



URA LandCare Pilot Program

Sustainable Return on Investment Report



PREPARED BY

Grounded Strategies
6587 Hamilton Ave | Pittsburgh, PA 15206
www.groundedpgh.org

AUTHORS

Evaine K. Sing, RLA, LEED AP
Anna Archer
Miranda Micire

Table of Contents

Executive Summary

Introduction	1
A. Benefits of SuROI	
B. Pilot Program Summary	
C. Valuation Approaches	
Program Background	6
A. History	
Methodology	8
A. Stakeholders and Scope	
B. Map Outcomes and Establish Value	
C. Discounting Factors	
D. Calculating the Sustainable Return on Investment	
Program Investment	15
Theory of Change	16
Impacts and Value Creation	17
Additional Findings	20
A. Vacant Land Maintenance Survey	
B. 311 Data	
Sensitivity Analysis	22
Considerations and Limitations	24
Conclusion	26
References	28

Executive Summary



Above: Rev. Walls, LandCare contractor in the Hill District

About this Report

This report details the process and methods used to quantify the environmental, social, and economic impact for the Urban Redevelopment Authority's (URA) LandCare Pilot Program. Calculating the sustainable return on investment, or SuROI, allows us to measure and ensure that project investments are positively impacting communities. SuROI places a monetary value on the social and environmental change to better identify sustainable outcomes for programs and the community at large.

URA LandCare Program

The URA LandCare program creates a localized land maintenance system that allows small businesses and nonprofits to participate in vacant lot maintenance for the URA's portfolio. Grounded Strategies, formerly GTECH, worked closely with the URA to design, plan, and implement this system to create more community benefit through the URA's vacant land management process.

In the fall of 2016, the URA issued 7 contracts to small businesses and community-based organizations to maintain more than 350 URA-owned lots. Each contractor was awarded a bundle of approximately 50 lots that were geographically concentrated in five communities: Manchester, Homewood, Hazelwood, Larimer, and the Hill District.

Contractors visit URA-owned lots on a monthly-basis to remove debris and litter, cut the grass, respond to complaints, and, clear the sidewalks of snow and ice during the winter months. The SuROI analysis includes outcomes from year 1, which ran from September 2016-August 2017. The LandCare program is now in its second year of operation.

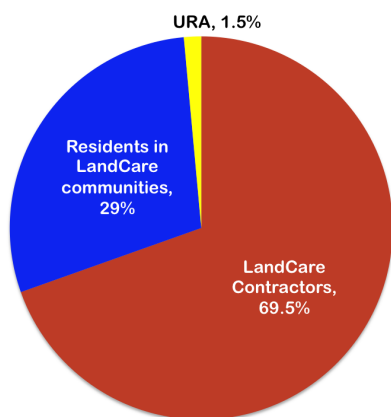
Key Program Achievements in Year One

- 7 bundles, 350 vacant parcels, five neighborhoods - Hill District, Larimer, Homewood, Manchester, Hazelwood - routinely maintained on four-week cycles
- 4 small businesses and 3 local nonprofit organizations awarded contracts
- 42 part-time and full-time employees hired
- \$10,955 in maintenance services provided in-kind to community members
- 100% of LandCare contractors surveyed reported increased technology skills, expanded business opportunity, and positive community impact
- Communities in the LandCare program had a decrease of 132 calls placed to 311 for "overgrown properties." LandCare communities also saw decreases in 311 calls for weeds/debris, illegal dumping, and snow removal.
- 48% of residents surveyed noticed vacant lots being maintained more regularly
- 34% of residents surveyed reported positive changes in their communities as a result of the LandCare program



"This one program, LandCare, it hits on so many things. It creates jobs, empowers residents, builds capacity, and beautifies the community. The landscape is now greener and more open."

– Laura Dendy, Ervin Home Beautification (Small Business)

Percent of total value experienced
per stakeholder

Sustainable Return on Investment Findings

The SuROI approach allows the URA to measure the intangible impacts of the LandCare program and quantify the changes experienced by each stakeholder group.

In order to place a dollar value on program outcomes, Grounded Strategies collected and organized data into an impact map. Financial proxies were applied to outcomes to calculate the change. Qualitative and quantitative data was collected using various methods, including online surveys, paper surveys, interviews, and project records. The program outcomes were sorted into six categories: Well-being, Employment, Ecosystem Services, Health, and Training/Education, and Actualized Economic Gains. The following table lists the monetary value of the SuROI benefits by category.

Factor	Cumulative Value	Percent of Total
Well-being	\$848,397	41%
Employment	\$788,481	38%
Ecosystem Services	\$190,568	9%
Actualized Economic Gains	\$167,661	8%
Health	\$44,588	2%
Training/Education	\$19,837	1%
Total	\$2,059,532	100%

For every \$1 spent on the LandCare program, there is a \$6.51 benefit over three years time.

The initial investment in the URA LandCare program for year 1 was \$316,500. The initial investment will return a social value benefit of \$2,059,532 over three years time. This represents a sustainable return on investment ratio of 1 to 6.51.

The findings demonstrate that the URA LandCare program is cost-effective and has a profound impact on small businesses and organizations. Further, the benefits continue to accrue over time, creating sustainable change. The URA LandCare program provides economic opportunity to organizations that experience positive, long-term outcomes. These outcomes result in improvements to community cohesion and participation, community beautification, future earnings for small businesses, and training and development opportunities for local employees.

Introduction

In 2016, the URA created the LandCare program to improve the vacant lot maintenance process with the goal to create opportunity for community benefit. The URA committed to prioritizing local service-providers and added measures for increased transparency, accountability, and community engagement. The increase in work opportunity and improved standards for property stewardship required a significant investment on behalf of the URA.



"The LandCare Program provided us with our first significant contract. That gave us the ability to grow our company into a competitive business and finally be taken seriously."

– Jmar Bey, Hilltop Rising (Small Business)

In order to ensure that this investment is positively impacting communities and optimizing sustainable impact, Grounded applied a Sustainable Return on Investment (SuROI) methodology to the LandCare program. This approach allows us to provide tangible value to a program that has innumerable intangible benefits. It also demonstrates how property maintenance can be used to provide community benefit and align with strategic goals of the URA.

When you think about property maintenance, some very clear images come to mind. You might think about work that you do around your home or community. Mowing the lawn, landscaping your yard, or tidying up a nearby yard. Although these might sound like chores, these tasks add value to a community. Getting outside, visiting with a neighbor, or learning a new hobby are social value benefits. Social Value UK, a leading organization on the SuROI

approach summarizes social value in this way:

"An account of social value is a story about the changes experienced by people. Social value is the value that people place on the changes they experience in their lives. Some, but not all of this value is captured in market prices. The Principles of Social Value provide the basic building blocks for anyone who

URA LandCare Program

Sustainable Return on Investment Report

wants to make decisions that take this wider definition of value into account, in order to increase equality, improve wellbeing and increase environmental sustainability.”¹

This report reflects our theory and approach to social value measurement. Through Grounded’s work of assisting community members, organizations, and municipalities with transitioning vacant properties into active spaces, we understand how critical land is to a stable community. Land is ever present, visible, and its quality and condition has a documented correlation to resident well-being. It is for this reason we use green and open space projects to encourage small, incremental actions that gain momentum and inform social, economic, and environmental improvements to increase community health. The SuROI approach allows us to assess the degree to which land use policies impact residents and communities.

Benefits of SuROI

This report shares findings on the qualitative and quantitative value created through the URA’s LandCare program. It communicates the strength, impact, and limitations of this program. The SuROI approach combines several valuation methods to focus on the long-term sustainable impact.

SuROI follows a similar methodology to Social Return on Investment (SROI). The SuROI approach places a monetary value, identified through financial proxies, on the social and environmental changes directly experienced by the people who are affected by policies, investments and development decisions. SuROI can be utilized to advance responsible policies and programs that create value for those directly affected.

This evidence-based model was developed by RealWorth, a UK-based consulting agency that focuses on creating better and more sustainable outcomes for their clients and wider society², and combines many social and environmental valuation approaches. The combination of valuation approaches includes: Social Return on Investment (SROI), Ecosystem Services Analysis (ESA), Wellbeing Valuation, and social impact elements of Life

1. “What Are the Principles of Social Value?” Social Value UK, www.socialvalueuk.org/what-is-social-value/the-principles-of-social-value/.

2. “Who We Are.” RealWorth, www.realworth.org/who-we-are/.



Cycle Assessment and others to understand sustainable change. Grounded partnered with RealWorth in 2016 to complete a SuROI evaluation of the ReClaim McKeesport Program.



Above: A Landforce crew member maintains a vacant lot in Homewood.

Pilot Program Summary

- **Program:** URA LandCare Program
- **Locations:** Manchester, Hill District, Hazelwood, Homewood, and Larimer
- **Project Goal:** Maintain the URA's portfolio of vacant properties while adding community benefit
- **Project Outcome:** Proactive stewardship of vacant lots performed by small businesses and nonprofit organizations
- **Outputs:** 7 contracts in 5 communities maintaining 350 vacant lots
- **Project Investment:** \$316,500
- **Direct participation:** 7 total firms (4 for-profit, 3 nonprofit, all minority, minority and women, or women-led)

Table 1: Valuation Approaches

Method	Description
Sustainable Return on Investment (SuROI)	A combination of multiple social and environmental valuation approaches
Social Return on Investment (SROI)	<p>A model that assigns value to social change. There are two types of SROI:</p> <ol style="list-style-type: none"> 1. Evaluative: conducted retrospectively and based-upon actual outcomes. 2. Forecast: predicts how much social value will be created if the activities meet their intended outcomes
Return on Investment (ROI)	A performance measure, used to evaluate the efficiency of an investment. ROI measures the amount of return on an investment, relative to the investment's cost.
Ecosystem Services Analysis (ESA)	A framework to value changes in the natural environment, measuring the environmental benefit of a given intervention or change.
Well-being Valuation	The Wellbeing Valuation approach 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 status, whether they volunteer, whether they play sports, whether they live in a safe area, etc.
Life Cycle Assessment	Analysis 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.

About the Urban Redevelopment Authority

The Urban Redevelopment Authority of Pittsburgh (URA) is the City of Pittsburgh's economic development agency, committed to creating jobs, expanding the City's tax base and improving the vitality of businesses and neighborhoods.

The URA achieves this mission by assembling, preparing and conveying sites for major mixed-use development; and by providing a portfolio of programs that include financing for business location, relocation and expansion, housing construction and rehabilitation, and home purchases and improvements. The URA is also committed to equitable development, and incorporates best practices for equity and inclusion into the URA's internal and external policies and activities.



About Grounded Strategies

Mission: We work to strengthen the economic, social, and environmental health of distressed and transitional communities by building capacity through collaborative greenspace projects.

Vision: We envision a region of thriving communities with engaged, motivated, and equipped individuals working together to sustain positive change. We believe lasting change happens when people have the tools to take steps towards creating safe, green, resilient and liveable spaces on the ground and are weighing in on the systems that affect them.

Approach: Our four-pronged approach has been refined through over 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, and **Connect** people to resources and opportunities, and **Sustain** progress through innovation and collaborative partnerships.



3. "Minutes of the Regular URA Board Meeting." Urban Redevelopment Authority, October 2015.

4. RFP for LandCare Tier 2. June 2016.

Program Background

The URA LandCare program creates a localized maintenance system that allows small businesses and nonprofits to participate in vacant lot maintenance for the URA's portfolio. The launch of the LandCare program represents the first-of-its-kind for the City of Pittsburgh and a large shift in shared opportunity to provide property maintenance to publicly-owned land.

History

In January 2015, the URA Board authorized a request to issue a request for proposals (RFP) to seek qualified community-based nonprofit organizations to work with the URA and City officials to develop a capacity-building program that enabled community-oriented service providers to perform lot maintenance under URA and City contracts.

At the time, the URA managed the maintenance of over 1,400 vacant lots and over 50 vacant structures. These lots are distributed across the City of Pittsburgh. However, the highest concentrations of vacant lots occur in the City's most vulnerable communities and often contribute to the image of blight, abandonment, and distress in these neighborhoods. The URA Board asserts its commitment to resolving this issue and hired Grounded Strategies, formerly known as GTECH, to plan, develop, and implement a localized maintenance system.³

As a recognized name in the field of community development and land use interventions, Grounded was selected to design a program that added community benefit to the vacant land management process for the URA. As a community-based nonprofit organization, Grounded was well-positioned to assess and redesign a program that increased equity, transparency, and accountability.

In early 2016, Grounded started working closely with the URA to develop a tiered maintenance system. The tier-system allowed URA staff to identify and prioritize vacant lots of similar size and condition that were concentrated in five communities. Approximately 350 vacant lots were grouped into seven separate bundles. Two bundles were located in the Hill District, two in Homewood, and one in Hazelwood, Manchester, and Larimer. In the summer of 2016, a RFP was released for firms to apply for year-long maintenance for one bundle.

Below: Andre Young of Chatman Properties in Larimer



The URA adopted the new initiative and the LandCare program launched in September 2016. For one year, seven contractors were responsible for maintaining URA-owned property. Responsibilities included removal and disposal of debris, cutting of grass and general overgrowth, snow removal and deicing of sidewalks and drives, response to emergency situations, and clean-out of non-hazardous materials from lots.⁴ Contractors report their work on a web and mobile-based software that the URA verifies. For each site visit, contractors take before and after images and note the completed maintenance activities. Contractors also participated in community outreach to help publicize their service schedules.

The LandCare program has furthered the URA's mission by:

- Providing small businesses with professional services opportunities
- Creating jobs
- Prioritizing Minority and Women Business Enterprise participation
- Monitoring, reporting, and tracking
- Enhancing quality of life in transitioning communities
- Increasing organizational transparency
- Demonstrating commitment to being responsible stewards of publicly owned land



Jmar Bey, Hilltop Rising, submits photos of his work in the Hill District through the mobile application, Loveland.

Methodology

Grounded followed a best-practice methodology to report the economic, social, and environmental value of the URA LandCare program. The framework provided through the SuROI approach emphasizes stakeholder collaboration, transparency in process, and thorough documentation of sources and assumptions. Future application of the framework can guide data collection that support decisions that increase the value being created for stakeholders and hold organizations accountable for their social impacts.

The seven principles that informed this SuROI include:

1. Involve stakeholders
2. Understand what changes
3. Value the things that matter
4. Only include what is material
5. Do not over-claim
6. Be transparent
7. Verify the result

This seven-step process is also visually captured by the SuROI Impact Map. The data collected were organized in this map to document the relationship between the program inputs and outputs. Most of the SuROI outcomes were obtained through interviews, surveys, and project records. Individual surveys for each stakeholder group (contractors, residents, and the URA) were developed and distributed. Grounded staff conducted interviews with each LandCare contractor to collect qualitative and quantitative data on the degree to which their participation in the LandCare program impacted their individual well-being, their businesses, and the broader community. Resident surveys were administered to gauge public awareness of the program as well as report potential changes.



Scope and Stakeholders

This report examines the social benefits for year one of the URA LandCare program, which ran from September 2016 to August 2017. The program created a localized maintenance system that expanded economic and professional opportunity for small businesses and nonprofits to participate in property maintenance of URA-owned parcels. The new program prioritized hiring local contractors to increase transparency, accountability, and community participation. This report presents the findings from an SuROI analysis that studied the changes experienced by the URA LandCare contractor and communities with a LandCare contractor. In addition to sharing the findings from Grounded's analysis, this report serves as a tool to identify relevant indicators that can be used to measure the impact and success of the program on the community and guide investment decisions based on program outcomes that have a real impact.

Stakeholders are the people or entities that experience change as a result of the activity -- and are best-placed to describe that change.⁵ The primary stakeholders for the LandCare program are the LandCare contractors, residents that live in communities with a LandCare contractor, and the URA.

5. Social Value International. "Standards for Applying Principle 1: Involving Stakeholders." <http://www.socialvalueuk.org/app/uploads/2018/04/Stakeholder-Standard-2017-TEXT-FINAL-v0.5.pdf>

Table 2: URA LandCare Stakeholders

Stakeholder Group	Purpose for Inclusion
URA	The organization responsible for the activity
LandCare Contractors	Participants of the activity and most likely to experience outcomes as a result
Residents	Adjustments to land stewardship and community engagement are likely to have a significant impact on residents in communities with a LandCare contractor
Grounded	The organization responsible for SuROI report and technical assistance providers for program

Note: The City of Pittsburgh is considered an important stakeholder because of considerations for how this program can be scaled to additional communities and adopted as a model for locally-sourced vacant lot maintenance.

Table 3: SuROI Principle: Understanding Change

Part One: Creating well-defined outcomes	Part Two: Designing indicators (metrics) to measure the Outcomes	Part Three: Measuring the Outcomes
<p>Decide what outcomes to measure:</p> <ul style="list-style-type: none"> - With representatives of each of the stakeholders (where possible) explore all of the outcomes that are occurring - positive and negative. Going beyond just the intended outcomes. - Explore the links between all of the outcomes. Using causality to develop a narrative of the change. - Creating Chains of Events. Develop an understanding of the outcomes that hold value and thus need to be managed. Create a well-defined outcome. 	<p>Decide how to measure the outcomes.</p> <p>Indicators are designed for each of the well-defined outcomes. These indicators must be able to measure whether the outcome has occurred and how much of the outcome has occurred.</p> <p>They can be a combination of objective and subjective indicators.</p>	<p>Decide how to collect data.</p> <p>The indicators designed in Part Two are used to measure how much of each outcome has happened; including the number of people experiencing the outcome and the amount of the outcome they experience.</p> <p>This part involves collecting data on how much change has occurred or is expected to occur.</p>

Identifying stakeholders and scope of analysis sets the boundaries for the evaluation. The determined scope being to identify the social impact of the LandCare program activities. In considering scope, further analysis of the purpose, audience, background, resources, and timeline are considered.

Prior to data collection, the objectives expressed in the project 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 then best measures the relationship between the inputs and outputs in the analysis, clearly illustrates engagement with stakeholders, and their relationship and contribution to outcomes produced.

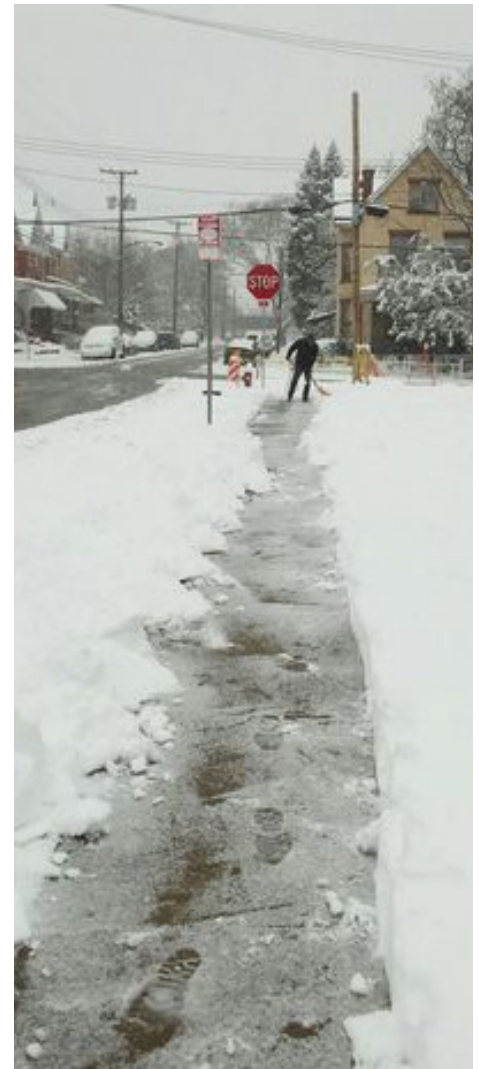
Map Outcomes and Establish Value

After establishing the project's stakeholders and scope, Grounded worked with URA staff to understand the intended and unintended changes as experienced by the specific stakeholder group. Beyond that, Grounded worked to give each of those changes or outcomes a value. In the absence of relevant and available indicators for the outcome, stakeholders were involved to determine a comparable indicator that can measure the amount of each outcome.

Data Collection

Grounded administered three surveys: one for LandCare contractors that were directly involved and impacted by the project, another survey was administered to residents living in communities with a LandCare contractor and may notice and/or experience changes as a result of the activity. We also had URA staff that were involved in the management of the LandCare program participate in a survey to understand their perceptions of the program and to inform outcomes to measure.

Grounded's team conducted in-person interviews with each LandCare contractor from year 1 of the program. These interviews



Winter maintenance in Homewood

lasted approximately 30-60 minutes and revealed the relationship between the intended or unintended changes and the outcome, according to the most highly-impacted stakeholder.



"This program has provided unity in the community. It empowers and hires residents from the Hazelwood community."

**– Sandra Cole McKamey, POORLAW
(Nonprofit Organization)**

Survey data was collected from residents in each of LandCare communities: Manchester, Hazelwood, Homewood, Larimer, and the Hill District. Grounded worked with partners and the existing LandCare contractors to identify community meetings, events, and highly-trafficked areas to distribute surveys. An online version of the survey was also circulated, although the majority of surveys were completed in-person. Based on where the highest number of responses were coming from, we would identify other communities to boost response, in order to reach a diverse makeup of responders. Community members were asked to provide their address in order to verify their residence in LandCare communities and analyze their proximity to vacant land.

In total, Grounded collected 73 resident surveys. 6 out of the 7 LandCare contractors completed interviews. Emma Coleman, of Premier Touch Cleaning, passed away in September 2017. Her son, Robert, provided anecdotal data, as well as business records, to report on Emma's activities. These response numbers are reflected in the impact map under the 'quantity' column and are adjusted to represent the stakeholder at large.

A quantitative analysis using BlastPoint, a local software company that uses maps to visualize data analytics, helped to derive an estimate for the number of residents likely to be impacted by long-term stewardship of vacant lots. The total number of beneficiaries are around 10,000. Grounded utilized publically available data through the Western Pennsylvania Regional Data Center (WPRDC) to analyze changes in 311 calls and assess property value trends for LandCare communities.



Establish Impact

To understand the change experienced, inputs, outputs and outcomes were organized in the impact map. Inputs are simply what was invested (ie: funds, technical assistance, 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.

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 SuROI Principles.

"This program gave me a chance to connect with residents at a deeper level and meet new people."

– LandCare Contractor

Discounting Factors

Deadweight, displacement, attribution, drop-off, duration, and discount rate are all areas in which avoiding the risk of over-claiming are addressed. Each factor is applied independently to each outcome to best constrain the overall value per outcome. The discounting factors are as follows.

Deadweight

To what degree would the outcomes have occurred without the LandCare Program? Deadweight is typically accounted for by referencing a comparison group or benchmark. Whenever appropriate, we would account for changes simultaneously occurring and would utilize census data to recognize already existing trends. Grounded also accounted for additional interventions and programs implemented at the neighborhood and city-scale that could influence respondents. We were highly aware of the LandCare contractors participation in similar activities and were careful to tease out what could be attributed to being a part of the LandCare program, as opposed to a traditional maintenance contract. We conservatively applied values as high

"Maintaining the lots and employing people from the community increases wealth, beautifies the land, improves safety, and inspires the community."

– LandCare Contractor

as 95%, to ensure that we were only accounting for 5% of the outcomes or changes. Essentially, the more deadweight we apply to the outcomes, the less change we attribute to the LandCare program.

Displacement

What activity was displaced? 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 LandCare program. The LandCare program introduced new tools, models, and areas of maintenance to the URA. Because of constrained resources and capacity, much of this work could not be accomplished at this scale throughout the City. The LandCare program added to the existing efforts to proactively steward vacant lots and did not displace existing efforts.

Attribution

Who else contributed to the outcomes? Attribution captures how much of the outcome was caused by the contributions of other organizations or people. Based on our organization's research, we found that there were no similar programs coinciding with the LandCare program. We calculated low attribution in our model.

Drop-off

Does the outcome decrease in value over time? Based on our experience and history of programs similar in nature to the LandCare program, as well as our research spent benchmarking programs that LandCare was modeled off of, we believe that three years is the reasonable length of time for benefits to exist. Past stewardship projects that work to restore vacant lots to higher purposes 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. We have also witnessed the spillover effects of having one person maintain a vacant lot and positively inspire others to start investing more effort into their own property. Our three year drop-off time is also based on the hundreds of people that Grounded has worked through our various capacity building initiatives.

Calculate the Sustainable Return on Investment

After all of the outcomes were entered into the impact map, the total values per outcome were aggregated into one value and divided by the input costs, creating the SuROI ratio. Included in that calculation are the discounting factors (deadweight, displacement, attribution, and drop-off). These factors indicate the forecasted value that the LandCare program will have in three years time.



LandCare contractors and URA staff at Grounded Strategies for an info-sharing and networking event.

Program Investment

The value of stakeholder investments into the URA LandCare program for year 1 was \$316,500. This investment accounts for URA funding to each contractor as well as technical assistance to Grounded Strategies.

Table 4: Program Investment

Stakeholder	Investment	Value
Urban Redevelopment Authority	Funds	\$250,000
Grounded Strategies	Technical Assistance	\$66,500

Theory of Change

Grounded worked with the URA to produce a logic model that mapped the theory of change for the LandCare program. The theory of change hopes to explain the change, or impact, as perceived by the stakeholders, specifically the LandCare contractors, Pittsburgh residents, and URA, rather than present the speculation behind the project design pre-implementation. A table of our Theory of Change is included below:

Table 5: URA LandCare Program Theory of Change

Stakeholder Group	Key Interventions	Outcome
LandCare Contractors	Participate in targeted maintenance program Hire local crew members Exercise responsibility for reaching out and engaging with their communities Utilize smartphone technology to report work and increase accountability	Employment Potential Increased landscaping and community engagement experience Exposure to future contracts Improved Well-Being Improved sense of connection, socially and professionally Increased self-confidence Increased neighborhood enjoyment
Urban Redevelopment Authority	Hire seven local maintenance providers Mandate online and publicly available reports on work progress (before and after photos with notes)	More regular communications with neighbors Increased trust and transparency Fewer Service Request Calls Decrease in 311 Improved Health Conditions Improved mental health as a result of mild exercise Improved general levels of health

Impacts and Value Creation

A total investment of \$316,500 by the URA, is forecasted to create a social value benefit of \$2,059,532 over three years time. The URA LandCare program SuROI evaluation estimates a return of \$6.51 for every dollar invested in the program, over a three-year period, indicating a return ratio of 1 to 6.51.

Through our application of the SuROI methodology, we found that the LandCare program increases economic opportunity, improves ecosystem services, and enhances the wellbeing and health of the service providers. Further, there is strong evidence that these improvements are also being passed along to the communities, which reported improvements as a result of localized maintenance and increased transparency. Community members attributed many of these improvements to the commitment of the LandCare contractors in their communities. Residents noted trusting and knowing the professionals in their neighborhood, which can have a dual purpose of increasing local presence and furthering the URA's connection to communities.

The highest returns were made in the categories of wellbeing, employment, and ecosystem services. These categories accounted for 88% of the benefits created through the program. Actualized economic gains, which included outcomes such as the cost-savings associated with the decrease in 311 service requests, tax benefits, and donated services, made up another 8% of the total value created. Although there were multiple indicators for training included in the valuation model, these financial proxies tend to have lower values. Health financial proxies are usually high values but were heavily discounted in our model due to the limited connection to the interventions of the program.



"This work allows me to mentor several men each year. They are looking for a fresh start. I hope that I can help them identify their purpose, get focused, and find hope. Because when you feel like you have a purpose, it gives you hope."

– Kipp Jackson, KRJ Enterprises (Small Business)

URA LandCare Program

Sustainable Return on Investment Report

In order to gain a better understanding of how the program evolved at the URA, Grounded also estimated the SuROI value for the property maintenance approach prior to the creation of

the LandCare program. We found that the program as it existed before returned \$0.45 for every dollar invested. This valuation comparison demonstrates the added benefits of investing in neighborhood-scale contractors and small business owners infusing higher standards for outreach and transparency as a function of the maintenance system.



"People and kids will stop and ask questions. They say it's nice to see someone caring for the community. It gives us the opportunity to gain greater experience and explain to people what the URA is trying to achieve, especially in partnership with a nonprofit. It's a win-win."

– Reverend Lee Walls, Amani Christian CDC (Nonprofit Organization)

The intent in the program restructuring was to make the system more efficient and have a higher level of outcomes as well as contribute to an equitable solution for the hardest hit communities. It is reasonable to assume that if the URA had increased its level of investment in the old program model, a higher return would have been created due to the additional levels of accountability. However, the outcomes associated with residents having a role in stewarding their own neighborhood creates additional value that would not be present in a model that simply scales the monthly maintenance to

include more vacant lots as well as the fact that many of the new contracts went to business rather than non-profit entities which extends the cycle of investment back to the City in terms of business taxes.

Table 6: Values by Outcome and Stakeholder

	Outcomes or Benefits	Individual Outcomes	End of Program Impact	Total Projected Value	%
Contractors	Employment	Increased level of comfort with technology	\$290	\$924	0.1%
		Increased competitiveness within job market	\$6,511	\$26,044	1.8%
		Increased MWBE participation	\$12,776	\$38,329	2.7%
		Increased job creation	\$149,511	\$433,584	30.3%
		Increased opportunities and referrals due to LandCare contract	\$28,400	\$289,600	20.2%
	Training/ Education	Increased environmental awareness and knowledge	\$1,024	\$3,800	0.3%
		Increased leadership/managerial experience	\$2,164	\$6,491	0.5%
		Increased understanding of challenges related to vacant lots	\$2,573	\$9,546	0.7%
	Well-being	Increased community participation	\$12,439	\$36,072	2.5%
		Improved community benefit	\$100,246	\$371,911	26%
		Increased visible impact on the community	\$6,868	\$25,479	1.8%
		Improved sense of belonging to community as a result of being a contractor	\$17,553	\$50,903	3.6%
	Health	Improved wellbeing and health from spending increased time outside as a result of the LandCare contract	\$15,375	\$44,588	3.1%
	Actualized Economic Gains	In-kind donations made to the community through LandCare service	\$10,955	\$94,775	6.6%
Contractor Total			\$366,685	\$1,432,046	100%
Residents	Environment	Decrease in invasive species	\$2,098	\$6,295	1.1%
		Improved appearance due to less overgrown landscaping	\$7,508	\$22,523	3.8%
		Decrease in litter	\$53,917	\$161,750	27.1%
	Well-being	Increased awareness of maintenance service provider	\$53,232	\$159,696	26.7%
		Increased pride due to vacant lot maintenance	\$68,112	\$204,336	34.2%
	Actualized Economic Gains	Property value increases	\$10,691	\$42,766	7.2%
Resident Total			\$195,558	\$597,366	100%
URA	Actualized Economic Gains	Increased savings from decrease in 311 calls	\$11,220	\$22,440	74.5%
		Business/payroll expense taxes	\$3,840	\$7,680	25.5%
URA Total			\$15,060	\$30,120	100%

Overall Total \$577,303 \$2,059,532

SuROI Ratio \$1: \$1.82 \$1: \$6.51

Additional Findings

Vacant Land Maintenance Survey



Above: These photographs were taken on the same day, directly across the street from each other. Both are vacant lots in Hazelwood. The image above is a privately-owned parcel and the image below is a URA-owned parcel and assigned to a LandCare contractor. These images demonstrate the complexity of assessing a greening program that only applies to a small fraction of existing vacant land.

In addition to collecting data to assess the sustainable return on investment of the program, Grounded distributed surveys to gauge public awareness of the program. The Vacant Land Maintenance Survey for the URA LandCare program helps us understand public awareness and perception of the URA LandCare program. The survey was distributed to local organizations and given at community events and gatherings. Participants could take the survey online or fill out a paper survey. In March and April 2018, 73 surveys were collected.

Nearly half of all respondents have noticed improvement in vacant lot maintenance since the URA LandCare program started in 2016. Compared to before 2016, 47.9% (35 of 73) responded that they have noticed vacant land being maintained more regularly.

Many comments from survey respondents were positive:

- "The vacant lot directly across from where I live used to be overgrown, in the last year, it has been cleared and maintained better."
- "Much neater. The lawn's are detailed not just mowed. Well maintained and green."
- "Individuals have begun to take more interest in cleaning their property as well."
- "Better appearance makes the community feel nicer"
- "Fewer overgrown lots"
- "Cleaner & safe for residents to walk"
- "URA lots -- Mowed and clean; City -- not so much. URA lots are lots that people wish to buy."



Some survey comments added suggestions, encouragement, or room for improvement:

- “Maybe add a small stake with signage that the land is maintained by this program.”
- “Wish I’d known about this program. I’m a pretty active citizen/neighbor and never heard of this program.”
- “I did not know the URA had a LandCare program. More outreach and publicity needed!”
- “We the community need to know/post signs on the lots so if a problem we know who to contact”
- “I’m new to the city so I didn’t know much about what the state of affairs were before this program, but I think it’s wonderful & would like to know more”

“We invested in the neighborhood that we called home. People would stop to thank us.”

– LandCare Contractor

311 Data

The 311 service allows residents to place a work order to the city for non-emergency work. The service continues to be popular with Pittsburgh residents. Even with an overall increase in the number of 311 calls, a review of 311 Data indicates fewer land maintenance calls in communities serviced by LandCare contractors. Top categories that experienced a reduction include:

- Overall, there were 132 fewer 311 calls for overgrowth removal (overgrown or unsafe properties) in Larimer, Homewood, Hazelwood, Manchester, and the Hill District. Every community experienced a decrease in 311 calls related to overgrowth removal.
- Manchester & Larimer experienced less 311 calls for weeds/debris
- Homewood and Manchester experienced less 311 calls for illegal dumping
- Homewood, Hazelwood, and the Hill District experienced less 311 calls for snow removal

Sensitivity Analysis

"I learn something new every day. This is a learning and training opportunity. When the contractors come together, they teach me how to be more efficient and improve my business."

– LandCare Contractor

The SuROI ratio represents an estimate of true value to the participant community and is therefore subject to error. In order to decrease the chance of over-claiming, intense data collection and analysis was conducted. Further, the primary goal of this evaluation was to measure the value of the program and we were therefore diligent about being conservative in our application of financial proxies. Due to the limitations and considerations outlined in the next section, we took considerable measures to find direct sources of data and were conservative and rigorous about documenting our assumptions.

Currently, the Pittsburgh community and environmental development sectors are not utilizing a 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 overall value, and therefore did not specifically calculate those differences, but rather outline our rationale for their inclusion as reported.

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

- Duration
- Discounting factors of deadweight, attribution, and drop-off
- The exclusion of certain outcomes

Duration effect

A SuROI analysis is impacted by the duration effect, or length of time attributed to social benefit gains. Many social benefits last longer than the immediate year-long length of the program. Based on work in similar programs, we assigned a duration effect of multiple years to some outcomes. For instance, knowledge gained through a training opportunity can last multiple years. The longest duration effect multiplier for any outcome was three years.



If, instead, we only look at the immediate 1-year social return value for the LandCare program, the overall return is \$577,303. Therefore, if all forecasting assumptions are false, the minimum possible SuROI is \$1 to \$1.82. This number is expected since most benefits continue accruing over time. The year after this program, organizations are on a better trajectory and more invested in their community. Those benefits are realized and included in the total 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 employment, as these were not local proxies.

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

Above: A LandCare contractor documenting their work in Hazelwood. A map is publically available for residents to review images submitted by the contractors.

Considerations and Limitations

"Community members are inspired to see people that look like them and have a similar background in these LandCare positions."

– LandCare Contractor

In order to fully understand and interpret the URA LandCare program SuROI analysis and ratio, several factors must be taken into consideration:

- **Responsibility for Vacant Lots.** The LandCare program maintains a small fraction of the vacant lots that exist in the City of Pittsburgh. Because there are no means to easily identify who owns a vacant lot by just driving or walking past it, it is difficult to tease out how residents could distinguish URA lots from City-owned or privately-owned lots. It is therefore very difficult to precisely pinpoint the impacts of a program that is addressing a small portion of the challenge.
- **Data Collection.** Grounded's primary role in the LandCare program has been to work closely with the contractors to provide day-to-day support and technical assistance. Because of the relationships we have built and the trust we have established with the contractors, we have been able to have candid and honest conversations about how their involvement in the program has affected their lives. Those relationships, as well as initial data collected on the quantitative impacts such as the number of new contracts awarded and hours spent in donated services to the community, helped us to frame the SuROI on the contractors' experience. However, this excludes another critical population, the crew members carrying out the work. Due to scope and time limitations, outcomes on crew members wellbeing, health, training and employment, were not included in this SuROI. A future iteration that could plan for a robust data collection effort would help reveal further benefits of the program.
- **Timing of SuROI Analysis.** The evaluation of the program occurred during the second year of the URA LandCare program. This includes data collection, analysis, and financial proxy research. Because data was collected retrospectively and LandCare is an ongoing program, there is a significant risk

that the second year of the program could influence responses about the first year of the program. We accounted for this risk in our discounting calculations.

- **Financial Proxies.** We believe that a more comprehensive assessment of outcomes could be produced with greater access to financial proxies. We experienced a lack of reliable proxies that measures outcomes related to land maintenance, workforce development, minority and women participation, and the provision of local services. We also lacked proxies that were measured in communities similar to those in the LandCare program. We would be interested in measuring more outcomes and indicators if those values were available and robust. However, we generally remained cautious and left out or limited indicators that were less representative of this program.
- **Comparison Disclaimer.** SuROI ratios should not be compared between organizations' approach, measurement framework, geographic location, and stage of development.
- **Third Party Review.** Grounded advocates for land use interventions that improve equity and community health. The potential for bias in value estimation by the evaluator was considered. To minimize this risk, most values used in this analysis were sources primarily from interviewed participants and testimonies we heard from the contractors. Additionally, the Grounded program team engaged a third party reviewer to certify and challenge the potential areas for bias in calculation.

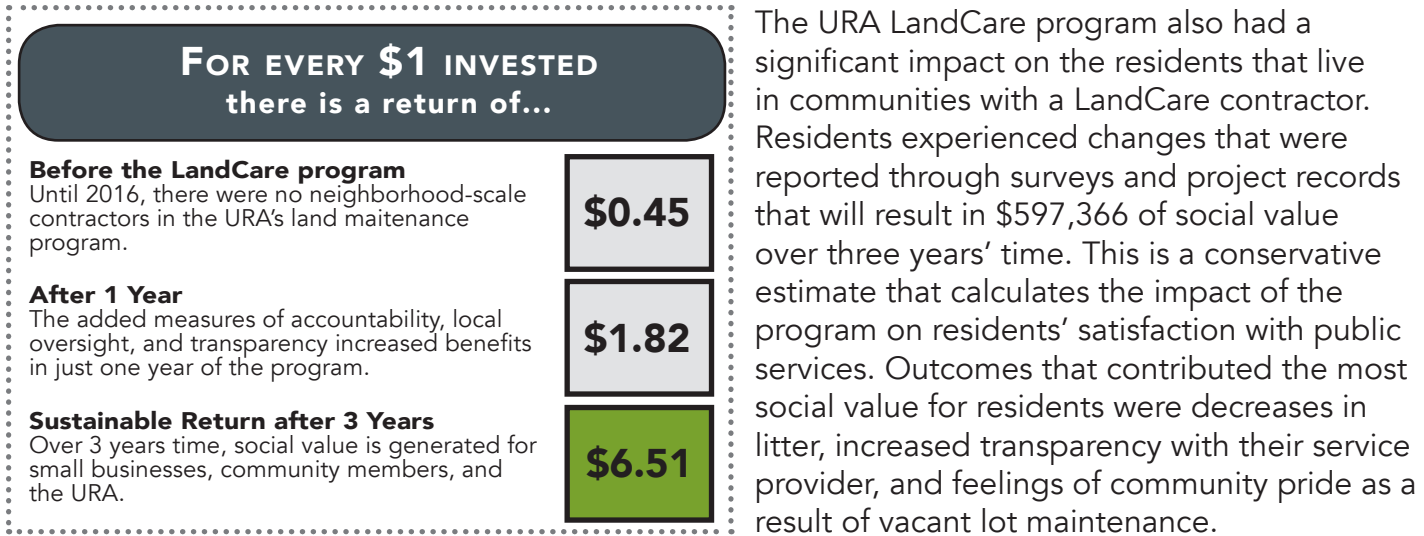


"We recognize that there's a gap in services for young adults between the ages of 18-24. For those that don't go to school or land a job right away, they time out of important services. Through the LandCare program, we can work with those individuals to train them, teach them the business, and equip them to be thriving members of our economy."

– Shinora Johnson, Center that CARES (Nonprofit Organization)

Conclusion

The URA LandCare program will create an impact of more than \$2 million over three years time. This analysis demonstrates that the URA LandCare program generates significant social value for stakeholders, and most notably, for the LandCare contractors. The contractors accounted for more than \$1.4 million of the social value creation. This is not surprising because many of the contractors credit the program for increasing their marketability, improving their ability to utilize technology, increasing community involvement and understanding of community development challenges, and expanded business opportunity. A majority of the contractors said the LandCare program improved their relationship with the URA, and all of the contractors reported that it was a positive experience.



The City of Pittsburgh experienced actualized economic gains as a result of the LandCare program. The two included in this report were decrease in 311 responses and increase in business tax. Additionally, any increases in property value is a boon for both residents and the city.



We believe SuROI is a great tool to measure and assess program impact. The SuROI framework captures the hard to measure outcomes typically left out in traditional valuations. The LandCare program has many secondary impacts and was a great candidate for this application. We expect that programs similar in nature -- that increase local ownership and control of vacant land -- would have complementary results. We encourage this assessment to be used as a guide to continue strengthening the program, with an aim on increasing its social value in the future.

If you have any questions or want more information about our sources, process, or values, please email info@groundedpgh.org or call (412) 361-2099. We would love to hear from you!

Above: LandCare crew member in Larimer

References

This list includes the research and reference material that helped inform this report.

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

Dolan, Paul, and Daniel Fujiwara. "Valuing Adult Learning: Comparing Wellbeing Evaluation to Contingent Valuation." Nov. 2012.

Fischbach, Jordan R., et al. Robust Stormwater Management in the Pittsburgh Region: A Pilot Study. RAND Corporation.

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

Heckert, Megan. "The Economic, Environmental, and Social Justice Impacts of Greening Vacant Lots: An Integrated Spatial Assessment of Urban Revitalization and Sustainability Outcomes." Temple University. 2012.

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/>

Sadler, Richard Casey, Jesenia Pizarro, Brandon Turchan, Stephen P. Gasteyer, and Edmund F. McGarrell. "Exploring the Spatial-Temporal Relationships Between Community Greening Programs and Neighborhood Rates of Crime." Applied Geography 83 (2017): 13-26.

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

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

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>