



ReClaim McKeesport

SUSTAINABLE RETURN ON INVESTMENT REPORT

MEASURING MORE THAN JUST
WHAT YOU CAN SEE



SOCIAL RETURN ON INVESTMENT REPORT

ReClaim McKeesport Ambassador Program

Authors:

Evaine K. Sing, RLA, LEED AP

Kate Hancock

Graphics Support:

Tom Mulholland

Photo Credits:

2014-2015 GTECH Strategies Staff

2015 Alexander Denmarsh

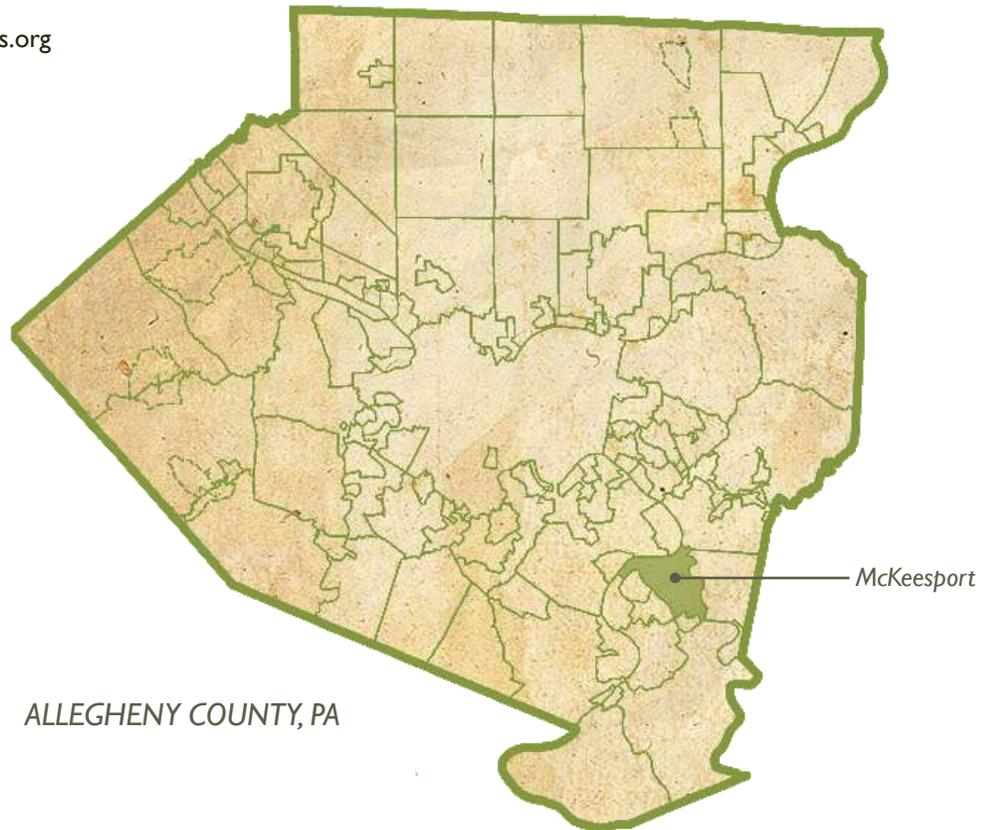
More information:

GTECH Strategies

6587 Hamilton Avenue, IW, Pittsburgh, PA 15206

Phone: 412-361-2099

Email: info@gtechstrategies.org



CONTENTS

Executive Summary	3
About GTECH	4
1. Introduction	5
2. Project Background	6
Summary of Project Achievements	7
3. Methodology	
A. Establish scope and identify stakeholders	8
B. Map outcomes	8
C. Evidence the outcomes and give them a value	8
D. Establish impact	10
E. Calculate the sustainable return on investment	11
4. Project Investment	11
5. Theory of Change	11
6. Impacts and Value Creation	11
7. Sensitivity Analysis	14
8. Considerations and Limitations	15
9. Conclusion	15
Acknowledgments	17
References	19

ACRONYMS AND DEFINITIONS

Ecosystem Services Analysis (ESA)	A framework to value changes in the natural environment by measuring the environmental benefit of a given intervention or change in order to understand the impact of environmental conditions
Financial Proxy	A value determined through social science research connecting intangible actions with quantifiable market values
Social Return on Investment (SROI)	A model that assigns value to social change. There are two types of SROI: <i>Evaluative</i> : conducted retrospectively and based upon outcomes and <i>Forecast</i> : Predictive of outcomes; changes
Stakeholder	A person, organization or entity that experiences change as a result of an intervention
Sustainable Return on Investment (SuROI)	A combination of multiple social and environmental valuation approaches
Well-being Valuation	An approach that draws on large national survey data that includes people's responses to well-being questions and data on a large number of aspects and circumstances of their lives. A typical survey includes data on people's well-being plus their employment status, marital status, health statuses, whether they volunteer, whether they play sports, whether they live in a safe area etc.
Life Cycle Assessment	An assessment that analyzes of the environmental impacts of a product or service from raw material extraction through disposal and provides interpretation of the results to identify actions that can be taken

AFFIRMATION

Except as acknowledged by the references of other authors and publications, the evaluation described within this report consists of our own work, to describe and advance learning as part of GTECH's effort to monitor and evaluate our programmatic efforts and adjust programs to increase levels of impact in our region.

Primary quantitative and qualitative data collected throughout the evaluation process remain the property of GTECH and the participants described in this document. Information and data must only be used with the consent of GTECH, representing the interested of the community and verifying the validity of information recorded.



EXECUTIVE SUMMARY

This report explains the process and methods used to quantify the environmental, social and economic impact for GTECH Strategies' ReClaim McKeesport Ambassador Model. Calculating this Sustainable Return on Investment, or SuROI, enables GTECH Strategies to measure and ensure that project investments are not only positively impacting communities, but creating a sustainable impact.

SuROI is the combination of various social and environmental valuation approaches that places a monetary value on social and environmental change, in efforts to better identify sustainable outcomes for programs and the wider society. As a stakeholder-led process, the SuROI model places a dollar value on changes experienced by those directly affected by the intervention. The ability to quantify the social and environmental outcomes help to communicate the effectiveness and scope of impact of the program, policy, investment or development decision.

The GTECH Ambassador model addresses vacant land transition and maintenance issues through a neighborhood-scale initiative that simultaneously builds knowledge, capacity and expertise with individuals in communities, contributing and encouraging community revitalization efforts. The McKeesport Ambassador Program took place from September 2014 to September 2015. Over the course of one year, 10 dedicated community residents were recruited to serve as Ambassadors and reclaim vacant lots throughout the city of McKeesport. Ambassadors attended vacant land education sessions and were awarded micro grants of \$3K to put their own ideas, planning and vision into action.

The model's "people and places" approach to vacant land transition is particularly relevant in McKeesport. McKeesport has suffered since industry fled Southwest Pennsylvania, leading to high vacancy rates, disinvestment and crime and health issues. When addressing issues of vacancy, it is imperative that communities build capacity, leadership and knowledge on where to start, how to contribute, and how to maintain momentum to bring about meaningful change. The Ambassador Program operates with this context in mind.

The SuROI approach enabled GTECH to measure the intangible impact of the Ambassador Program. To calculate impact, GTECH, in collaboration with RealWorth, applied financial proxy values to outcomes, as indicated by stakeholders to determine the changes and give them value. Quantitative and qualitative survey

data was collected using various survey methods.

The data collected was organized into a robust impact map, which organized and calculated the relationship between the inputs and outputs. The impact map was informed by the stakeholder-driven theory of change map (see Table 4). The survey data informed the categories, interventions, and outcomes. The outcomes were categorized into the following categories:

- Actualized economic gains
- Crime
- Employment
- Environment
- Health
- Improved well-being

In summary, the Program concluded that the initial investment of \$169,435, over three years time, is forecasted to create a net value of \$3,533,763, translating into a sustainable return on investment ratio of \$1: \$21.90.

Note: summary of outcomes in Table 1.

Key Achievements

- 9 vacant lots were reclaimed into community greenspaces
- 10 educational, skill-based sessions were completed by Ambassadors
- 100% of Ambassadors surveyed reported that they developed more green habits
- 75% of Ambassadors surveyed reported an increase in mental and physical health as a result of the program
- 74% of community members who responded to the survey felt more pride in the area's appearance as a result of the newly designed greenspaces
- Nearly half of community residents surveyed were more encouraged to walk around the neighborhood more
- 38% of residents surveyed say they talk to their neighbors more as result of the increased greenspace



Flowers in bloom at the Library District Gateway Garden project site

About GTECH

Growth Through Energy and Community Health (GTECH), is a nonprofit organization dedicated to mobilize residents, local policy-makers, and like-minded organizations to transform vacant spaces into thriving places everyone can enjoy to improve the economic, social and environmental health of our communities.

Mission: To cultivate the unrealized potential of people and place by creating opportunities that improve the economic, social and environmental health of communities.

Vision: Thriving communities of engaged, empowered and equipped individuals participating in the process of community betterment in order to transform wasted resources to valuable assets.

Approach: Our four-pronged approach has been refined through our nearly 10 years of experience in program development, planning, community engagement, capacity building, and on-the-ground implementation. We facilitate a systems-based approach to **Investigate** critical issues, take **Action** where action is possible, **Connect** people to resources and opportunities, and **Sustain** progress through innovative and collaborative partnerships.

“The hard work is all worth it for people to be interacting and working together, and stopping to say the garden makes them feel better when they walk or drive by it.”

- Shari Holland, Ambassador



Ambassador Shari at her completed “Library District Gateway Garden” (Cover Photo)

I. INTRODUCTION

How can organizations quantify environmental, social, and economic impacts and validate how investments are positively impacting communities served? How can we hold organizations accountable to the promises made at the onset of a new project or program? How do we ensure that our interventions are making a sustainable impact without shifting the burden? How can we take anecdotal stories and make a more tangible case for the work in order to attract further investment?

These are some of the questions GTECH posed, leading to the application of a Sustainable Return on Investment (SuROI) methodology on the McKeesport Ambassador Program, as a way to test our ability to provide tangible value to program work with numerous intangible benefits on program participants and broader community. The SuROI methodology aligns well with GTECH's "people and place" approach, wherein we work with community residents to define and address needs through a platform of engagement that results in place-based interventions.

Similar to a Social Return on Investment (SROI), the SuROI approach places a monetary value, identified through financial proxies, on the social and environmental changes experienced by the very people who are affected by policies, investments and development decisions.

The SuROI approach is a credible and well-evidenced model developed by RealWorth, a UK-based consulting agency that focuses on creating better and more sustainable outcomes for their clients and the wider society, and combines many social and environmental valuation approaches. The combination of valuation approaches includes: Social Return on Investment (SROI), Ecosystem Services Analysis (ESA), Well-being Valuation, and social impact elements of Life Cycle Assessment and others to understand sustainable change. This SuROI report was advised by RealWorth.

This report shares findings on the value created through the execution of GTECH's ReClaim Ambassador Project, which took place in the municipality of McKeesport, Pennsylvania, from September 2014 - September 2015. This report outlines the process followed that led us to the social and environmental value of the ReClaim McKeesport program in order to communicate the strength of impact that this program, and others like it, are able to have in this region.

Project Summary

Location: McKeesport, PA

Project Goal: To equip and empower residents to take action on vacant land for the purpose of improving community health.

Project Outcome: Engaged residents actively participated in civic processes by using a network of resources to tackle community challenges.

Outputs: 1) Residents with an awareness of process, available resources, and strong networks. 2) New greenspace projects on previously vacant or underutilized and blighted lands.

Project Investment: \$169,435

Funders: Benedum Foundation, McKeesport Hospital Foundation, UPMC Health Plan

Direct participation: 10 residents were intensively engaged over a 1 year period with an additional 300 residents attending networking or volunteering events.

Total beneficiaries within walking distance from program sites: 5,377 residents

ReClaim Ambassador Model



GTECH depends on the self-selection of residents to recruit our Ambassadors.



Hands-on learning side by side builds a network of trust and immediate action.



Implementation of tangible projects across the community signaling care, unity, and momentum.



Celebration and support through programming.

2. PROJECT BACKGROUND

ReClaim McKeesport was GTECH's first neighborhood-scale initiative outside the City of Pittsburgh. The program built off the success of two previous initiatives, ReClaim Northside and ReClaim South, expanding the Ambassador model to build community capacity throughout Allegheny County.

In an effort to maximize the impact of investments on vacant land, GTECH developed this model of neighborhood-scale initiative that simultaneously builds knowledge, capacity and expertise with individuals in communities while enabling tangible actions to fuel community revitalization efforts. GTECH believes vacant land serves as a platform to foster increased community engagement and ownership of a reinvestment process and that the application of catalytic strategies positively contributes to community health.

The ReClaim Ambassador program is fundamentally a “people and places” approach to vacant land transition and maintenance through community empowerment, education and ownership. In McKeesport, active community citizens were selected with support from municipal leaders, community-based organizations and partners for their dedication to positive, actionable change and desire to be more present in the development conversations happening in their community. Participants attended vacant land education sessions on issues ranging from assessment, current legislation, community organizing, roles of government and community entities and available funding sources among others.

After bringing the cohort together through educational and networking activities, Ambassadors were encouraged to apply the hands-on learning through the use of micro-grants provided by GTECH. These micro investments of \$3K allowed Ambassadors to execute their own projects on vacant lots throughout the community, providing the perfect opportunity to engage neighbors with community-focused volunteering activities resulting in aesthetically positive results. The McKeesport Ambassadors are now part of the larger GTECH network, consisting of previous Ambassadors who share lessons learned and provide valuable insight on how to implement their projects. Since 2012, GTECH has supported over 100 community Ambassadors in over 20 communities.

In McKeesport, this approach was especially relevant- as

industry has decreased in the Southwestern Pennsylvania region, communities have been left to address the resulting economic impacts. These communities have suffered from declines which reduce the tax base and ability to provide services and amenities to their constituents. High vacancy rates have led to further disinvestment, crime, and health issues. When addressing the complex issue of vacancy, communities often lack continuous capacity, leadership or knowledge of how to start bringing about meaningful change. Even more specifically, communities may need to gain baseline knowledge of green strategies and the resources available to stem the negative impacts of blight and vacancy.

McKeesport, PA

- Location: Allegheny County, Pennsylvania
- Area: 13.9 sq mi
- Population: 19,453 (2015)
- Households: 8,760
- Median value of owner-occupied housing units: \$46,600
- Median household income: \$26,224

Summary of Project Achievements

The McKeesport Ambassador Program transitioned nine McKeesport vacant lots into carefully planned greenspaces for use by the community. As a cohort, the Ambassadors dedicated hundreds of hours to planning, presenting, and executing their unique and inspiring neighborhood visions. Each Ambassador stayed committed to their project for over 12 months and attended ten educational sessions, where program and skill-based topics were covered. The projects allowed for Ambassadors to build stronger relationships with their community and highlight their individual strengths.

The Ambassadors and the GTECH team were not the only stakeholders to make these lot visions into reality; GTECH and the Ambassadors were able to engage over 275 different volunteers to help reclaim the nine lots.

Though the revitalized lots and SuROI value speak for themselves, the projects were recognized area-wide with over 11 appearances in the paper, 12 articles written about the Ambassadors and their projects and even one radio interview--the Ambassadors' work did not go unnoticed.

Project achievements as acknowledged through Ambassador feedback

- Fostered community involvement and connection
- Encouraged more exercise
- 50% reported healthier eating habits as a result of the program
- 75% reported feeling happier when working on the program
- 75% reported having learned new personal/technical skills
- 50% are more confident in managing people
- 100% developed more “green habits” as a result of the program

Project achievements based on community members

- 78% noticed positive changes to the neighborhood post-implementation
- 74% of community residents feel more pride in the area’s appearance
- 38% are less worried about criminal activity in their area as a result of the program
- 46% are more encouraged to walk around the neighborhood more
- 38% talk to their neighbors more as a result of the greenspaces

(Note: this reflects the opinion of only those who participated in the survey rather than the cohort as a whole)

These sites are products of hard work, dedication, collaboration, education and pride. The SuROI approach enabled GTECH to measure the personal and social impact of that work which, according to 75 percent of Ambassadors, resulted in an increase in mental and physical health. Ambassadors also reported feeling better about themselves after participating in the training programs. More notably, 100 percent of Ambassadors reported that they developed more “green habits” (planting and gardening more, environmental awareness, decreasing carbon footprint, carpooling and turning off the lights when not in use) as a result of the program. In addition to the individual Ambassador impacts, community residents reported an increase in pride in the area’s appearance and almost half reported that they feel more encouraged to walk around the neighborhood more.

Each Ambassador, with the exception of one, whose project was unable to be completed, started with a vision of what they wanted to provide for their neighborhood. Of the four out of nine Ambassadors who were able to respond to the project follow-up evaluation, 100 percent reported that the program was an overall great experience that positively impacted their personal well-being.

3. METHODOLOGY

GTECH followed a seven-step best-practice methodology to ethically and accurately report the social and environmental value of the McKeesport Ambassador program. The SROI framework follows this methodology with an emphasis on stakeholder collaboration. This is separate, but not exclusive, from the ecosystem services analysis model (ESA), which measures the environmental benefit of a given intervention or change in order to understand the impact on environmental conditions. This section outlines the seven-step process provided by the SROI Network.

To organize the process, RealWorth and GTECH developed an impact map, which illustrates, in an excel format, the seven-step process.

To obtain much of the SuROI outcomes, a GTECH project associate reached out to Ambassadors and conducted a follow-up survey to gain qualitative and quantitative data on the degree to which the Program impacted the Ambassadors and community. One survey was administered only to Ambassadors and another survey was administered only to community residents who reported that they were familiar with the new greenspaces within their community.

The Seven Principles of Best Practice SROI

- Involving stakeholders
- Understanding change
- Valuing what matters
- Only including what is material
- Not over-claiming
- Transparency
- Verifying the result

A. Establish scope and involve stakeholders

The scope of this analysis sets the boundaries of what is being considered, ie: the social impact of the Ambassador Program activities. In considering scope, further analysis of the purpose, audience, background, resources, activities, and timeline are also considered. Involving stakeholders is a best practice principle and a crucial component of analysis and implementation. Stakeholders are those who will or have been impacted by the change that is being evaluated.

While local businesses are identified as an important stakeholder group, we were unable to survey local businesses to include their direct impact on the return value. Similarly, volunteers were not interviewed at the time of service and were difficult to reach one year after project completion, noted as an additional limitation of our process. Table I outlines all the intended stakeholders and the reason we identified them, however highlighting only those that we were able to include in this effort. We recognize this as a significant limitation of the study and will continue measuring the impact on various stakeholder groups to further ensure and support our current SuROI value. As a result of this effort, we will continue to identify and develop proxy values and outcomes to further represent the impact on all the stakeholder groups that were identified.

Inputs are simply what was invested (ie: funds, in-kind expertise, etc.) and the value of that investment. The outputs are the activities that the inputs allowed for, and the outcomes are the changes. The outcomes then break down the change into the following categories: indicators, source of indicator, quantity of change, the financial proxy used to value the change, and the value that is derived from the proxy and quantity.

B. Map outcomes

After establishing who the project's stakeholders are, the next step is to understand the intended or unintended changes, as experienced by the specific stakeholder group, and give those changes, or outcomes, a value. After understanding what the change or outcome is, we applied appropriate outcome indicators, based on the reported change.

Prior to data collection, the objectives expressed in the project

Table I: Stakeholders

Stakeholder Group	Reason for Inclusion
GTECH Strategies	The organization responsible for the activity
Funders	The funders of the activities
ReClaim McKeesport Ambassadors	Primary beneficiaries most likely to experience outcomes as a result of the activities
Residents of McKeesport	Improvement in the greenspace as well as the opportunities for social inclusion and networking are likely to have a significant impact on residents of McKeesport
McKeesport Local Businesses	Purchases made during the program were made locally, and since many of the activities were new, this represents additional income for the local economy.
Volunteers	The network building, physical labor, and contribution to a public good has beneficial impact on volunteers.

design were re-ordered into a theory of change map that was used to guide the formation of data collection tools. After data collection, the map was revised and refined to reflect the experience of the project stakeholders, rather than the project objectives. The impact map, informed by the Theory of Change outcomes, measures the relationship between the inputs and outputs in the analysis and clearly illustrates engagement with stakeholders and their relationship and contribution to the outcomes produced.

C. Evidence the outcomes, give them a value

Key Ambassador and Resident Interviews

GTECH administered two surveys, one for ambassadors who were directly involved and impacted by the projects and the one for community residents who may notice and/or experience the greenspaces. The surveys were conducted to reveal the relationships between the intended or unintended changes and the outcomes, according to the most highly-impacted stakeholders.

The GTECH evaluation team conducted these surveys on separate occasions in the city of McKeesport. Surveys were concentrated around the areas of the gardens, but not exclusive to them. 'Hot spots' in the city were identified, based on level of activity, in order to reach the most amount and most diverse



Ambassadors met with professional designers to plan out their projects

makeup of individual stakeholders. Survey data was collected using various methods including: having residents write in answers on paper surveys, filling out survey electronically on tablets, or through a verbal survey administration, of which was transcribed and input electronically.

In total, the evaluation team collected 62 McKeesport resident surveys. Time was the biggest limitation in collecting survey responses from Residents. Poor weather can also be noted as a limitation. Out of the nine Ambassadors that completed the program, four responded to the various methods of survey distribution: email, text, phone calls. These response numbers are reflected in our impact map under the ‘quantity’ column and were not extrapolated to represent the cohort at large.

The survey records and analysis informed what the most appropriate valuations are to best measure the outcomes as reported by the Ambassadors and McKeesport residents. The

Table 2: Description of data sources used to calculate outcomes

HACT Social Value Bank	The Housing Associations’ Charitable Trust Social Value Bank is comprised of UK datasets from the British Household Panel Survey and focuses on understanding the impact that interventions have on employment, local environment, health, financial inclusion, youth and other measures, on an individual’s life.
Fujiwara 2013	A framework which calculates social impact using the combination of five approaches: Cost-benefit analysis (CBA), Social Return on Investment (SROI), Cost-utility Analysis (CUA), Cost-effectiveness Analysis (CEA) and Multi-criteria Analysis (MCA) to develop social value metrics. This framework, in conjunction with HACT, developed the Social Value Bank.
NAMI and NIMH	The National Alliance on Mental Illness and National Institute of Mental Health produced estimates of the costs associated with mental illness and treatment.
SAMHSA	Substance Abuse and Mental Health Services Administration reports were used to inform well-being proxy values as they relate to well-being and health outcomes.
TEEB Database	The Economics of Ecosystems and Biodiversity (TEEB) is a global initiative and structured valuation approach focused on “making nature’s values visible”. Its principal objective is to mainstream the values of biodiversity and ecosystem services into decision-making at all levels.

surveys informed 20 out of 25 outcomes. Additional outcomes were informed using SAMHSA data, relevant literature reviews and other data banks (see Table 2).

Project records

Throughout the project, the GTECH team captured data and metrics for use in this study. This data include headcounts, spending trends and feedback collected throughout various program activities. Survey responses are included in the project records and are the primary source of the Ambassadors’ outcomes.

Analysis of publicly available data

A quantitative analysis, using geographic information systems (GIS), determined the total number of residents likely to be most impacted by the Ambassador sites. The total beneficiaries within walking distance from each program site is 5,377 residents.

Revealed preference techniques were used for instances when proxy financial indicators for some important outcomes were not obtained from community stakeholders. This was due to the time limitation of the survey period and difficulty in reaching the intended stakeholders, or because the evaluation team did not appreciate the extent of the impact until after the data collection period.

D. Establish impact

To understand the change experienced, we organized our inputs, outputs and outcomes in our impact map. Each outcome was

identified and matched with a proxy value, then mapped in order to generate the SuROI figure. The following are steps taken to ensure that the impact calculated was done so in-line with the SROI Principles.

Table 2 highlights many of the datasets used to identify financial proxies for this study.

Discounting factors

To avoid the risk of over-claiming, deadweight, displacement, attribution, drop-off, duration and discount rate were added to the calculations of each impact to reduce or constrain the values of each individual return. Each factor is applied independently to each outcome to best constrain the overall value per outcome.

Deadweight: To what degree would the outcomes have occurred, without the Ambassador Program? Deadweight is typically accounted for by referencing a comparison group or benchmark. Because we did not reference a specific comparison group, we turned to census data to account for growth in the city. The team also accounted for additional interventions and programs implemented city-wide. Despite knowledge that there were little to no additional interventions occurring simultaneously, we conservatively applied values as high as 60%, to ensure that we were only accounting for 40% of the outcomes or changes.



Volunteers hard at work at the En-GAGE project site, Ambassador Alandra

For example, 45 community residents reported an increased feeling of safety, of which we applied a crime indicator measuring the cost of street crime, as a result of fewer police call outs and prosecutions. We applied a 60% deadweight measure to this outcome to account for any other reason why a community resident would feel more safe, even though it was reported as a result of the greenspace(s). Essentially, the more deadweight we apply to the outcomes, the less change we attribute to the Ambassador Program.

Displacement: accounts for how much of an outcome displaced or transferred onto outcomes not measured or in the program area. Displacement does not occur in every SuROI analysis, as is the case with the Ambassador Program. Because the focus of our work is on vacant land with a particular focus on communities that have an abundance of vacancy paired with very little ability or plan to address it, the work did not displace other efforts. If anything, additional efforts were aligned with our program to maximize impact as noted in the attribution figures.

Attribution: Who else contributed to the outcomes? Based on Ambassador and resident survey responses and additional sources, the attribution rates ranged from 0 to 98 percent; however, the majority of the Program's attribution rates ranged from 25-80 percent. As mentioned above, this is due to the incorporation and layering of other programs' potential impacts and partner goals as often as was possible.

Additionally, while there were no greenspace transformation programs coinciding with the Ambassador Program, we exercised conservative attribution rates to account for daily tasks, interactions and duties that may have occurred alongside program site interactions, thus influencing the outcomes measured. We received strong support and participation from partners in the municipality's Department of Public Works for land services, Youth CAST for youth engagement and volunteerism, Penn State Greater Allegheny for incorporation into curriculum, and several local business and organizations who provided support and expanded our network to more areas of the community.

Drop-off: Does the outcome decrease in value over time? Based on our experience and history of the execution of Ambassador programs, we believe three years is the reasonable

length of time that Ambassador programs exist as initially intended. Past projects have reflected that after the two-year to three-year mark, some subset of projects are not kept up while a greater number may enter into a phase II, further enhancing their impact, but this goes beyond the scope of the current evaluation.

We consider this projection to be an estimate, and are assessing this based on what we have seen in past cohorts- new greenspaces and Ambassador and resident gains will still be influenced even if the sites themselves are not as acutely supervised and tended to as they were at the onset. To represent this, the drop-off rate for “increased well-being from walking” was set at zero and after one year 50 percent drop-off was added, to account for decrease in habit and decrease of influence on well-being over time.



Ambassadors stop for a photo at the Ambassador-driven Youth Networking Event to encourage youth to get involved in community service projects

E. Calculate the sustainable return on investment

After all outcomes were entered into the impact map, the total values per outcome were aggregated into one value and divided by the input costs, yielding the SuROI ratio. Included in the calculation are all discounting factors. The sustainable return on investment then predicts the forecasted value that the Ambassador Project will have upon project completion and after three years.

4. PROJECT INVESTMENT

The chart below outlines each stakeholder and the value of their

investment. The designers’ in-kind expertise was donated during the design and planning education session. The volunteers’ and landscape architect designers’ value was calculated using the current national estimated value of volunteer time. The value of stakeholder investments into the ReClaim McKeesport Ambassador Program totals \$169,435.

5. THEORY OF CHANGE

Table 3: Stakeholder Investments

Stakeholder	Investment	Value
Benedum Foundation & UPMC Health Plan	Funds	\$135,000
McKeesport Hospital Foundation	Funds	\$3,000
Designers	In-kind Services	\$2,741
Individual Giving	Funds	\$653
Volunteers	Time	\$28,042
	Total	\$169,435

The theory of change hopes to explain the change, or impact, as perceived by the stakeholders, specifically the Ambassadors and McKeesport residents, rather than present the speculation behind the project design pre-implementation. The evaluation and survey data were studied to identify changes and their connections across the stakeholder groups. Results indicate Ambassadors and community residents gained similar types of benefits, though often experienced in different magnitudes. A descriptive theory of change is represented in Table 4.

6. IMPACTS AND VALUE CREATION

SuROI at the end of Year 1

The immediate impact after the completion of the projects, produced a return of \$1,553,577. The value after the first year is valued at nearly half of the overall return of investment, signifying the immediate impact the program has as a result of the program.

Sustainable return on investment at the end of Year 3

A total investment of \$169,435 by the Benedum Foundation, UPMC Health Plan, McKeesport Hospital Foundation and individual time and donations, over three-year period, is forecasted to create a net value of \$3,533,763.

The McKeesport Ambassador Program SuROI evaluation

Table 4: ReClaim McKeesport Ambassador Program Theory of Change

Stakeholder Group	Key Interventions	Outcome
ReClaim McKeesport Ambassadors	<p>Participated in a targeted education and training program</p> <p>Enrolled in relevant professional development courses of their own choosing</p> <p>Exercised responsibility for reaching out and engaging their own communities in appropriate and relevant ways</p>	<p>Crime Reduction Fewer police call-outs and prosecutions</p> <p>Employment Potential Increased community development skills</p> <p>Environmental Benefits Increase in vegetation cover leads to reduction in climate impacts</p> <p>Improved Health Conditions Improved mental health as a result of mild exercise Improved general levels of health</p>
Residents of McKeesport	<p>Participated in volunteer activities</p> <p>Live in close proximity to project sites</p> <p>Know Ambassadors through daily life</p>	<p>Improved Well-Being Feeling better about themselves after participating in a training program Feeling better about themselves as a result of gardening Relief from problems connected with arms, legs and back pain Improved mental health as a result of mild exercise while walking in the neighborhood Improved sense of connection, socially and professionally Increased self-confidence Improved sense of connection Increased neighborhood enjoyment Increased sense of belonging to neighborhood More regular communication with neighbors Decreased worry about crime</p>

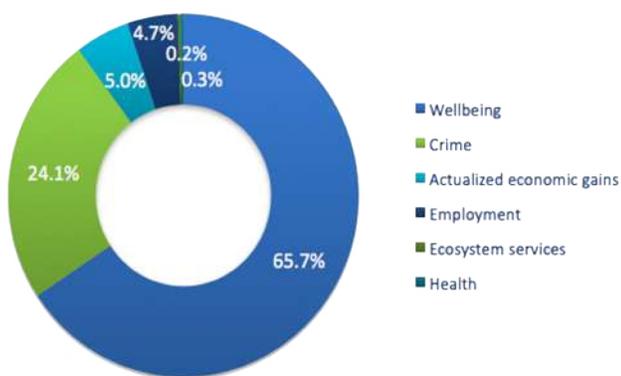
revealed a return of \$21.90 for every dollar invested in the program, over a three-year period, indicating a return ratio of \$1: \$21.90.

establishing how long the outcomes will last and finally, putting a value on the outcome.

The following table lists the outcomes per community stakeholder group. The categories are sorted via the various valuation approaches. In both stakeholder categories, well-being factors created the greatest value; this finding correlates with the number of well-being outcomes, as determined by the stakeholder groups.

The second greatest value calculated was the crime outcome, ‘fewer police calls and prosecutions’, totaling \$892,440.00 after forecasting three years’ value. Note the outcomes presented in Table 5 reflect all discounting factors. After these factors are applied, increased community development skills for Ambassadors and increased enjoyment, as a result of improvements in the neighborhood for McKeesport residents, created the most significant value.

Value by Factor



Graph 1: Illustration of the value created organized by output category.

Valuing what Matters

Demonstrating and valuing outcomes require identifying and developing outcome indicators, collecting outcomes data,

Table 5: Values

Outcomes or Benefits	Individual Outcomes	Year 1: end of project value	Year 3: projected value	Percentage of total value per stakeholder group	
Ambassadors	Well-being	• Feeling better about self as a result of the training program	\$2,962	\$7,405	1.85%
		• Feeling better about self as a result of gardening	\$2,582	\$6,455	1.61%
		• Feeling better about self as a result of walking more in the neighborhood	\$9,664	\$24,161	6.04%
		• Relief from problems connected with arms, legs and back pain	\$1,593	\$3,983	0.96%
		• Improved mental health as a result of mild exercise while gardening / walking the neighborhood	\$50,461	\$126,153	31.51%
		• Improved sense of connection - socially and professionally, as a result of being an Ambassador	\$10,980	\$27,450	6.86%
		• Increased self-confidence as a result of running a project	\$9,810	\$24,525	6.13%
	Improved Health	• Improved mental health as a result of mild exercise while gardening / walking the neighborhood	\$1,779	\$4,892	1.22%
		• General levels of health improve as a result of participation in the Program	\$832	\$2,080	0.52%
		• Improved mental health as a result of mild exercise while gardening / walking the neighborhood	\$30	\$60	0.01%
Increased employment opportunities	• Increased community development skills	\$69,255	\$173,138	43.25%	
	Ambassador Total	\$159,948	\$400,302	100%	
McKeesport Residents	Well-being	• Improvement in neighborhood leads Increased enjoyment	\$136,793	\$316,333	9.58%
		• Feeling better about themselves as a result of walking more in the neighborhood	\$70,066	\$162,027	4.91%
		• Improved mental health as a result of mild exercise while gardening / walking the neighborhood	\$487,793	\$1,128,021	34.15%
		• Improved sense of connection	\$38,430	\$88,869	2.69%
		• Improved well-being due to there being no problem with vandalism / graffiti	\$85,695	\$198,170	6.00%
		• Improved well-being due to belonging to the neighborhood (and Decreased Isolation Among Neighbors)	\$41,208	\$95,293	2.89%
		• Improved well-being due to talking to neighbors regularly	\$49,531	\$114,540	3.47%
		• Improved well-being due to not being worried about crime	\$27,104	\$62,679	1.90%
		• Improved well-being due to less litter	\$20,873	\$46,963	1.42%
	Crime	• Fewer police calls and prosecutions	\$385,920	\$892,440	27.02%
Actualized Economic Gains	• \$ of property value increases	\$8,605	\$25,814	0.78%	
	• Public dollars being spent on maintenance	\$40,043	\$160,172	4.85%	
Environment*	• Increase in vegetation covers leads to a reduction in climate impacts	\$915	\$10,066	0.30%	
Health	• Reduction in costs for treatment	\$653	\$1,509	0.05%	
	Resident Total	\$1,393,629	\$3,302,896	100%	
Grand total of value created		\$1,553,577	\$3,703,198		
SuROI Ratio		\$1: \$9.20	\$1: \$21.90		

7. SENSITIVITY ANALYSIS

Despite intensive data collection, analysis and calculation, the SuROI ratio is still an estimate of true value to the participant community and is therefore subject to error. That said, as GTECH's first effort to measure value of our programs, and due to the considerations and limitations outlined below, we were extremely conservative in our application of financial proxies. Currently, the Pittsburgh community and environmental development sectors are not utilizing an ROI model of measurement. This means that there are no comparable studies to assess in relation to this specific set of activities. Though we hypothesize on some potential areas that could affect the overall ratio, we feel that it is likely these items would only increase our value overall, and therefore did not specifically calculate those differences, but rather outline the thinking behind their inclusion as reported.

Assumptions that were tested and reported in this sensitivity analysis relate to:

1. duration
2. discounting factors of deadweight, attribution, and drop-off
3. the exclusion of certain outcomes



Ambassador, Rhonda, enjoying her new community space at Noah's Ark.

Duration effect

The minimum duration calculated was the end of project sustainable return. As noted in Table 5, the "immediate" social return is \$1,553,577, so even if all forecasting assumptions are false, the minimum possible SuROI is \$1:\$9.20 with the inclusion of community member in-kind donations and contribution of



Volunteers working with Ambassador Julie at her GAP Trail Garden.

volunteer time. It is also likely the three year value is actually a short estimate of length of benefit to the community. This is a conservative estimate based on the longest period of time since our first successful Ambassador program. As time continues to pass, this number will likely extend, increasing the forecasted SuROI value.

Sensitivity of discounting factors

The most sensitive variables over the long-term scenario are the drop-off rate and the values included for health and crime as these are not local proxies.

Deadweight, displacement or attribution, even if increased, would not be likely to drop the end-of-project SuROI to a 1:1 return ratio due to the significantly low investment at the onset of the program. This clearly indicates that the sustainable return is robust.

Sensitivity of selection of outcomes

Removing certain social returns has different impacts on the SuROI ratio. Some may question the inclusion of crime reduction and mental health benefits. The evaluation team recognize that some may consider the benefit to the target community too broad, or that double-counting has taken place by counting the effect of these items in both their critical category as well as indirectly in well-being. Project participants, as noted in the survey, referred specifically to the positive feeling of safety and health as a result of the program supporting their inclusion and importance. This was then supplemented through literature underlining the additional benefits and cost savings gained through similar activities.

8. CONSIDERATIONS AND LIMITATIONS

In understanding and interpreting this project's SuROI analysis and ratio, a number of important factors must be considered.

- The evaluation of the program occurred over one year after completion, including data collected over a year and half of time during and after the program ended. Without knowing how the information would be used in the long term, there were inevitably missed opportunities for more thorough and in-depth data collection. The result of the evaluation is that baseline values are the same as Year 1 values, which inevitably means they are conservative calculations.
- Some important project impacts were mentioned by stakeholders but not included in the SuROI calculation. This was due to lack of data or no identifiable proxy value. These positive impacts include:
 - Former volunteers as a category were excluded since we were unable to reconnect with them and only received 3rd party feedback for this evaluation, which we did not include.
 - Additional impact related to "youth" as a stakeholder rather than grouping them into "residents."
 - Increased alternatives for youth activity to reduce negative choices.
 - Increased physical health from demanding physical work.
 - Calculation of a variety of environmental impacts as a result of small, scattered projects.
 - Increased interactions and communication with neighbors
 - Economic increase to local economy as a result of activated community spaces (tax assessments).
 - Stormwater management of repurposed sites versus original condition.



Palisades Butterfly Garden, Ambassador Sharon

- There was no negative impact incorporated into "project costs" for changes made mid-program resulting in delay timeline and implementation of one project that needed to be moved and restarted. This concern was raised by one Ambassador but did not appear to result in changed behavior.
- SuROI ratios should not be compared between organizations' approach, measurement framework, geographical location and stage of development.
- The potential for bias in value estimation by the evaluators was considered. To minimize this risk, most values used in this analysis were sourced primarily from interviewed participant testimonies and surveys. Additionally, the GTECH program team engaged a third party consultant, RealWorth, to assist with survey development, indicator identification, and financial proxy determination, which likely challenged potential areas of bias in calculation.

"The [greenspace] shows that people care about the space."

-McKeesport Resident

9. CONCLUSION

The net impact of the ReClaim McKeesport Ambassador Program, amounting to over 3.5 million dollars over three years' time, illustrates the diverse outcomes that can be measured in the actualized economic gains, crime, employment, environment, health, and well-being categories. After adjusting the impact for discounting factors, the stakeholder investment of \$169,435 amounted to a sustainable return on investment ratio of:

- \$1: \$9.20, immediate impact ratio
- \$1: \$21.90 the projected ratio after three years

These ratios stem from conservative sensitivity analyses and generous applications of the discounting factors. Accounting for change three years out (with the exception of one outcome) reinforces our reasonable assessment, based on past Ambassador projects, of impact duration and sustainability. However, we predict and believe the program's impacts go beyond the scope of our current evaluation.

The SuROI ratio of \$1:\$21.90 indicates a robust return on investment. Outcomes that contributed the most social and

environmental value (in order of impact) are:

- Improved mental health as a result of mild exercise while gardening/ walking in the neighborhood
- Fewer police calls and prosecutions
- Increased enjoyment as a result of neighborhood improvement
- Improved well-being as a result of less vandalism/graffiti
- Increased community-development skills

Out of 25 outcomes, these top five outcomes contributed to 69 percent of overall impact. Every output resulted from direct Ambassador and community residents' evaluation and project feedback and was valued using various social and environmental valuation approaches, as appropriate. We believe that a more comprehensive assessment of outcomes and greater proxy bank would adjust the outcome category's order of impact because more indicators would be considered and measured.

The SuROI ratio is just one aspect of the community's and the project's story of change and growth.

Generally, we believe that the results of this evaluation may be higher than the reader may expect. However, this has been determined by comparing SROI or SuROI reports that have examined programs with significantly higher levels of investment or input to achieve outcomes. Large (more than 1:10) return on investment numbers occur when the changes created as a result of a program or development are significant, while the cost of the intervention is modest. As in this case, this typically occurs in a project where the investment pays for a small number of activists in the field with minimal capital requirement who then impact upon a large number of disadvantaged people living in an under-invested area. The start-up cost of the ReClaim McKeesport Ambassador program is significantly smaller than other community development initiatives that may have even greater impact.

The SuROI methodology enables GTECH to value the impact we have on Ambassadors, residents, the greater community and ecological systems affected. The SuROI evaluation framework

models the GTECH approach by ensuring programs and interventions have a sustainable and multi-faceted impact.

It is important to note that using SuROI as a single filter for making decisions on future program funding is insufficient because it ignores valuable context and dynamics of each unique opportunity. Additionally, the application of SuROI principles requires judgments to be made in areas where there are few definitive answers or standards to use. The process of valuing and discounting as well as the spirit of conservatism in calculations means that some practitioners will under-claim more than others. This report aims to clarify and provide as much transparency as possible to the process of valuing and discounting ReClaim McKeesport's unique community and projects.

Moving forward, GTECH hopes to address the considerations and limitations encountered during this assessment. Developing a plan to move forward and implement the SuROI approach to other programs will require more comprehensive survey measures and approaches. As previously mentioned, the local community and volunteers invested more than what was measured in terms of time, support, and physical exertion. Next steps include capturing these outcomes and proxy values for a more comprehensive impact calculation.



Noah's Ark Community Park Ambassador project site, "After"



Ambassador, Dana, and her daughter on Dana's completed Reservoir Retreat project site

ACKNOWLEDGMENTS

The field data collection process was executed by Kate Hancock and Masoud Sayles with additional information collected throughout the program activities by the project team. Analysis and report writing was performed by Evaine K. Sing, RLA, LEED AP, COO of GTECH and Kate Hancock, GTECH intern from the University of Pittsburgh School of Social Work.

GTECH commissioned RealWorth to provide external guidance and scrutiny in data collection, analysis, and reporting. RealWorth uses their own unique, credible and well-evidenced approach to place a monetary value on social and environmental change, helping clients create better and more sustainable outcomes for their organisations and wider society. RealWorth uses a range of accepted and robust welfare economic approaches such as Social Return on Investment, Ecosystem Services Analysis, Well-being Valuation, social impact elements of Life Cycle Assessment and others to understand sustainable change.

We, the evaluators, acknowledge and have deep gratitude for the community of McKeesport, specifically the Ambassadors and residents who generously gave their time to share their stories

with us. It is our hope that this report is a faithful reflection of their experiences and partnership with this project.

Sincere thanks go to our funders and other contributors including the Benedum Foundation, McKeesport Hospital Foundation, the Hillman Foundation, local designers and volunteers, who enabled this program to launch and grow and who made this evaluation process possible.

A special thanks to UPMC Health Plan for enabling the project team to conduct interviews, capture data, evaluate and make sure that all the Ambassadors' needs were met prior to the completion of their sites

This program would not have been possible without support from the City of McKeesport and Mayor Mike Cherepko and staff, and our program partners including Habitat for Humanity, Green Building Alliance, and the McKeesport Area School District. Thank you to our community partners The Kiwanis Club, The Lions Club, McKeesport Trail Commission, Penn State Greater Allegheny, Auberle, McKeesport Heritage Center, APOST, McKeesport Family Center, and YouthCAST. A big thank you is also owed to our corporate volunteers, Starbucks and

Apple Store and our local business friends, Apple Harvest, Busy Beaver and Veltre's Pizza.

The architects and landscape architects who donated their time and expertise to enhance the Ambassador experience brought patience, creativity, and insight into the program. Those include: Origin4Design, Carla Lukehart, Jenn Rogers Design, Studio for Spatial Practices, Tsuga Studios, Astorino, IKM Inc.

A special congratulations to the McKeesport Ambassador team at GTECH, who assisted in directing this program and all of its successes so that they may be shared among the greatest number of people

AMBASSADORS

Alandra Kahl & April Belback, *EN-GAGE*
Dana Jackson, *Reservoir Retreat*
Hank Gostkowki, *Volunteer Extraordinaire*
Julie Fleckenstein, *GAP Trail Garden*
Kimberly Brownfield Perkins, *Play in the Bouquet*
Rhonda Moorer, *Noah's Ark Community Park*
Rochelle Williams, *Empty to Embellished*
Sharon Soles, *Palisades Butterfly Garden*
Shari Leidig Holland, *Library District Gateway Garden*
Walter Yager, *Connecting the Dots*



*"...(W)e need to take pride in our city and be grateful that we can make a difference."
- Julie Fleckenstein, Ambassador*

REFERENCES

This list includes the research and reference material that we have referenced over the past year and has informed this report. We hope it can be used to further broaden your understanding.

Berman, M. G., Jonides, J., Kaplan, S. (2008). The cognitive benefits of interacting with nature. *Psychological Science*, 19(12): 1207-1212.

Bichard, E. & Higham, P. *Who We Are*. (n.d.) Retrieved from: <http://www.realworth.org/who-we-are/>.

Corporation for National and Community Service, Office of Research and Policy Development. (2007). *The health benefits of volunteering: A review of recent research*. Washington, DC.

Fujiwara, D. (2014) *A Short Guide to Social Impact Measurement*. Simetrica. Retrieved from: <http://www.simetrica.co.uk/wwwsimetricacouk-resources>

Hall, C. (n.d.). Health and well-being benefits of plants. Ellison Chair in International Floriculture, Texas A&M University. Retrieved on July 16, 2016 from <http://ellisonchair.tamu.edu/hallbio/#.V4qliKI-gXg>.

Herzog, A.R., Franks, M.M., Markus, H.R. & Holmberg, D. (1998). Activities and well-being in older age: Effects of self-concept and educational attainment. *Psychology and Aging*, 13(2): 179-185.

Independent Sector. (2016). *The Value of Volunteer Time*. Retrieved from: http://www.independentsector.org/volunteer_time.

McVittie, A. & Hussain, S. (2013). *The Economics of Ecosystems and Biodiversity- Valuation Database Manual*. Retrieved from: <http://www.teebweb.org/publication/the-economics-of-ecosystems-and-biodiversity-valuation-database-manual/>

NAMI. (2016) *Mental Health by the Numbers*. Retrieved from: <http://www.nami.org/Learn-More/Mental-Health-By-the-Numbers>.

Rauscher, O., Schober, C., Millner, R. (2012). *Social impact measurement und social return on investment (SROI)-analysis: New methods of economic evaluation?* NPO Competence Center. Vienna, Austria.

RICS Research Trust. (2015). *Developing an Approach to Sustainable Return on Investment in the UK, Brazil and the USA*. London, England: Bichard.

Santo, R., Palmer, A., & Kim, B. (2016). *Vacant lots to vibrant plots: A review of the benefits and limitations of urban agriculture*. Johns Hopkins Center for a Livable Future. Baltimore, MD.

Sneed, R. S., & Cohen, S. (2013). A prospective study of volunteerism and hypertension risk in older adults. *Psychology and Aging*, 28(2): 578-586.

Social Value UK. (2016). *What is Social Value?* Retrieved from: <http://www.socialvalueuk.org/why-social-value/>.

Southwestern Pennsylvania Commission. (2016). *Allegheny County & Municipalities*. Retrieved from: http://spcregion.org/reg_all.shtml.

The Economics of Ecosystems and Biodiversity (TEEB). (n.d.) Retrieved from: <http://www.teebweb.org/>

Tolbert, C. M., Irwin, M. D., Lyson, T.A. and Nucci, A. R. (2002). Civic community in small-town america: How civic welfare is influenced by local capitalism and civic engagement. *Rural Sociology*, 67: 90–113.

Trotter, L., Vine, J., Leach, M. & Fujiwara, D. (2014). *Measuring the Social Impact of Community Investment: A Guide to using the Wellbeing Valuation Approach*. London, UK. Retrieved from: <http://www.hact.org.uk/measuring-social-impact-community-investment-guide-using-wellbeing-valuation-approach>

U.S. Census, 2015. (2015) *Quick Facts: McKeesport city, Pennsylvania*. Retrieved from: <http://www.census.gov/quickfacts/table/PST045215/4246256>

Zimmerman, M.A, Stewart, S.E., Morrel-Samuels, S., Franzen, S., & Reischl, T.M. (2011). Youth empowerment solutions for peaceful communities: Combining theory and practice in a community-level violence prevention curriculum. *Health Promotion Practice*, 12(3): 425-39.



gtech

2016

