pdf



Next Steps and Future Research

Our research team is currently working to establish and pilot a repeatable methodology to conduct CEA studies for different types of peacebuilding activities. At a minimum, this will include the initial set of programs identified in the previous section. There are two primary CEA comparisons that will be piloted – a comparison of like units of outcome per dollar (e.g. dollars spent per capita improvement in perceptions towards violence) and dollars spent per change in violence indicator (dollars spent per capita reduction in civilian fatalities or battle deaths). For the programs selected here, there is sufficient data available to establish a normalized CEA ratio for both program indicators and violence indicators. Table 5 lists some of the illustrative program indicators that are related to violence that will be used to establish comparative CEA outcomes.

Program	Illustrative Program Indicators and Outcomes
Commander's Emergency Response Program (Iraq)	 56% reduction in civ fatalities / attack Each labor project reduces civil attacks by 2%; 49% decrease in incidents
Conciliation in Nigeria through Community based Conflict Management and Cooperative Use of Resources (CONCUR)	 18% increase in frequency disputes resolved successfully 72% felt they could move safely within their villages without fear of violence 79% felt tensions had decreased
DDR in Congo	Civilian perceptions of community security: 71% OK to safe vs. 10% OK to safe
Ethno-Religious Violence in Plateau and Niger	 Politics as cause of violence decreased by 23% Politicians as perpetrators of violence decreased by 6%
Liberia Community Empowerment Program (CEP)	 Trainees (leaders) 94% more likely to find resolution to money conflict 34% less likely to experience a series fight with weapons (community) 6% increase in perception of security (trainees)
National Solidarity Program (NSP) in Afghanistan	 1% reduction in probability of a villager engaging in dispute with another villager 5% increase in male perception of security 4-5% increase in female perception of security
Plateau Will Arise (PWA) project	 Capacity of the communities to resolve conflict peacefully rated as good (48%) or very good (26%) 36% perceived security in community as improving a little, 40% as improving a lot 70% of respondents felt that intergroup relations had improved
Agricultural training and capital program for Liberian ex-fighters	45% less likely to be willing to fight in a neighboring war
Stabilizing Vulnerable Communities in CAR through the promotion of intercommunity dialogue and economic cooperation (SVC)	 71.7% of the participants reported that conflicts were managed peacefully, corresponding to 451% increase from the baseline of 13% 67% of the respondents said their area was secure, up from 38% 12 months ago
Anti-Electoral Violence in Nigeria	 8% improved knowledge of ways to counteract violence 13% reduction in the intensity of electoral violence Voter turnout increased by 10% for each unit increase of security
Working with men to prevent intimate partner violence in Cote D'Ivoire	 8% decrease in intention to use violence 18% increase in use of conflict management techniques
Reconciliation in Sierra Leone	34% less likely to fight in another war

Table 5. Illustrative Program Indicators and Outcomes

We are committed to sparking, cultivating and helping maintain a community of interest in cost-effective peacebuilding. Eventually, we hope a community of interest will grow into a robust community of practice like that of the bourgeoning peacebuilding evaluation community. Please contact our lead author, Steve Sheamer at steve@fdg-llc.com, if you are interested in joining this effort.



About the Authors



Steve Sheamer has spent his entire professional career focused on improving effectiveness and efficiency through rigorous cost analysis, improved business processes, performance measurement, and technology implementation. He is a Certified Cost Estimator, Industrial Engineer, Lean Six-Sigma Black Belt, and Project Management Professional with over 15 years of experience supporting large, complex programs. His industry experience includes consumer product manufacturing, computer chip fabrication, aerospace and defense, and management consulting. As a

management consultant, he led the development of Cost Engineering and Strategic Financial Analysis consulting practices that included the development of employee training, tools, and analytical methods.



Alexa Courtney has over 15 years of experience leading research and assessment teams in the peacebuilding field in the US and globally in South Asia, Africa, and Europe. She is the CEO and Founder of Frontier Design Group and pioneered the application of design thinking, innovation, and systems complexity studies to human security challenges. Since founding Frontier, she has worked with executive leaders at large non-profits and Federal agencies to apply the tools of design and innovation

practices to drive organizational change. She was honored by DevEx and Chevron Corporation as one of forty international development leaders under forty in Washington, DC, for acting as a change agent within USAID and driving adoption of innovative approaches to prevent vulnerability and conflict.



Noah Sheinbaum is passionate about helping people, organizations, and processes achieve their potential. He has advised Fortune 500 corporations, government, and nonprofit clients, helping them manage change and complexity. Noah began his career in the private sector with the global management consultancy Bain & Company, before working with the U.S. Institute of Peace to produce the Fragility Study Group. He graduated from Yale University with a BA in Ethics, Politics & Economics and

Global Affairs. He is a recipient of the Council of American Ambassadors Annenberg Fellowship, as well as the Les Aspin '60 Public Service Fellowship.



References

Blattman, Christopher, Alexandra Hartman, and Robert Blair. "Can we Teach Peace and Conflict Resolution?: Results from a randomized evaluation of the Community Empowerment Program (CEP) in Liberia: A Program to Build Peace, Human Rights, and Civic Participation." Innovations for Poverty Action. 2011. Accessed June 2017. https://www.poverty-action.org/sites/default/files/publications/ blattman hartman blair can we teach peace ipa liberia 0.pdf.

Blattman, Christopher, and Jeannie Annan. "Can employment reduce lawlessness and rebellion? A field experiment with high-risk men in a fragile state." Enterprise Development. December 16, 2014. Accessed June 2017. http://www.enterprise-development.org/wp-content/uploads/ Can employment reduce lawlessness and rebellion Blattman Annan.pdf.

Bradly, Andrew Penn. "Cost-Effectiveness Analysis: An Assessment of its application in evaluating humanitarian assistance." Asia Pacific Press, Australian National University. 1999. Accessed June 2017. https://openresearch-repository.anu.edu.au/bitstream/1885/41689/3/cem99-5.pdf.

Chalmers, Malcolm. "Spending to Save? An Analysis of the Cost Effectiveness of Conflict Prevention." Centre for International Cooperation and Security, Department of Peace Studies, University of Bradford. June 12, 2004.

Chalmers, Malcolm G. "Spending to save: Prospective case studies." University of Bradford. 2005. Accessed June 2017. https://bradscholars.brad.ac.uk/handle/10454/3627.

Cilliers, Jacobus, Oeindrila Dube, and Bilal Siddiqi. "Can the Wounds of War be Healed? Experimental Evidence on Reconciliation in Sierra Leone." May 2015. Accessed June 2017. http://odube.net/papers/Reconciliation.pdf.

Collier, Paul, and Pedro Vicente. "Votes and Violence: Evidence from a Field Experiment in Nigeria." Institution for Social and Policy Studies, Yale University. January 2009. Accessed June 2017. http://isps.yale.edu/sites/default/files/page/2013/06/vicente 4.25.09 notes.pdf.

"DFID's Approach to Value for Money (VfM)." Department for International Development, United Kingdom. July 2011. Accessed June 2017. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/49551/DFID-approach-value-money.pdf.

Dhaliwal, Iqbal, Esther Duflo, Rachel Glennerster, and Caitlin Tulloch. "Comparative Cost-Effectiveness Analysis to Inform Policy in Developing Countries: A General Framework with Applications for Education." Abdul Latif Jameel Poverty Action Lab, Massachusetts Institute of Technology. December 3, 2012. Accessed June 2017. https://www.povertyactionlab.org/sites/default/files/publications/ CEA%20in%20Education%202013.01.29 0.pdf.

Doyle, Michael W., and Nicholas Sambanis. "International Peacebuilding: A Theoretical and Quantitative Analysis." American Political Science Review. December 2000. Accessed June 2017. https://www.cambridge.org/core/journals/american-political-science-review/article/international-peacebuilding-atheoretical-and-quantitative-analysis/2E28FC5F7DD0F30B097D83553312C023.

Dunne, J. Paul. "Copenhagen Consensus: An Economic analysis of the challenge of Armed Conflicts." Copenhagen Consensus. April 16, 2012. Accessed June 2017. http://www.copenhagenconsensus.com/sites/default/files/armedconflict.pdf.



Egel, Daniel, and Peter Glick. "Assessing the Stabilizing Effects of Development Programming: A Review of USAID's Evaluation Efforts in Afghanistan." National Defense Research Institute, RAND. June 2016. Accessed June 2017. https://www.rand.org/content/dam/rand/pubs/working_papers/WR1100/WR1106/RAND_WR1106.pdf.

Fearon, James, and Anke Hoeffler. "Benefits and Costs of the Conflict and Violence Targets for the Post-2015 Development Agenda." Copenhagen Consensus. August 22, 2014. Accessed June 2017. http://www.copenhagenconsensus.com/sites/default/files/conflict_assessment_-_hoeffler_and_fearon_0.pdf.

Gaarder, Marie, and Jeannie Annan. "Impact Evaluation of Conflict Prevention and Peacebuilding Interventions." The Organization for Economic Co-operation and Development. June 2013. Accessed June 2017. https://www.oecd.org/dac/evaluation/ImpactEvaluationofConflictPreventionand PeacebuildingIntervention.pdf.

"Generalized Cost-Effectiveness Analysis." World Health Organization, United Nations. Accessed June 2017. http://www.who.int/choice/cost-effectiveness/generalized/en/.

"GiveWell's Cost-Effectiveness Analyses." GiveWell. Accessed June 2017. http://www.givewell.org/how-we-work/our-criteria/cost-effectiveness/cost-effectiveness-models#2017Version1.

Gupta, Jhumka, Kathryn Falb, Heidi Lehmann, Denise Kpebo, Ziming Xuan, Mazeda Hossain, Cathy Zimmerman, Charlotte Watts, and Jeannie Annan. "Gender norms and economic empowerment intervention to reduce intimate partner violence against women in rural Côte d'Ivoire: a randomized controlled pilot study." BMC International Health and Human Rights. 2013. Accessed June 2017.

https://bmcinthealthhumrights.biomedcentral.com/track/pdf/10.1186/1472-698X-13-46?site=bmcinthealthhumrights.biomedcentral.com.

Humphreys, Macartan, and Jeremy M. Weinstein. "Demobilization and Reintegration." Journal of Conflict Resolution. August 1, 2007. Accessed June 2017. http://journals.sagepub.com/doi/abs/10.1177/0022002707302790.

Iyengar, Radha, Jonathan Monten, and Matthew Hanson. "Building Peace: The Impact of Aid on the Labor Market for Insurgents." National Bureau of Economic Research. August 2011. Accessed June 2017. http://www.nber.org/papers/w17297.pdf.

Key, James Edwin. "At What Price? Benefit-Cost Analysis and Cost-Effectiveness Analysis in Program Evaluation." Harvard Family Research Project. 1999. Accessed June 2017. http://www.hfrp.org/evaluation/the-evaluation-exchange/issue-archive/methodology-15/at-what-price-benefit-cost-analysis-and-cost-effectiveness-analysis-in-program-evaluation.

King, Elisabeth, Cyrus Samii, and Birte Snilstveit. "Interventions to Promote Social Cohesion in Sub-Saharan Africa." International Initiative for Impact Evaluation. July 2010. Accessed June 2017. http://www.3ieimpact.org/media/filer_public/2012/05/07/SR002%20Final.pdf.

Koehler, Jan, Kristóf Gosztonyi, Keith Child, and Basir Feda. "Toward mixed-methods impact evaluation: Making stabilization assessments work for development cooperation." The Economics of Peace and Security Journal. 2015. Accessed June 2017. https://www.epsjournal.org.uk/index.php/EPSJ/article/view/229.



"Lessons Learned on the Department of Defense's Commander's Emergency Response Program in Iraq." Office of the Inspector General for Iraq Reconstruction. January 24, 2013. Accessed June 2017. https://cybercemetery.unt.edu/archive/sigir/20131001090410/http://www.sigir.mil/files/audits/13-005.pdf#view=fit.

Levin, Henry M., and Clive R. Belfield. "Guiding the Development and Use of Cost-Effectiveness Analysis in Education." Center for Benefit-Cost Studies of Education, Teachers College, Columbia University. August 2013. Accessed June 2017. http://cbcse.org/wordpress/wp-content/uploads/2013/08/Guiding-the-Development-And-Use-of-Cost-effectiveness-Analysis-in-Education.pdf.

"Measuring Peacebuilding Cost-Effectiveness." Vision of Humanity. March 2017. Accessed June 2017. http://visionofhumanity.org/app/uploads/2017/03/Measuring-Peacebuilding_WEB.pdf.

Menkhaus, Ken. "Impact Assessment in Post-Conflict Peacebuilding: Challenges and Future Directions." Design, Monitoring and Evaluation for Peacebuilding. January 13, 2012. Accessed June 2017. http://dmeforpeace.org/learn/impact-assessment-post-conflict-peacebuilding-challenges-and-future-directions.

Musgrove, Philip, and Julia Fox-Rushby. "Cost-Effectiveness Analysis for Priority Setting." National Center for Biotechnology Information. January 01, 1970. Accessed June, 2017. https://www.ncbi.nlm.nih.gov/books/NBK11780/.

Pugel, James. "What the Fighters Say: A Survey of Ex-Combatants in Liberia February-March 2006." United Nations Development Programme. April 2007. Accessed June 2017. http://www.operationspaix.net/DATA/DOCUMENT/904~v~What_the_Fighters_Say_A_Survey_of_Excombatants_in_Liberia.pdf.

"Report on Pilot Expenditure Analysis of PEPFAR Programs in Six Countries." The U.S. President's Emergency Plan for AIDS Relief (PEPFAR). July 2012. Accessed June 2017. https://www.pepfar.gov/documents/organization/195700.pdf.

United States of America. United States Agency for International Development. MISTI Stabilization Trends and Impact Evaluation Survey: Analytical Report, Wave 5: Sep 28-Nov 3, 2014. April 28, 2015. Accessed June 2017. http://acsor-surveys.com/wp-content/uploads/2015/10/MISTI-Wave-5-Analytical-Report-FINAL_USAID.pdf.

United States of America. Department of Defense. Special Inspector General for Afghanistan Reconstruction. Quarterly Report to the United States Congress. October 30, 2015. Accessed June 2017. https://www.sigar.mil/pdf/quarterlyreports/2015-10-30gr.pdf.

Uppsala Conflict Data Program. "UCDP/PRIO Armed Conflict Dataset version 17.1" and "UCDP Battle-Related Deaths Dataset". 2016. Accessed August 2017. http://ucdp.uu.se/downloads/

Weinstein, Jeremy, and Macartan Humphreys. "What the Fighters Say: A Survey of Ex-Combatants in Sierra Leone June-August 2003." Columbia University. July 2004. Accessed June 2017. http://www.columbia.edu/~mh2245/Report1_BW.pdf.