Introduction to Project
From 2020-2021, Grounded Strategies has conducted our Stewardship First Campaign. The overall goal of our campaign is to build a sense of urgency and deep community understanding of how ineffective vacant land maintenance practices negatively affect the quality of life for the most at-risk communities in our region. We then seek to build the community capacity needed to generate equitable solutions to the problem.

As a component of this campaign, we worked to build an understanding of the physical condition and use levels of past Grounded projects. Of our total 121 existing projects, our team was able to assess 68 projects. We assessed them utilizing 4 different site condition factors including hardscapes, softscapes, water management, and beautification and interactiveness.

In this report we will be breaking down the findings from the site assessments. From this report we have identified areas of greater need for ongoing maintenance support, and evaluate the success of stewardship strategies of our different program models.

**Breakdown of Sites Included and Project Types**

**412 Build:** In a collaborative effort between AlphaLab Gear, TechShop, City of Play and Grounded (GTECH) Strategies the InnovationWorks/412Build program came to fruition. The program recruited youth passionate about entrepreneurship, creativity and a willingness to learn and implement community development and engagement.

**AirSpace:** AirSpace was a collaboration between Grounded Strategies and GASp (Group Against Smog and Pollution), designed to engage Allegheny County residents with topics related to air quality and other environmental health issues. Through 2017 & 2018, AirSpace worked in four different Allegheny County communities, facilitating educational programs and designing and implementing art installations that creatively engage the public with issues related to environmental health. Art installations were built on vacant or underutilized lots in each different community.

**Community Garden:** Grounded has supported numerous community gardens in their work to develop and maintain growing spaces.

**Green Playces:** The Green Playces Initiative champions youth voices in every step of the placemaking process. From designing and planning with landscape architects, to learning construction and teamwork skills while building Green Playce sites, to stewarding sites for years to come, our unique curriculum creates opportunities for youth to learn valuable skills for implementing positive change in their communities.

**Green + Screen:** A project done on vacant lots in Garfield to help create artistic value on the fronts of the lots along Penn. Avenue.

**Hazelwood GSI:** The Grounded Strategies Green Stormwater Infrastructure (GSI) Project used green solutions to address pressuring stormwater issues and community needs. We sought to understand the types of GSI features desired in communities and how they can be used to generate creative community spaces while reducing stormwater runoff. The goal of the GSI
project was to reduce the number of combined sewer overflows while also achieving community co-benefits. This was achieved by using green solutions to capture stormwater while creating valuable community green spaces for everyone to enjoy.

**Hops on Lots:** This project brought hops within Pittsburgh city limits and enabled us to have locally grown and produced beer! Garfield has an active community dedicated to revitalizing their neighborhood despite their high vacancy rates and limiting topography.

**Knots on Lots:** A 2014 project conducted by Grounded Strategies (formerly GTECH) to create a useful biochar product from the invasive species, Japanese Knotweed. Japanese Knotweed is a non native perennial plant that can be found on numerous vacant lots in the city. It is incredibly difficult to remove as it is a rhizome based plant that spreads aggressively in the ground. This project worked to create products such as paper from the young Japanese Knotweed shoots.

**MOMS Play Yard:** The MOMS Green Play Yard is a place for interactive and educational play, essentially providing a safe and easily maintained ‘backyard’ for residents of MOMS Sojourner House and other families on the block. A model of urban reuse and renewal, this project is flexible enough to respond to the dynamic community while allowing its users to feel a sense of ownership. This project also encouraged residents to build a community food garden in an adjacent lot.

**ReClaim:** In an effort to maximize the impact of investments in vacant land, Grounded Strategies developed the ReClaim Ambassador model, which simultaneously builds knowledge, capacity, and expertise within individuals in vulnerable communities while enabling tangible actions to fuel community revitalization efforts. Vacant land serves as the platform to foster increased community engagement and ownership of the revitalization process and provides a canvas for the implementation of catalytic strategies to create positive hubs of community health.

- ReClaim Locations: Central, Clairton, McKeesport, Northside, and South

**ReGen South:** Between Fall 2016 through June 2019, Grounded offered a range of custom interventions in partnership with 24 organizations working toward improving community health through our people and places approach. Grounded provided technical assistance and direct financial support through targeted land use interventions, strategic data collection, community capacity building and ongoing partner collaboration in the effort to increase the resilience of vulnerable communities.

**Sunflower Project:** Work done to plant sunflowers on a vacant lot to beautify empty space, encourage neighborhood revitalization and even use sunflower oil as biofuel.
As shown on the graph above, the majority of the sites assessed were from the ReClaim project which included multiple site locations; Central, Clairton, Mckeesport, Northside, and South. 36 of the site assessments were from ReClaim and Claim South had the most assessments done at 17.

Numerous projects only had one site that were assessed. This includes 412 Build, Community Garden, Green and Screen, Kaboom, Knots on Lots, and MOMS Play Yard.
The Overall Site Analysis

Methodology

For the site analysis the surveyor noted the site ID, the address, the neighborhood and the program affiliation. The site analysis included; one general (‘yes-or-no’) question about the active use of the site, 4 open-ended questions about the conditions, and 17 Likert-scale questions. These questions covered four areas; the hardscapes, softscapes, water management systems and beautification or interactive components of the site.

The 17 Likert scale questions were rated with a 0 for NA, 1 for good, 2 for okay and 3 for bad for different conditions of the site. These numbers were then tallied so each site received a score out of 51.

Results

The site assessment scores ranged from 0 to 32 out of 51. A score between 0-10 indicates most N/A answers, a score between 11-19 indicates mostly “good” ratings, a score between 20-29 indicates a mixture of “good” and “okay ratings, a score between 30-39 indicates mostly “okay” ratings and a score of 40+ indicates mostly “bad” ratings.

As shown in the table, the majority of the sites (34 out of 68) received a score between 11-19. 20 sites received a score of 0-10, 11 sites received a score of 20-29 and only 2 sites received a score between 30-39. Overall, this shows that the majority of the sites were in “good” or “okay” condition.

From these results and given the limited data and programs, there does not appear to be any correlations between the project type and the condition of the site.

<table>
<thead>
<tr>
<th>Score (out of 51)</th>
<th>Number of Sites</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-10</td>
<td>20 sites</td>
</tr>
<tr>
<td>11-19</td>
<td>34 sites</td>
</tr>
<tr>
<td>20-29</td>
<td>11 sites</td>
</tr>
<tr>
<td>30-39</td>
<td>2 sites</td>
</tr>
<tr>
<td>40+</td>
<td>0 sites</td>
</tr>
</tbody>
</table>
Hardscapes Breakdown

Image: Westend Kaboom

Methodology

In this section we had surveyors analyze if a site had any hardscape construction or development and what condition it is in. Hardscapes are defined as landscaping materials that are put into or built into the natural landscape. Hardscapes included for reference were mulched areas, gravel area, garden edging, garden decoration, fence, outdoor furniture, trash receptacle, shade sail, shade structure, signage, and stairs. We evaluated the conditions of the visibility of the installation boundaries, load bearing components of the installation, ground cover (mulch, gravel, pavers, etc.), site amenities, and earthwork.

Surveyor Notes

Throughout the surveying process, surveyors also made note of more distinct factors that went into determining the hardscape scores. Every lot, of course, has a different history, different stewards, and different layouts, however, we are able to distinguish some larger themes that come up amongst sites. Of the sites given good scores, we found that they had either undergone a recent Refresh (funding provided by Grounded to stewards to update their sites) or had been maintained without our support. Sites with okay and bad scores had maintenance problems documented and remediated by Grounded staff. Maintenance concerns included damage to play structures, a need for increased mulch, dilapidated fences, benches in need of repair, or structures were not visible due to weed and vegetation overgrowth.
Data

Out of the total 68 sites assessed, we found that overall the hardscapes found on the sites were in relatively good or okay conditions. Around 44% to 50% of sites were rated as good, whereas 14% to 26% of sites were rated as okay. As noted in the graphs, 20% to 37% of the sites did not have hardscapes embedded into the site to report on. Of the 5 assessment points for hardscapes the percentage of sites scored as “bad” condition ranged between 4% to 15% of total sites.
Softscapes Breakdown

Image: Aetna WYP

Methodology

In this section we had surveyors analyze if a site had any softscape construction or development and what condition it is in. Softscapes are defined as features added to a property consisting of materials and design elements that are physically soft. Softscapes included for reference were shrubs, flowers, plants, soil, mulch, vegetables, vines, turf and color schemes. Softscape elements are fluid and change as they mature. We evaluated the conditions of herbaceous planted landscape, woody planted landscape, unwanted plants, stage of unwanted plant growth and general notes about the softscape conditions.

Surveyor Notes

Throughout the surveying process, surveyors also made notes that went into determining the softscape scores. A number of sites were surveyed in the winter months which made assessing softscapes impossible or difficult to determine due to lack of plant growth or snowfall. Numerous notes also expressed difficulty in determining what was intentionally planted and what was naturally occurring or unwanted. Notes about specific unwanted plants were also made such as
invasive species and knotweed. A few notes also included specific future plans or recent upkeep notes from other partners.

**Data**

Out of the 68 sites assessed, we found that the overall softscapes found on the sites were in relatively good condition. As noted in the graphs, a number of the sites did not have softscapes embedded into the site to report on. Around 44% to 50% of the sites were rated as good and 6% to 13% of the sites were rated as okay. Of the 4 assessment points for softscapes, the percentage of sites scored as “bad” condition ranged between 3% to 7% of the total sites.
Water Management Breakdown

Image: East Hills Rain Garden

Methodology

In this section we had surveyors analyze if a site had any water management construction or development and what condition it is in. Water management is the control and movement of water resources to minimize damage to life and property and to maximize efficient beneficial use. We evaluated the conditions of the water management systems such as the condition of the stormwater input infrastructure, amount of standing water on site, condition of seals and bonds intended to limit leaks and water storage units.

Surveyor Notes

While we did not have any distinct notes from surveyors regarding specific updates needed to the water management systems, it is important to note the importance of vacant lots for water collection. Vacant lots can be utilized to reduce the outcomes of combined sewer overflows and
improve water quality by being turned into green stormwater infrastructure sites that can collect, filter, and utilize excess water or overflows.

Data

Of the 68 sites surveyed, the majority of them did not have water management embedded in the site. As noted in the graphs, the majority of the sites that have water management systems were rated as good. Only 3% to 9% of the sites were rated as “okay” and 0% to 1% of the sites had a rating of “bad”.

[Bar chart showing the distribution of ratings for different aspects of water management projects.

Legend: N/A, Good, Okay, Bad]
**Beautification and Interactive Components Breakdown**

Image: Braddock Hollander

**Methodology**

In this section we had surveyors analyze the aesthetic and interactive components of sites. This included Green Stormwater Infrastructure projects, Little Libraries, and Public Art. Surveyors looked at overall aesthetic condition and whether the interactive components were still in functioning shape. Beautification and interactive components allow for residents to really interact with green spaces and feel a part of the space.

**Survey Notes**

Throughout the surveying process, surveyors also made notes that went into determining the scoring of the beautification and interactive components. Many of the notes also showed requests from stewards for more interactive components such as a Little Library and more trash cans. Many of the sites with murals were still in great condition or had contingency plans to update said murals.
Data

Out of the total 68 sites assessed, we found that the overall beautification and interactive components found on the sites were in relatively good or okay conditions. 43% to 60% of the sites did not have beautification or interactive components embedded into the site. 38% to 44% of the sites were rated as good and 3% to 29% were rated as okay. Of the 3 assessment points, only 1% to 12% were rated as “bad”.

Analysis of Grounded Past Projects:
Beautification

<table>
<thead>
<tr>
<th>Number of Past Project Sites</th>
<th>Condition of public art features or signs</th>
<th>How much litter is on the site?</th>
<th>How well functioning are interactive components?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
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<td></td>
<td>40</td>
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<td></td>
<td></td>
<td>17</td>
<td>19</td>
</tr>
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<td></td>
<td></td>
<td>5</td>
<td>8</td>
</tr>
</tbody>
</table>

- 0% N/A
- 25% Good
- 19% Okay
- 8% Bad

Data

Out of the total 68 sites assessed, we found that the overall beautification and interactive components found on the sites were in relatively good or okay conditions. 43% to 60% of the sites did not have beautification or interactive components embedded into the site. 38% to 44% of the sites were rated as good and 3% to 29% were rated as okay. Of the 3 assessment points, only 1% to 12% were rated as “bad”.
Main Takeaways and Followup

This assessment allowed for Grounded Strategies staff to really take inventory of our work done with communities and learn how we can best provide support to the stewards and their sites. While we could only get to 58% of the sites, we were able to see some overall trends and needs for further assistance through the site audits. This audit has allowed us to take a look at the long-term sustainability of the work we do. From the audit we have found that the majority of the sites that had the corresponding components to assess were rated as “good”. As stated prior, there were no drastic takeaways as far as looking at trends across project types.

For the hardscape assessments, these ratings varied the most and had the most “bad” ratings but also had the most data collected. For the cases with the bads, there were often mitigation plans put in place or documentation of next steps. Also, due to the use of sustainably sourced or recycled materials, there were a number of hardscapes that were falling apart quicker. A number of these sites underwent Refresh Funds prior to the audit.

For the softscapes assessments, this category had the most “good” ratings. However most of the N/A’s were due to winter assessments and the softscapes could not be properly assessed. With many sites being community gardens, pollinator spaces, and green stormwater infrastructure sites we would usually be able to see the spaces in full bloom. In future audits, we should account for the timing of the audit to ensure that we are able to observe softscapes.

For the water management assessments a majority of the projects were not green infrastructure sites so they weren’t inherently being used as water storage/filtration sites. With that being said,
the sites that did have them were mostly rated as “good”. This shows that vacant lots have good potential for stormwater collection.

For the beautification and interactive components, this data was decently mixed, with the most okays. If there was public art on the site, most of them were in good condition or needed little updating. Most of the sites were being well maintained and had no litter or very little amounts on site. The sites with interactive components were mostly in good condition as well, which is important especially for green stormwater infrastructure that often acts as a multipurpose art piece and water catchment system.

Of the sites that had assessments, the average rating was calculated for each of the assessment points and the averages ranged from 1.105 to 1.611 (1=good, 2=okay and 3=bad) which means all of the assessment points averaged between good and okay. Sites that were audited allowed for staff to reach out to previous program participants and partners to offer resources such as our Lots to Love Refresh Grant funds, tools from our Mobile Toolbox, or Land Doctor consultation support.

Overall, we were able to reach numerous partners and stewards and continue on supporting their work to create sustainable and long-term green spaces in their communities. The tools used in this audit are able to be replicated and improved upon in future iterations. We hope to continue this work in the future and look towards auditing and providing support for the other 53 sites we were not able to reach this time around. We also hope to use the information we have from our current site audit results to continuously inform our support for past stewards and future stewards.