

A Resilient
Future
Starts
Here.



Servicios Comunitarios
Centro de Desarrollo &
Community Center Planning Guide & Toolkit



Centro de Desarrollo
&
Servicios Comunitarios

Community Center Planning Guide & Toolkit

2021

A Message from the Founder

Hurricane Maria for me was shocking. I was scared and alone with my mother, my house was shaking, and I thought we were going to die. The days following, I remember going outside and seeing my neighbor's houses all damaged or even destroyed. I spent the coming weeks showering with rainwater, exchanging food with neighbors, using the river to clean my clothes, waiting for some form of help. I depended on using my generator every day and waited hours at the gas station for gas which always seemed impossible to get. I remember standing on my balcony looking at all the aftermath thinking "What are we going to do now?" Then a dove landed in front of me, shook its feathers, and flew off again. At the moment I knew, "That's what I have to do."

When I was in Colombia on a mission in February 2020, I heard a voice in a dream repeating "ID Shaliah" which when translated from Hebrew means "embassario de Jesus". And four months later when I returned to Puerto Rico When I started my non-profit organization ID Shaliah, I wanted to help my community and build a stronger, more united, and prosperous community so that the next time there was an emergency, we were prepared. In June 2020, we began to help members of my community by with this goal in mind, that is when I decided to open a community center in Cubuy.

My vision was to establish a sustainable, resilient community center that could support citizens through providing helpful supplies and access to essential services during times of crisis and recovery, as well as offer a safe place to convene and obtain basic necessities that otherwise might be unobtainable to citizens. This guide encapsulates all of the work my team and myself have put into the community center over the course of this undertaking. I hope that this guide is of use to any similar projects over the coming years.

Founder and President of ID Shaliah Inc.
Javier Valedon

Acknowledgements

Authors and Editors

WPI Project Team:

Shelby Tweedie
Walter Conway
Makayla Delo
Nicholas Willey

Project Sponsors

ID Shaliah Inc.
Karma Honey Project

Additional Sponsors

GelyCan
Bien Estar Health Group
Emergency Management Task Force
Agricultura
Municipality of Canóvanas
Mixed Martial Zone and Fitness
Home Rescue by ID Shaliah Inc.
Desde Mi Campo by ID Shaliah Inc.

Worcester Polytechnic Institute

WPI Project Advisors:

Scott Jiusto
Gbetonmasse Somasse

WPI Global Projects Program
WPI Puerto Rico Project Center
WPI Puerto Rico Project Center Co-Directors:

John Michael Davis
Scott Jiusto

Photos

Maritza Santiago
Kenneth Zapata
Javier Valedon
WPI Project Team

Other Contributors

Jeffrey Brennan
Talía Mamayek
Alexander Strickland
Isabel Nearing



This working document was first organized by a team of the following four engineering students from Worcester Polytechnic Institute in 2021:

Shelby Tweedie
Walter Conway
Makayla Delo
Nicholas Willey

If any questions come up along the way, the team can be reached at the following group email alias:

Gr-CTPR-CubuyCenter@wpi.edu

This guide emerged from a brand-new partnership with ID Shaliah and The Karma Honey Project, however, we've drawn many ideas from the following sources:

Brechwald, Dana. *REGIONAL RESILIENCE TOOLKIT - 5 STEPS TO BUILD LARGE SCALE RESILIENCE TO NATURAL DISASTERS*. epa, July 2019, https://www.epa.gov/sites/default/files/2019-07/documents/regional_resilience_toolkit.pdf.

Perkins and Will. *COMMUNITIES TOGETHER A GUIDE FOR RESILIENT COMMUNITY CENTER DESIGN IN ISLAND COMMUNITIES*. ResilientSEE, 2019, https://static1.squarespace.com/static/5b03087436099b5102da89ba/t/5da759a117efa74e511ffa60/1571248561589/Resilient+Community+Hubs+Guide_ENGLISH_Digital.pdf.

wikihow. "How to Start a Community Center." *Wikihow*, 2021, <https://www.wikihow.com/Start-a-Community-Center#:~:text=1%20Write%20bylaws.%20Your%20community%20center%20needs%20a,just%20need%20to%20make%20sure%20that%20people%20come>.

Table of Contents

i. Introduction.....	8	II. Centro De Desarrollo & Servicios	
<i>Introduction to this Guide & Toolkit.....</i>	<i>9</i>	Comunitarios: Site-Specific Toolkit.....	54
 ii. Basic Project Information.....	12	 1. Directory.....	55
<i>About Our Project.....</i>	<i>13</i>	<i>Floorplan.....</i>	<i>56</i>
<i>Our Vision & Mission.....</i>	<i>14</i>	2. Current Programs & Services.....	57
<i>Contact Information.....</i>	<i>15</i>	<i>Building 1.....</i>	<i>58</i>
<i>Partners & Sponsors.....</i>	<i>16</i>	<i>Building 2.....</i>	<i>62</i>
		<i>Building 3.....</i>	<i>65</i>
 I. Community Center Development:		3. Building Transformations.....	70
General Planning Guide.....	20	<i>Exterior Progress & Projections.....</i>	<i>71</i>
		<i>Interior Progress & Projections.....</i>	<i>72</i>
 1. Formulating the Project Team.....	21	 4. Outreach Plans.....	76
<i>Assembling the Team.....</i>	<i>22</i>	<i>Outreach Contact Information.....</i>	<i>77</i>
<i>Establishing a Common</i>		<i>Outreach Email Template.....</i>	<i>78</i>
<i>Understanding.....</i>	<i>23</i>	5. Donations & Contributions.....	79
2. Community Assessment.....	24	<i>Donations & Contributions.....</i>	<i>80</i>
<i>Community Engagement.....</i>	<i>25</i>	<i>Volunteers.....</i>	<i>81</i>
<i>Identifying Needs & Priorities.....</i>	<i>27</i>	6. Resiliency Operations.....	82
3. Project Development.....	30	<i>Preparations & Recovery.....</i>	<i>83</i>
<i>Designing Services,</i>			
<i>Programs, & Initiatives.....</i>	<i>31</i>		
<i>Evaluation of Program Logistics.....</i>	<i>32</i>	 iii. Additional Resources & References.....	88
<i>Planning for Implementation.....</i>	<i>33</i>	<i>Resources.....</i>	<i>89</i>
4. Community Endorsement.....	34		
<i>Generating Community</i>			
<i>Support.....</i>	<i>35</i>		
5. Outreach.....	37		
<i>Stakeholder Analysis.....</i>	<i>38</i>		
<i>Outreach Tools.....</i>	<i>39</i>		
<i>Developing an Outreach Plan.....</i>	<i>40</i>		
<i>Storytelling.....</i>	<i>41</i>		
6. Finances.....	42		
<i>Budgets.....</i>	<i>43</i>		
<i>Budget Templates.....</i>	<i>44</i>		
<i>Funding Opportunities.....</i>	<i>45</i>		
<i>Grants.....</i>	<i>46</i>		
<i>Fundraising.....</i>	<i>48</i>		
7. Evaluation & Modification.....	49		
<i>Evaluation Techniques &</i>			
<i>Methods.....</i>	<i>50</i>		
<i>Evaluating Programs</i>			
<i>& Services.....</i>	<i>51</i>		
<i>Self-Evaluation.....</i>	<i>52</i>		



i. Introduction

Chapter Overview:

Introduction to
this Guide & Toolkit.....9

Introduction to this Guide & Toolkit



In urban and rural communities alike, a significant determining factor of a community's successful development stems from the involvement and collaboration of people from different factions of the community. In communities within Puerto Rico, where accessibility to several essential resources is limited, residents have more of a dependency on a strong and cohesive community presence to support themselves. Additionally, these communities can be sent into a continuous state of recovery due to natural disasters that have devastating effects on life, property, the economy, and ecosystems, and are always threatened by the possibility of future natural disasters. Because of this, it is important for community leaders to have the tools and guidance they need to take action in the face of a catastrophic event.

This document aims to accomplish two overarching goals. The first of which is to serve as a general planning guide that could be used by both the Centro de Desarrollo & Servicios Comunitarios, as well as other organizations that hope to implement a similar center or similar programs in their own communities. Note that the information in this guide is organized in a conceptually sequential order, however, the steps and recommendations may be modified and adjusted as necessary. The general planning portion of this guide provides information on:

- ✓ How to assess community needs and generate project involvement and engagement
- ✓ How to design, manage, and evaluate programs and services to
- ✓ Communication and outreach guidance and resources for engaging a broad coalition of stakeholders across a region
- ✓ Project and service evaluation techniques to ensure resources are benefiting the community in the most efficient way possible

Introduction to this Guide & Toolkit



In the Canóvanas region of Puerto Rico specifically, it is difficult to access valuable resources located in San Juan. Cubuy is a small community of approximately 1,800 residents in the municipality of Canóvanas on the West edge of the El Yunque National Rain Forest, which is approximately a thirty-minute drive from San Juan. ID Shaliah's project is working to advance their efforts in serving the community through the community center that the organization is developing, however this project is a significant undertaking. Although the leader of this project, Javier Valedon, has experience working with and providing for the community through his involvement with ID Shaliah, organizing a community center is a detailed process that requires extensive planning and organization. Because of the need for the residents of Cubuy to be self-sufficient, it is important that they have all of the tools that they need to operate the community center that will be a significant source of their support.

The second goal of this guide is to serve as a site-specific toolkit for the Centro de Desarrollo & Servicios Comunitarios, that focuses on documenting the project and providing future suggestions and plans that can be implemented. Although this portion is intended to be specific to the Centro de Desarrollo & Servicios Comunitarios, a lot can still be learned from this portion of the guide that can be implemented into future projects. The site-specific portion of this guide provides information on:

- ✓ Floorplan layout and building Transformations
- ✓ Current programs and service information
- ✓ Outreach templates and plans for future use
- ✓ Prior donations and contributions, along with the contact information of the contributor



ii. Basic Project Information

Chapter Overview:

About Our Project.....	13
Our Vision & Mission.....	14
Contact Information.....	15
Partners & Sponsors.....	16

About Our Project



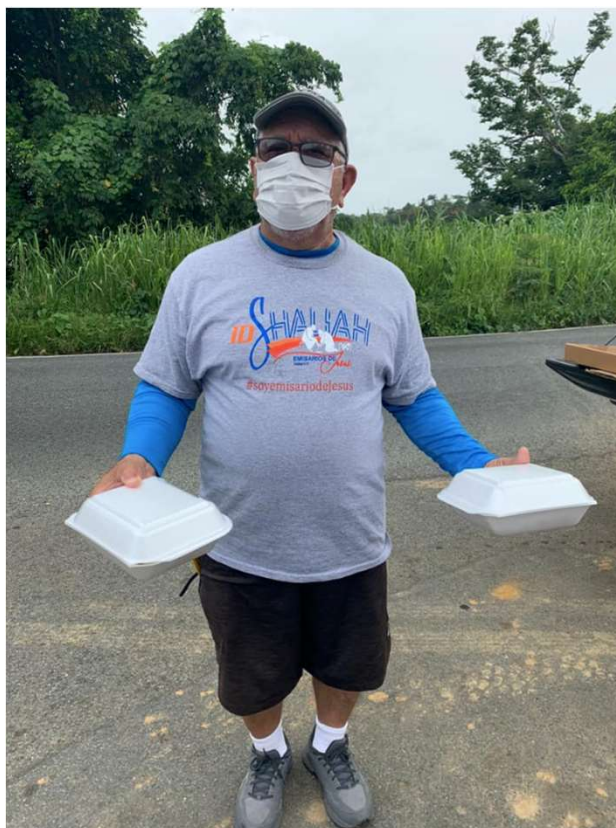
We are a community center serving the Cubuy-Lomas communities in the municipality of Canovanas on the island of Puerto Rico. The Cubuy-Lomas community center is a project led by Javier Valedon, founder and President of ID Shaliah Inc., and the Karma Honey Project, with the help of volunteers from both non-profit organizations. Valedon began organizing the project in the summer of 2020, with the Karma Honey Project partnering in December of that year. Together, the two organizations have transformed a vacant elementary school building that was abandoned in 2017 into a community center to support the Cubuy-Lomas communities in Puerto Rico. The center is set to open in January of 2022 to offer medical and pharmaceutical services, meals, and educational programs (and so much more!) to the residents of Cubuy-Lomas.



Our Vision & Mission



Our vision was to establish a sustainable, resilient community center that could support citizens through providing helpful supplies and access to essential services during times of crisis and recovery, as well as offer a safe place to convene and obtain basic necessities that otherwise might be unobtainable to citizens.



Our mission is to create absolute autonomy to supply the needs of the Cubuy-Lomas communities through a central hub that provides accessible services to all citizens. The goal of our initiatives is to build a stronger, united, prosperous community.

Contact Information



Address: Escuela Manuel Agosto Lebrón, Canóvanas, Puerto Rico 00729

Phone: 787-672-7528

Email: cubuylomascenter@gmail.com

Website: <https://www.cubuylomascenter.org/>

Social media:



@Centro de Desarrollo & Servicios
Comunitario Id Shaliah inc



@cubuylomas_center



@Cubuy Lomas Center

Partners & Sponsors



The Centro De Desarrollo Servicios Comunitarios is pleased and grateful to be working with the following partners and sponsors to help carry out our mission.



Partners & Sponsors



ID Shaliah Inc. is a non-profit organization founded by Valedon in May of 2020 with the mission of creating absolute autonomy to supply resources for communities and their residents to meet their needs and improve their quality of life. As a humanitarian project, ID Shaliah provides citizens in Cubuy with access to medicine, hot food boxes, adult diapers, medical equipment, essential items for preparing for emergencies, and home rescue services, amongst other things. The project also operates a program to help fix damaged properties from natural disasters.



The Karma Honey Project, led by Johnny Williams and Candice Galek, was founded in 2018 to increase the population of honeybees in Puerto Rico, and in turn to create local jobs through beekeeping and ecotourism. The project is looking to expand throughout Puerto Rico in many different disciplines. They are now collaborating to develop different services within the community center, including a woodshop, a beekeeping classroom, and a honey-processing department within the building where tourists could come to the community center to get an experience with the bees and the honey-making process, which could become a source of revenue to keep the community center running in the future.



ID Shaliah has also created a local farmers market where they give small businesses a chance to succeed in the farming, craft work and gastronomy fields. The goal of the ID Shaliah market, and ID Shaliah is to develop and help the economy of rural places like Cubuy and Lomas.



GelyCan provides a variety of services, including substance abuse, behavioral, health, and mental health service to community members with disabilities. Medical treatment, consultations, therapy, intervention and transportation, amongst other things, are all services offered by Gelycan which help them serve the community of Canóvanas.

Partners & Sponsors



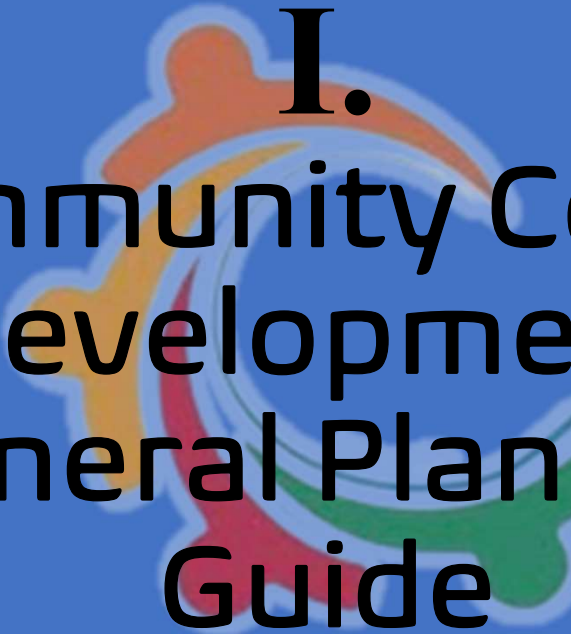
The government of Canóvanas holds lots of community events like history nights, kayaking outings and other fun events in order to help the community in Canóvanas to become closer. They are also taking initiatives to promote renewable energy and other sustainable options and having fundraisers to raise money for the community members in need. Both aspects are important to the overall goal of creating a community center as some funding and a tight knit community both help the members of the community using the center to get the most out of it.



Agricultura is an organization working to become a leader in the agriculture production industry in the Caribbean region of the United States. Their mission is to provide food to the people in this region, while improving their maximum agricultural capacity for local marketing in exporting, using science and technology to facilitate production.



The Emergency Management Task Force of Puerto Rico is an organization that helps people prepare for natural disasters such as hurricanes. A lot of the information that the organization tries to relay to the public is information is home survival techniques, how to plan for a natural disaster, and other tips on specifically what one should have during a natural disaster.



I. Community Center Development: General Planning Guide



1. Formulating the Project Team

Chapter Overview:

Assembling the Team.....	22
Establishing a Common Understanding.....	23

Assembling the Team



No one individual or organization can tackle a community center project on their own. A project of this magnitude requires the coordination of a team to achieve the greater goal. The leader of the project, or the leading organization, will need to involve members from other facets of the community who possess different expertise in a variety of areas that can benefit the project. This assembly of individuals will be the project team. The project team will be responsible for managing and carrying out the project work. This group will be working hands on with the technical aspects and management of the project. However, it is recommended that each project team forms a type of advisory group, including external stakeholders, members from non-profit organizations or organizations within the community, government representatives, local businesses and business professionals, and community members. This group, although not directly a part of the project team, can offer valuable insights, feedback, and ideas to the project group, help the team with promoting the project to the public, securing support from the community, the government, and the members of the advisory group's respective organizations, and contribute either financially or through volunteer efforts.

Identifying the stakeholders who will be involved with the project can be helpful in formulating both the project team and the advisory group. The project team and the advisory group should be diverse and consist of individuals from a variety of factions of the community to ensure that insights are being contributed from a representative sample of the community. It is important to identify who the stakeholders of the project are, including members of underrepresented groups. It is important to consider the role of each stakeholder and their purpose for being involved with the project. Subsequently, the team must determine the level of involvement of the stakeholders that would be required, or that the stakeholder would agree to. The team must then decide how they plan to engage the stakeholders in the project.

While it is important to identify stakeholders at the initial stages of the project, engaging stakeholders early on may be difficult. Developing an organized plan and demonstrating how the project has progressed can help attract stakeholders to become involved once there is evidence of momentum. Some relationships and partnerships will be developed in the early stages of the project, particularly because many projects will require outside assistance to gain traction. However, for the sake of outlining the steps and information in this guide in a conceptually sequential order, stakeholder engagement will be revisited in Chapter 4 in the discussion of outreach techniques and approaches to developing strategic partnerships.

Establishing a Common Understanding



With the project team assembled, it is important to lay the foundation for a successful team dynamic. This involves establishing a common understanding among group members about project goals. This also includes developing personal relationships with the members of the project team and the members of the community. This will be discussed in Chapter 2.

The project team should meet to discuss what they view the goals of the project are, and where they envision the project going. It is important that everyone on the team be on the same page and have a mutual understanding of how the project will progress forward, and what the team hopes the outcomes of the project will be. This provides the members of the team to share their feedback and work together to construct the project framework as a unit. The community may also have their own goals, and therefore it will be necessary to align the community's goals and priorities with the project team's goals. The team should also decide how each member of the team's skills and expertise can be used most effectively and efficiently in order to achieve the goals of the project.

In these initial team meetings, the team should also plan to draft a timeline outlining the ideal completion dates of certain project aspects, or at minimum the steps that the team will take in sequential order. Having a timeline drafted will allow the team to visualize the process that will need to be completed step by step in order to reach the desired outcome. In addition, having goals established at the initial stage of the project offers the team the ability to continually assess and evaluate the project's process by determining if the work being done on the project is consistent with achieving the project goals.



2. Community Assessment

Chapter Overview:

Community Engagement.....	25
Identifying Needs & Priorities.....	27

Community Engagement



Successful community engagement stems from establishing trust in the relationships that are formed with partners and community members. This trust must be developed among all parties working on the project, including the main organization, the leaders and decision-makers, the stakeholders, and the community members. It is important that these groups of people be identified and that everyone has an understanding of their purpose in the project. Some helpful tips for forming successful relationships include:

- Begin with relationships and connections that the team already has in the community to use as a foundation for developing new relationships.
- Approach this process with the mindset of forming long-term relationships to display the team's dedication to the project and interest in working with the community in the future.
- Be genuine!

Ensure that the team is making the effort to participate in the community's cultures and embrace the norms and customs of the community. The team should demonstrate an interest and respect for the community's ways of life and values to build trust with the community members and display that the team has the community's best interests. When engaging with the community, it can be a bonding experience to attend local events in the community and participate in their activities (even better if the team participates with the members of the community!)

Taking the time to form these relationships lays the groundwork for sparking the community's interest in the project. The next page discusses ways to move forward with engaging the community with the team's project work.

Community Engagement



Engaging the community directly with the project work provides an opportunity for the team to gauge the community's initial interest in the project. This type of engagement is also an excellent method to gain the community's support and secure the endorsement of the community. This will be discussed further in Chapter 3. There are a variety of ways that the team can engage with the community to learn about the people and what they would like to see in their community center. The following is a compiled list of activities to involve the community in the project, including:

- Take residents of the community on a tour of the project site to increase the excitement of the community by allowing them to see the community center's progress and promise.
- Utilize a replica of the community center and have residents write notes or place small objects in the rooms of the diorama to indicate what they wish to see incorporated as a fun and engaging activity for the community.
- Put corkboards, white boards, or poster paper in rooms and have members post their comments, suggestions, requests, or even images that have been provided to them.
 - Begin by walking community leaders, volunteers, or others who will be directly working with the community center through this process.
 - From there, create smaller focus groups of community members to include all facets of the community.
- In focus groups, use movement activities where the team can ask residents to move physically in response to different questions regarding their personal experiences or their thoughts about the community center. For example:
 - "Take a step forward if ..."
 - "Go to the left side of the room if..."
 - Try dividing focus groups into different age ranges or demographics in this process as priorities for members of different factions of the community might vary.
- Suggestion boxes can also be stationed in the community and at the community center for community members to share their ideas anonymously.

Identifying Needs & Priorities



In formulating a plan for the development of a community center, it is essential that the team gains a complete understanding of the community. In doing so, it is critical to identify the needs and strengths of the community to develop an understanding of the community's identity. It is essential that the team consults several groups of people within the community, including community leaders as well as other members of the community to gain a well-rounded perspective on what the people of community view as the most pertinent and urgent needs of their community. With the new relationships developed as discussed in the previous section, the following methods can be used to assess the needs and priorities of the community:

- Consult community leaders on what they view as the most prominent obstacles faced by the community.
- Conduct interviews with local community members to identify what they want out of their community center.
- Research information on the history, customs, culture, and demographics of the community.
- Determine what programs and services are currently available to the community.
 - Assess the adequacy of current services.
 - Locate the gaps in the resources of the community.

In order to develop a sense of who the community is, identify the strengths of the community, and understand what brings the community together, it is important for the team to immerse themselves into the community and learn about their history, culture, and ways of life to form a deeper and more meaningful relationship with community members, if these relationships have not already been established. In this process, the team should be looking to answer the following questions:

- How close-knit is the community?
- How do they come together to work toward a common goal?
- What are the skills of the community members?
- What networks exist within the community?
- What cultural aspects unite the community?
- How has the history of the community shaped the people in it?

Identifying Needs & Priorities



There are several other ways to learn about the community to answer these questions. It can be helpful to explore methods to allow community members to shape their stories and experiences for the team in a way that is not dependent on an interview-style question and answer format, such as by:

- Having discussions with community members by asking questions that prompt more in-depth answers and that promote a deeper kind of discussion, such as:
 - “Would you mind walking us through (insert specific experience here)?”
 - “Can you recount a time when (insert specific experience here)?”
 - “How did the community support each other during/after (insert specific experience here)?”
- As a substitute for asking questions, have residents walk the team through their experiences to share their own stories.
- Have residents show the team important items and locations that are important to them so the team can immerse themselves in their lifestyles and experiences.

Much information can be gained indirectly through these forms of communication. When community members make requests for what they wish to see from the community center, they might be requesting things that are not feasible or might not fit within the scope of the community center’s bounds. However, if the team has a sense of who the community is and have had the opportunity to form these deeper connections and bonds, the team will be able to deduce alternative solutions to the requests that may not be possible to fulfill.

Identifying Needs & Priorities



While consulting members of the community directly is a critical method for developing an understanding of what the needs of the community are, it will also be important to conduct independent research on the risks and vulnerabilities of the community. It is necessary to research which risks have the highest potential to impact the community. These "hazards" can be natural or climate-related, as well as social or political in terms of disputes that threaten the well-being or the successful functioning of the community. The risks that the community faces can be measured by approximating who and what would be affected by the hazard, the extent of people or things that the hazard could have an effect on, the outcomes of the hazard, and how frequently the hazard poses a risk to the community.

Particularly for weather events, it is recommended that the team investigates where such events as flooding, wildfires, landslides, earthquakes, etc. have occurred and the frequency of these events. In discussing with experts and officials, the team should be able to make predictions about these events using information about how climate patterns and external factors can influence the severity and timing of these events. Of course some events cannot be predicted, however performing this research will allow the team to have a familiar understanding of how weather events impact the community and develop strategies to prepare and respond to them.

At the same time, the team should also analyze the community's main assets, which could be in the form of community members, buildings, or systems. Some of this information may have already been gained through the team's interactions with the community. Determining important assets to the community can play a role in determining how significant a hazard is, depending on whether or not it would impact a community asset.

With this research, the team can then prioritize the risks based on the severity of their effects on the community. Combining this information with the findings from the team's interactions with community members, the team can make decisions about how they need to restructure their goals or timeline. Once the hazards are prioritized it is a good time for the project team to consider if it is necessary to refine or reprioritize the goals previously outlined. This will be discussed in more detail in the next chapter.



3. Project Development

Chapter Overview

Designing Programs, Services, & Initiatives.....	31
Evaluation of Program Logistics.....	32
Planning for Implementation.....	33

Designing Programs, Services, & Initiatives



Once the team has identified the needs and priorities of the community as well as the threats and risks that the community faces, the team must begin to develop strategies to address these findings. With a firm grasp on the needs of the community and an enhanced understanding of who they are, the team can brainstorm ways to develop and improve programs, services, and initiatives that best address the needs of the community. It will be important for the team to utilize the information that was gained through the actions outlined in Chapter 2 to synthesize this information into implementable services to benefit the community. The following outline can be referenced in designing programs, services, and initiatives within a community center:

- Incorporate the key issues identified by the community leaders and members into a list of the community's needs and requests.
 - Identify common ideas, requests, and themes from the different members of the community who were surveyed.
 - Formally arrange the issues, needs, and requests, and prioritize the central and immediate problems that need to be addressed.
- Use current programs as a foundation.
 - Explore ways to build upon and adjust current programs to make improvements that better suit the needs of the community.
- Develop new services to address needs that are not currently being met or considered.

When designing programs, services, and initiatives, it is also beneficial to contact other organizations who have and are currently developing community and resiliency centers in similar communities. Communication with the leaders and volunteers of these organizations, as well as the members of the communities who benefit from the services provided by these centers, can offer valuable insights into what has worked and what hasn't worked in other communities. The team can learn about how these centers operate, the types of services they provide, and how they manage their staffing, finances, etc. in order to be able to apply many of these findings to their own community center.

Evaluation of Program Logistics



Constructing a plan for how a community center will operate can be a daunting task. There are several logistics of the management and operations of the community center that must be considered to determine how to make the programs and services that have been planned possible. The development process that is being suggested in this guide will ultimately be comprised of how to tackle the physical state of the building and cosmetic updates to the property, how the center will operate and be managed, the services that the center will provide to the community, and how the center will support itself financially, among other things. Therefore, it is necessary that prior to planning for funding, important logistical questions must be answered. The following is chronological list of actions that help to provide answers to these questions and organize logistical information.

- Determine how much physical space will be required for each service, and how to organize the programs most efficiently within the space.
 - Allocate space in the blueprint of the building/on the property for each program to operate.
- Identify what types of equipment and resources will be necessary for each service.
- Analyze what staffing requirements will be needed to operate the programs, whether the center will be staffed by volunteers, community members, or paid employees, and how the staff will be managed.
 - Discuss:
 - How involved will the leaders of the sponsoring organizations be on a day-to-day basis?
 - How many volunteers are at the disposal of the community center, and what would their level of commitment be to the community center's operations?
 - Determine the willingness of community members to become involved in assisting in the operations of the community center.
- Perform a cost analysis of what the programs and services will cost, including the initial costs and the costs of operation.
- (more on cost analysis)

Planning for Implementation



With a prioritized list of the programs and services that the community center plans to offer, the team can begin to develop a plan for their implementation. There are two types of implementation plans: long term and short term. It is recommended that a long-term plan be constructed prior to the short-term plan, allowing the short-term plan to be built upon the long-term plan.

- Long-Term Implementation Plan
 - The long term plan, structured from 5 to 20 years, should outline the priorities, actions, timeline, and cost of implementing each program/service/initiative in order to create a broad overview of where the project is heading, and to link each strategy to the goals of the project.

The long-term plan should come before the short-term plan because the short term plan consists of actions that are structured to tackle the implementation of the ideas outlined in the long-term plan.

- Short-Term Action Plan
 - The short-term action plan should be structured to take from 0 to up to 5 years. This plan should focus on incorporating budgets and funding and the technical aspects of implementing the plans that reach the goal of the long-term plan. These technical aspects include who will be leading the project, specific cost breakdowns, the financial support, and a detailed timeline for the implementation of the program, service, or initiative.



4. Community Endorsement

Chapter Overview

Endorsement & Generating Support.....	35
--	----

Generating Community Support



After the logistics of the community center have been analyzed and the requirements for the community center have been established, the team can begin to present the plans for the community center to the community and gain the community's support. As was described in Chapter 1, engaging the community in the planning of the community center can help to increase the community's enthusiasm about the project and spark the community's interest in becoming involved with the community center. It is important that the community be on board with the mission of the center because after all, it will be for their benefit. Generating support from the community is a critical step in order to move forward with beginning to seek funding possibilities from government agencies, potential donors, sponsors, and partners. As the work on the community center advances, a great way to keep this enthusiasm alive is to continuously update the community on the community center's progress. Some of the following are examples of ways to keep the community involved with the community center:

- Update the community with reports and information about the community center's progress through the use of:
 - Email aliases
 - Paper mail
 - Community bulletin boards
 - Flyers
 - Newsletters
 - Web/paper calendars for program and activity updates
 - Submitting to local media outlets
- Host a public town meeting to present the plans for the community center to the community:
 - Outline the broad goals of the community center and then break down the details of the plan.
 - Incorporate several speakers to pitch the different aspects of the plan.

Generating Community Support



When approaching the funding aspect of the project, having the documented support of the community can strengthen the team's applications for financial assistance. Having written documentation of the community's support demonstrates the community's need for the project and can have a greater influence on potential sponsors, partners, government agencies, philanthropists, and other donors' willingness to contribute to the project. The following includes methods for securing the community's support in writing:

- Utilize petitions to record community support that can be presented to government agencies and prospective funders:
 - Obtain signatures from community members at public venues and through personal visits, presentations, and discussions with locals.



5. Outreach

Chapter Overview:

Stakeholder Analysis.....	38
Outreach Tools.....	39
Developing an Outreach Plan.....	40
Storytelling.....	41

Stakeholder Analysis



To return to a topic briefly discussed in chapter 1, with the information that the team has gathered from the community and a plan for the services and programs that the community center plans to offer to the community, the team must re-evaluate their stakeholders. Now that specific programs and services have been designed on paper and several of the project logistics have been ironed out, new stakeholders may have arisen, and the roles of the initially considered stakeholders may have changed. Before creating an outreach plan, it may be beneficial to construct a stakeholder map so the team can organize their potential contacts and understand how these stakeholders can contribute to the project.

Stakeholder mapping is used to categorize stakeholders based on their interests so the team can visually organize relationships and partnerships, how they are related, and how they should be prioritized. It is important that different stakeholders be organized by their interests, expertise, level of involvement, and the resources that they have to offer. Some of the following are important aspects to consider when constructing a stakeholder map. The stakeholder:

- Has political ties and can influence decision-making pertaining to advancing the efforts of the community center.
- Is a member of the community or someone who will be directly impacted by the community center's operations.
- Has specific relative knowledge and technical expertise.
- Can offer funding or supply physical contributions to the center.
- Has relationships that the team can leverage to extend their outreach.
- Is available and can dedicate a significant amount of time to the project.

Outreach Tools



The outreach methods and techniques used in the outreach process must be tailored to the audience being targeted in order to effectively engage each stakeholder. The tools should be clear and concise while still stating the key points in a way that relates to the audience. These different tools can include:

- Websites
- Social media accounts/posts
- Text message chains
- Statistics
- Newsletters
- Emails
- Paper mail
- Brochures
- Flyers/posters
- Meetings
- Presentations
- Videos
- Maps
- Interactive media

Developing an Outreach Plan



The outreach plan need not be specific at this stage of the process, and the plan is likely to change and grow as the project progresses. In general, the outreach plan should include:

- A list of the project's stakeholders (outlined in the previous section) and their potential roles in the project
- Outreach goals for each stakeholder (i.e., what the team is looking for from the relationship and what they hope the outcome of their conversation will be)
- The best ways to reach out to and communicate with the stakeholders
 - In-person Interview (group or individual)
 - Virtual interview
 - Phone call
 - Email
 - Text message
 - Through an intermediate contact
- Initial messages and plans for making initial contacts that are specific to the stakeholder
 - What tools to use (from the previous section)
- Prepare all materials for the meeting
 - Presentations, workshops, and meetings require a well-thought-out plan. For each of these interactions, the team must prepare an agenda and plan including the purpose of the meeting, who will be in attendance, where the meeting will take place, and the objectives of the meeting
- Create a tentative schedule for each meeting

Storytelling



At this stage, the team should have the planning and support required to begin their outreach. When looking to engage potential stakeholders in the team's project, storytelling is an effective technique that can captivate stakeholders and influence their involvement in the project. When having conversations with different stakeholders, the story can be modified to apply to the specific stakeholder in question. It is important that when communicating the project goals, objectives, missions, processes, and progress, that the information being presented is tailored to the audience who the team is seeking to persuade to join in the efforts. The stakeholder must be able to see how the project relates to them, what their role could be in the project, and how the project can benefit them or leverage their own position. The following is an outline of how to construct a powerful and effective story when pitching the project to a stakeholder:

1. Begin with an attention-grabber.

- The story will need some type of compelling hook to grab the audience's attention. This could be by using a particularly interesting or surprising statistic, anecdote, or visual media. The relevance of this hook to the project should be clearly recognizable within 30 seconds.

2. Establish the relationship to the audience.

- Next, find a way to relate the story directly to the stakeholder. When the story applies to the audience, engagement increases. This can be done by using specific names, places, or other relevant information.

3. Where's the beef?

- With the audience's attention, now it is time to dive into the main story. This is where the details about the project can be inserted.

4. Call to action.

- Finally, use a call to action to demonstrate what it is the team is looking for from the audience. Tie the story together and relate it to what the team is asking for.



6. Finances

Chapter Overview:

Budgets.....	43
Budget Templates.....	44
Funding Opportunities.....	45
Grants.....	46
Grant Applications.....	47
Fundraising.....	48

Budgets



The first step in organizing financial information and preparing to seek funding is creating a budget. It is important for the team to have an outline of the expenses that the community center will have in order to construct a financial plan for the community center's operations. This plan is necessary to determine how feasible the community center plans are as well as to decide how to allocate funds. Having a budget can also be used to present to potential sponsors, partners, and donors to display exactly what funds are needed and where contributions will be used, as some donors may want to contribute to specific aspects of the project. Having a budget demonstrates that the project has been organized and thoroughly planned. Of course, budgets can be subject to change. Nevertheless, constructing a tentative budget is a foundation that may be built upon as the project progresses. Some tips for creating a budget include:

- Estimate the initial costs to start the community center
- The costs of making structural improvements to the building
- The costs of the programs being offered
- The costs of maintaining and operating the center
- The costs of any necessary equipment
- The costs of fundraising
- Allocate a reserve to cover any unexpected financial setbacks

This process may require the help of external sources, including contractors as well as other organizations that have or are currently working on similar projects. Utilize the information in Chapter 4 to locate contacts who can assist with these financial assessments.

Budget Templates



Cafe

Item	Budget	Actual	Difference
Big table for the bar	-	-	-
Dining chair	-	-	-
Dining table	-	-	-
Formica sink	-	-	-
Large fridge	-	-	-
Large freezer	-	-	-
Industrial grill	-	-	-
Wall shelving	-	-	-
Metal shelving	-	-	-
Waiting room benches	-	-	-
Marble stand	-	-	-
Food stand/dispenser	-	-	-
Heat lamp	-	-	-
Total	\$0.00	\$0.00	\$0.00

Clinic

Item	Budget	Actual	Difference
Cabinet	-	-	-
Examining table	-	-	-
Operating table	-	-	-
Desk	-	-	-
Desk chair(s)	-	-	-
Partition	-	-	-
IV machine	-	-	-
Vital monitor	-	-	-
Basic operating equipment	-	-	-
Basic medical supplies	-	-	-
Total	\$0.00	\$0.00	\$0.00

Wood Shop

Item	Budget	Actual	Difference
Workbench	-	-	-
Stools	-	-	-
Shelving	-	-	-
Tools	-	-	-
Power tools	-	-	-
Laser cutters	-	-	-
Total	\$0.00	\$0.00	\$0.00

CPR Classroom

Item	Budget	Actual	Difference
Table/Desk	-	-	-
Chair	-	-	-
Shelving	-	-	-
Projector	-	-	-
Smartboard	-	-	-
Whiteboard	-	-	-
Total	\$0.00	\$0.00	\$0.00

Spinning Room

Item	Budget	Actual	Difference
Spinning machine	-	-	-
Flexiglass screen	-	-	-
Total	\$0.00	\$0.00	\$0.00

Pharmacy

Item	Budget	Actual	Difference
Over the counter drugs	-	-	-
Storage shelves	-	-	-
Checkout desk	-	-	-
Desk chair(s)	-	-	-
Total	\$0.00	\$0.00	\$0.00

Cyber Library

Item	Budget	Actual	Difference
Computer desk	-	-	-
Computers	-	-	-
Monitors	-	-	-
Rolling chair	-	-	-
Library shelving	-	-	-
Library books	-	-	-
Decorations	-	-	-
Total	\$0.00	\$0.00	\$0.00

Queen Bee Classroom

Item	Budget	Actual	Difference
Table/Desk	-	-	-
Chair	-	-	-
Shelving	-	-	-
Projector	-	-	-
Smartboard	-	-	-
Whiteboard	-	-	-
Total	\$0.00	\$0.00	\$0.00

Hurricane Resiliency Rooms

Item	Budget	Actual	Difference
Cat	-	-	-
Bed	-	-	-
Bunk bed	-	-	-
Changing table	-	-	-
Shower	-	-	-
Total	\$0.00	\$0.00	\$0.00

Hurricane Resiliency Rooms

Item	Budget	Actual	Difference
Cat	-	-	-
Bed	-	-	-
Bunk bed	-	-	-
Changing table	-	-	-
Shower	-	-	-
Total	\$0.00	\$0.00	\$0.00

General Needs

Item	Budget	Actual	Difference
Wifi	-	-	-
Power	-	-	-
Paint	-	-	-
Total	\$0.00	\$0.00	\$0.00

This is a budget template that can help keep track of all the needs for each room in the community center. Everything that is needed to run each room properly is listed under its corresponding room as seen above. We provide an editable version to the management team in the form of an excel spreadsheet

Funding Opportunities



With the community's support, a list of contacts, and an outlined budget, the team is ready to begin seeking funding opportunities to support the community center. There are several opportunities for funding at the disposal of a community center project. Many of the techniques used to obtain funding are intertwined with the information outlined in the previous chapter on outreach. Once again, some of the following techniques may be helpful in advertising the project to potential donors:

- Use email aliases, paper mail, community bulletin boards, flyers, and newsletters.
- Hold a town hall meeting:
 - Invite potential donors, sponsors, partners, philanthropists, government officials, and media.
- Contact media outlets to market the project

While these techniques are useful in generating interest and awareness for the team's project, the team will also have to contact potential donors and sources of funding directly, such as by:

- Meeting with representatives from local businesses, charities, religious and cultural groups, for-profit organizations, and individual philanthropists.
- Reaching out to politicians and community and government leaders.
- Applying for government funding.
- Applying for grants

Grants



Apply for grants that fall under disaster relief or community development: Determine which grants the community center is eligible to apply for. Identify what the application processes consist of. Consider locating professional assistance with these applications when they are beyond the scope of the WPI team and the sponsors' knowledge.

A grant is defined as "a sum of money given by a government or other institution for a particular purpose" (Collins English Dictionary, 2021). Grants are one of the best options for funding nonprofit community center projects, as the organization does not have to pay back the funds they were provided with. Federal grant funding currently makes up about 23% of all government funding in Puerto Rico and is becoming an increasingly popular way to help smaller communities bounce back from natural disasters (Commonwealth of Puerto Rico, n.d.). Grants called discretionary grants can be administered by the federal government to an organization, but more reliable funding is available via state governments and independent organizations. There are different types of common grants, however "startup grants" and "project/program" grants are most specific to hurricane relief and community center projects. To be eligible to apply for a grant, an organization must fall under one of the following categories (grants.gov, n.d.):

- Government Organizations
 - State governments
 - County Governments
 - City or township governments
 - Special district governments
 - Native American tribal governments (federally recognized)
 - Native American tribal governments (other than federally recognized)
- Education Organizations
 - Independent school districts
 - Public and state-controlled institutions of higher education
 - Private institutions of higher education
- Public Housing Organizations
 - Public housing authorities
 - Indian housing authorities
- Nonprofit Organizations
 - Nonprofits having a 501(c)(3) status with the Internal Revenue Service (IRS), other than institutions of higher education
 - Nonprofits that do not have a 501(c)(3) status with the IRS, other than institutions of higher education
- For-Profit Organizations
 - Organizations other than small businesses

Grant Applications



Applying for grants is a difficult and time-consuming process, particularly without experience. Therefore, the following basic steps are recommended for approaching grant applications:

1. Draft a proposal summary
2. Introduce the applicant and organization
3. Establish the problem statement
4. Provide objectives and desired outcomes
5. Explain step by step of how the project will be executed
6. Describe the skills and the training that the staff has
7. Explicate management and progress sheets
8. Layout the expenses and budget plan
9. Express the long-term impact of the funding

The more information that is included to support the applicant's mission, the better. However, it is strongly recommended that the proposal summary is attention-grabbing to engage the reviewers in the project. Also, be sure to include a cover letter that describes the requested grant amount, project mission, proposal contents list, references, contact details, and signature of the organization's director. For more references on how to write successful grant applications refer to sources below.

- *Creating Winning Grant Proposals: A Step-by-Step Guide* by Anne L. Rothstein
- *Proposals That Work: Guide for Planning Dissertations and Grant Proposals* by Lawrence F. Looke, Waneen Wyrick Spirduso, Stephen J. Silverman
- *Getting Funded: The Complete Guide to Writing Grant Proposals* by Mary S. Hall, Susan Howlett
- <https://learning.candid.org/resources/knowledge-base/grant-proposals-for-individual-projects/>
- <https://www.instrumentl.com/blog/successful-grant-proposal-examples>
- <https://donorbox.org/nonprofit-blog/grant-proposals/>

Fundraising



Hosting fundraising events is a fun way to engage the community in the project as well as raise funds to support the center. Fundraising events can be creative and there are a variety of ways that such events can attract attendees and generate income. Here are a few ideas to get the team started:

- Movie screenings
- Live performances
- Poetry slams
- Paint nights
- Game nights
- Athletic tournaments

To help make these events successful, try the following:

- Set ticket prices and charge for admissions, concessions, etc.
- Obtain sponsor for events in exchange for also promoting the sponsors.
- Solicit community volunteers to form committees and help organize and the events.

When working with non-profit organizations, there are often restrictions when it comes to assigning a monetary value to providing goods and services, and this exchange is often forbidden. However, the above fundraising events may still be conducted, and community contributions may be welcomed, but not required. Those who are able to may donate "suggested" amounts for admission, participation, concessions, etc.



7. Evaluation & Modification

Chapter Overview:

Evaluation Techniques & Methods.....	50
Evaluating Programs & Services.....	51
Self-Evaluation.....	52

Evaluation Techniques & Methods



When evaluating the success of the programs and services, or even just the project's progress, there are different types of standards that can be used: quantitative and qualitative. Quantitative measurements can refer to data such as money spent or funds raised for each service, or the number of people who attend programs or use the services being provided. The qualitative measurements cannot be measured with data, such as people's survey responses to how well-prepared they are to cope with a catastrophic weather event or comfort levels using technology.

The evaluation method that is being used should be selected to best-fit what is being measured. The method can be either qualitative or quantitative, or a mix of the two. Bear in mind that quantitative methods measure outputs, while qualitative methods assess outcomes. The evaluation method should be simple and well-defined. The evaluation method also should not be too time or resource-consuming. The results that are obtained from the evaluation method should also be useful and easily communicable and should help increase the project team's understanding of what they are evaluating. The methods should also be modifiable if necessary, that way they can be adjusted depending on the situation. In tandem, the evaluation methods should be current, and should be able to assess the success of a project aspect at the specific stage that is relevant.

With evaluation methods in mind, it might be difficult to determine what outputs and outcomes should be measured to obtain useful information. Using evaluation methods correctly allow for different outputs and outcomes to be measured appropriately to yield effective feedback. The methods used should:

- Have a control or baseline to compare the results to the initial point.
- A goal for the output or outcome being measured.
- A threshold for determining whether the results of the evaluation are unsatisfactory or successful.
- Yield a result that is easily linked to the broad project goals.
- Provide meaningful results.
- Be easy and inexpensive to use.
- Utilize less measurements to convey data and results.
- Be flexible.

Evaluating Programs & Services



Because communities' priorities can change overtime, it is necessary to continually reevaluate the community center's main focuses in terms of what programs and services it has to offer. Although some adjustments can be made simply by gauging demand for different services, developing a system for adjusting programming and services at different points in time can provide reassurance that the community center is moving in the right direction. As possible ways to do this, the team can use some of the following evaluation tools that can be used to reflect on the community center's success and make improvements for the future:

- SWOT Analysis to identify:
 - Strengths
 - Weaknesses
 - Opportunities
 - Threats
- Business action plans, covering:
 - Goals
 - Action plans
 - Expected results and how they will be measured
 - Necessary resources
- Services analysis:
 - These analyses are conducted to provide a foundation upon which new goals can be set. Two of the major domains of these analysis are to:
 1. Determine the community's needs and priorities by:
 - Evaluating the program and service usage to understand the level of demand of each program/service.
 2. Gauge the success of the services being offered by:
 - Evaluating the community's responses to additions and changes in programs using periodic surveys.

Self-Evaluation



In addition to evaluating individual programs and services, the team can also evaluate the other aspects of the project, as well as the team's own functioning. This self-evaluation can be informal and performed regularly throughout the project period, or it can be a more formal assessment, depending on the project team's needs. This technique can be used to:

- Evaluate the general progression of the team's work in relation to the team's broad goals.
- Determine obstacles that have hindered the overall project's advancement.
- Assess the success of the outreach to and engagement of stakeholders, as well as how stakeholders have had an impact on the project.
- Reflect on the different findings that the team has discovered.
- Reflect on how the project has changed or been modified since the starting point.
- Evaluate the team dynamics and how well the team works together, the division of labor, and the efficiency of the team's use of time.



II.

Centro de Desarrollo & Servicios Comunitarios: Site-Specific Toolkit

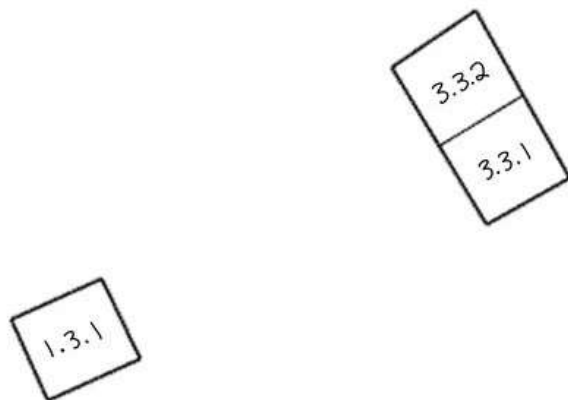


1. Directory

Chapter Overview:

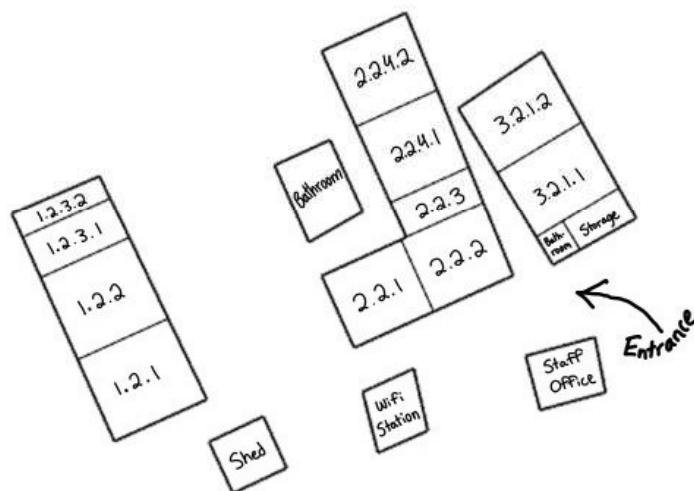
Floorplan.....35

Floorplan



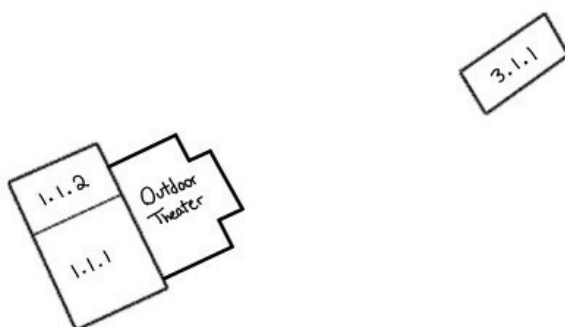
3rd Floor:

- 1.3.1 - Cyber Library
- 3.3.1 - Self Defense / CrossFit
- 3.3.2 - Emergency Certification Classroom



2nd Floor:

- 1.2.1 - Wood shop for Beeboxes
- 1.2.2 - Queen Bee Classroom
- 1.2.3.1 - Conference Room
- 1.2.3.2 - Teachers Lounge
- 2.2.1 - Pharmacy
- 2.2.2 - Medical Clinic
- 2.2.3 - Waterhouse for Staff
- 2.2.4.1 & 2 - Refuge
- 3.2.1.1 - Kitchen
- 3.2.1.2 - Cafe / Dining



1st Floor:

- 1.1.1 - Agriculture
- 1.1.2 - Warehouse
- 3.1.1 - Honey Processing



2. Current Programs & Services

Chapter Overview:

Building 1.....	58
Building 2.....	62
Building 3.....	65

1.1.1 Agricultural Practices



The agriculture classroom is a space where people can learn about agricultural practices and how to grow their own fruits and vegetables. In addition to instructional classes, residents will be assigned small plots of land within the classroom to gain hands-on experience with the methods they are learning.

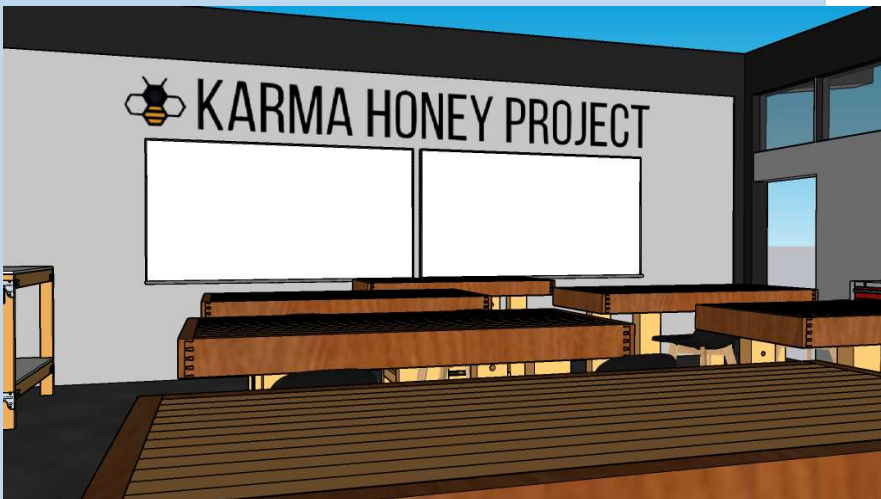
In the future, students who take the class will be assigned a half an acre of land in Cubuy that they may use at their will to grow their own crops. The crops that the community members grow on their plots may be used for personal use, and may also be sold back to the community center for use in the community kitchen, as well as to be rebranded under ID Shaliah's brand *Desde Mi Campo* to be taken to market.

Classes will be held in the afternoons to accommodate all schedules. The hope is that residents will gain knowledge in growing crops that are less common in the area to create a variety in their own diets, in the community kitchen, as well as in local markets.



BY ID **SHALIAH INC**

1.2.1 Wood Shop



This space will allow people to channel their creativity in crafting bee boxes. A bee box is an enclosed structure where a colony of honeybees can live and build a honeycomb. The nectar collected by bees is broken down into simple sugars and stored in the honeycomb as honey. Constructing these bee boxes can help increase the bee population which can in turn have a positive impact on food supply as they pollenate crops and increase the yield of the crops. The production of these bee boxes for use throughout Puerto Rico is valuable in increasing crop yield and stimulating the local economies by creating a honey business for residents.

Classes are structured to be taught by a woodworker five days a week for an hour each day, although this schedule is subject to change on a weekly basis depending on demand. Class organization includes a parent-child class in addition to individual sessions.



1.2.2

Queen Bee Classroom

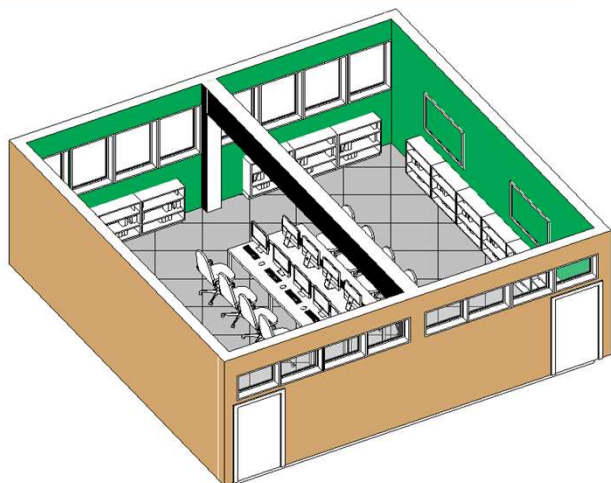
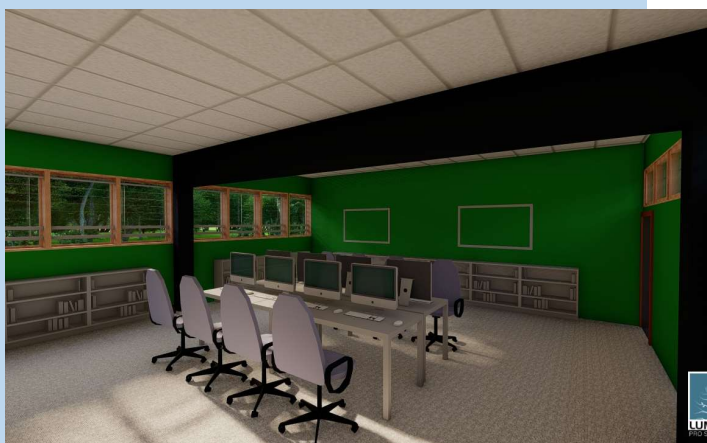


This space will serve as a classroom to learn about how to raise bees through "queening" and manage their own beehives. This is the process of finding and introducing a queen bee into a new beehive, thus making other bees follow and populate the hive to produce honey. Teaching this process again, can help increase the bee population which can in turn have a positive impact on food supply as they pollinate crops and increase the yield of the crops. The production of these bee boxes for use throughout Puerto Rico is valuable in increasing crop yield and stimulating the local economies by creating a honey business for residents.

Classes are structured to be taught five days a week for an hour each day, although this schedule is subject to change on a weekly basis depending on demand. The Karma Honey Project plans to purchase back the honey created by the students, to then redistribute.



1.3.1 Cyber Library

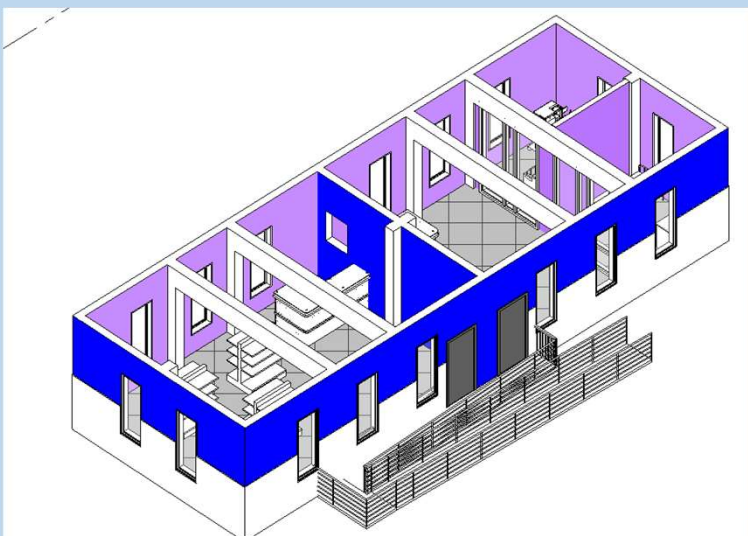


The cyber library is a space where community members can access guided technological assistance, an open library, and classes in finance and civil law taught by professionals in the field. The library will include bookshelves with books, magazines, newspapers, dictionaries, encyclopedias, maps, etc. For community use. The library will be operated on the honor system with no library card necessary. The library will be supplied by donations, and people may "check out," return, and donate materials at their leisure. The cyber library will consist of 10 desktop computers, including one to serve as a backup system for the pharmacy and medical clinic to also contain the software.

The library will be open to the public during the day for general access to the computers on a first come first serve basis. During the day, a volunteer staff member will be available to assist people with the use of computers. These volunteers will be able to assist with filling out government forms and paperwork online.

Educational classes will be offered in the evenings (i.e., from 5:00 p.m. - 6:00 p.m., or 6:00 p.m. - 7:00 p.m.) on an alternating schedule (i.e., one class on Mondays, Wednesdays, & Fridays, and a different class on Tuesdays & Thursdays). The programs offered will be finance classes and civil rights classes. The finance classes will be taught by accountants and volunteers with substantial knowledge on the subject. The civil law classes will be instructed by lawyers and volunteers with relevant experience. There will be no charge associated with these programs, however monetary donations will be accepted. The only requirement for courses will be registering for a seat in the class in advance.

2.2.1 Pharmacy

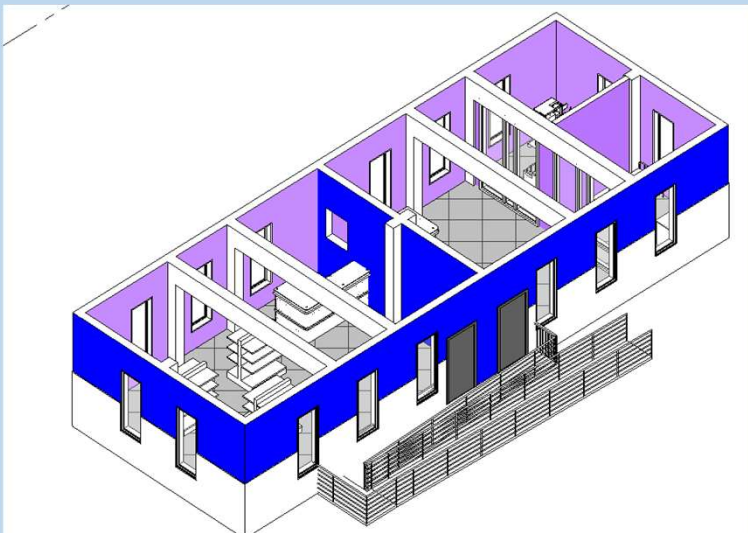


The center is complete with a pharmacy that will be open to the public Monday through Friday from 8:00 a.m. to 5:00 p.m. Saturday hours are reduced from 9:00 a.m. to 3:00 p.m. Business hours for the pharmacy will be extended to 9:00 p.m. on weekdays in the near future. The pharmacy includes access to both prescription and over the counter medications. All pharmaceutical services will be free to patients covered by Medicare health insurance.

The center is partnered with the Bienestar Health Group and GelyCan to provide pharmaceutical services. They have generously donated the fridges, computers, and software to operate the pharmacy.



2.2.2 Medical Clinic

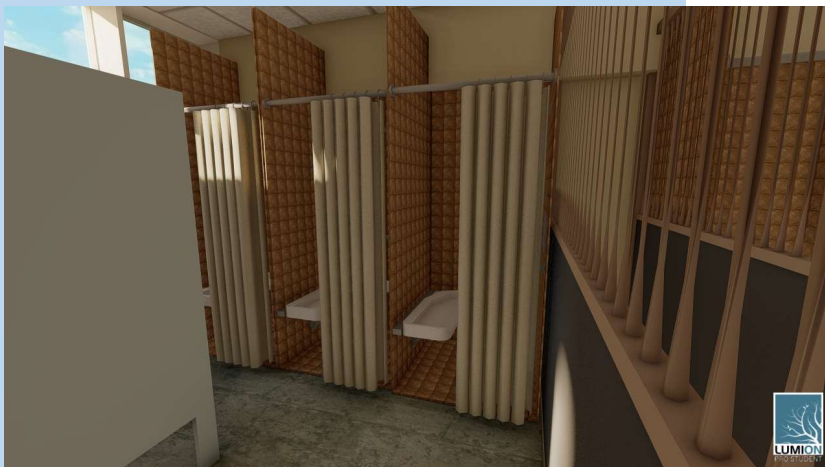


The center is complete with a medical clinic with urgent care services. The clinic will be open Monday through Friday from 8:00 a.m. to 5:00 p.m. Saturday hours will reduce from 9:00 a.m. to 3:00 p.m. The ultimate goal is to operate the medical clinic for urgent care services on a 24-hour basis. The clinic will also provide ambulance service to the clinic, and a physician is available to make home visits to those who are unable to commute to the community center. All medical services will be free to patients covered by Medicare health insurance.

The center is partnered with the Bienestar Health Group to provide medical services. They have generously donated the fridges, computers, and software to operate the pharmacy and clinic. We are very grateful to the San Juan Bautista School of Medicine for providing training for students to become doctors and nurse practitioners to staff the medical clinic.



2.2.4.1 & 2.2.4.2 Refuge



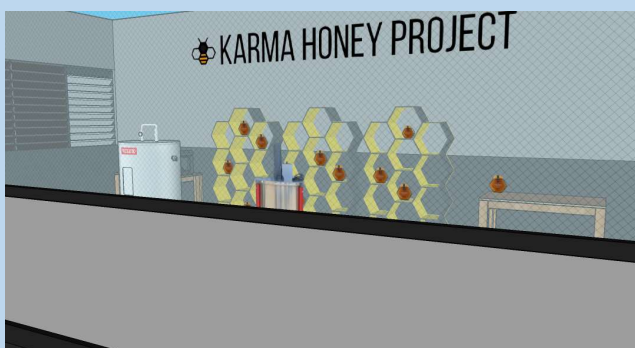
The refugee space will be utilized to provide emergency shelter to community members during the event of a natural disaster. The refuge will also offer shelter to homeless community members or those without a place to stay for any reason. This space will be complete with twin beds and cots, showers with clean, running water, and restrooms with toilets and sinks in the adjacent building.

The refuge will be able to house approximately 20 guests at a time. The length of time that each person will be allotted to stay will be subject to circumstance. The refuge will provide necessary toiletries to the guests and clean clothing if necessary. The beds and cots will be made with fresh pillows and clean sheets and blankets upon each arrival and departure. For homeless residents, they will be permitted to take their pillow and blanket with them when they leave.

Guests will not be charged for their stay. The products provided to guests will be supplied by donations. If guests are able to contribute at the time of their stay or in the future, all donations are welcome. The refuge will be maintained by volunteers.

3.1.1

Honey Spinning Room



The honey spinning room will be a place for the honey produced by the bee boxes to be processed and made so that it is ready for packaging and distributing. This room will contain all of the necessary equipment required to do this process. Visitors and community members will be able to watch demonstrations on one side of a glass dividing wall, and then get dressed in the special protective gear and be able to take part in the process themselves.

This room will be run by a beekeeper employed by the Karma Honey Project on a need-to-use basis. Honey is normally Harvested 2-3 times per season so the frequency that the room will be used will be based on the number of beehives throughout the community.



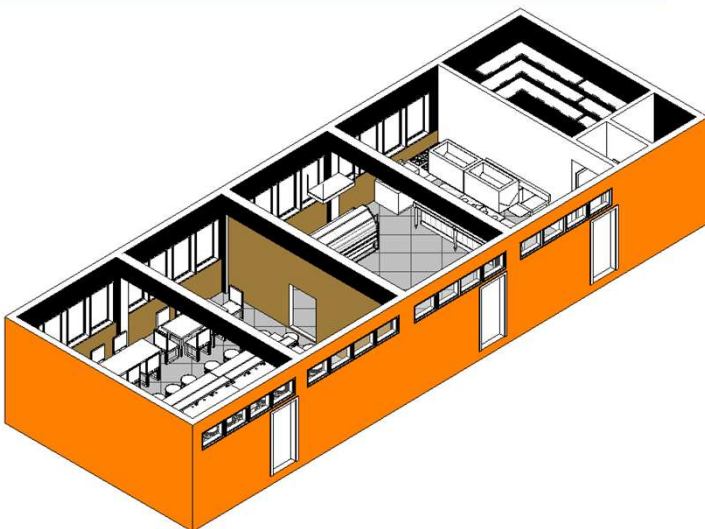
3.2.1.1 Kitchen



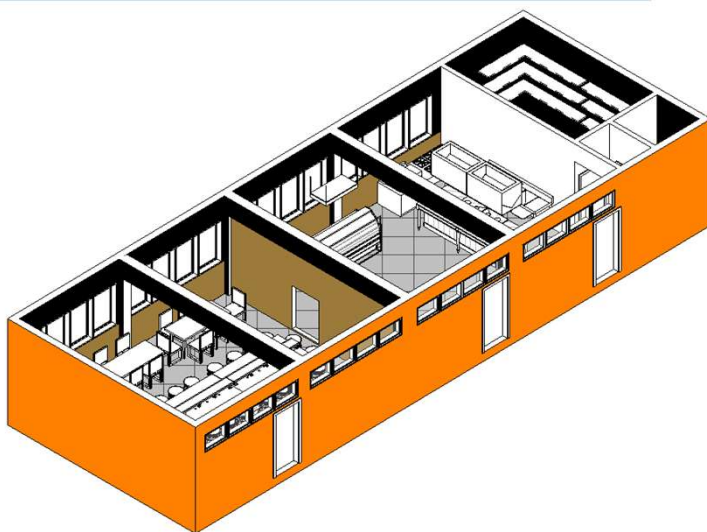
The kitchen will be utilized to prepare hot and cold meals from 8:00 a.m. to ~3:00 p.m. three or five days a week. Both hot and cold meals will include healthy options prepared in the center's own kitchen by a professional, paid kitchen staff.

The kitchen will be complete with refrigerators, ovens, stovetops, grills, and stainless-steel tables and countertops to put cooking equipment on and for food prep space. There is a pantry in the back of the kitchen that will have racks and shelves and to store food. Dishes will be hand-washed in large farm sinks, and a hot water tank will be used to ensure hot water is available for washing dishes. Both plastic and reusable silverware will be used, depending on the meals being served. Once food has been prepared, components of each meal will be stored in refrigerated and heated serving stations, similar to those in a buffet or at Subway.

There will be a dividing wall in between the kitchen and the café to mimic the atmosphere of a restaurant.



3.2.1.2 Café



The café is adding a twist to a typical soup kitchen. The community cafeteria is restaurant-style with the feel of a modern café where community members can come sit down, enjoy meals, and socialize. The café will have a waiting area, and different types of seating options to suit all patrons, from tables for two to family size tables, to high-top island tables with stool seating.

Members of the community who are in dire financial situations will receive food vouchers that they may use at the café for meals served for breakfast, lunch, and an early dinner, served at regular times each day. Those who are not provided with vouchers may still convene at the café and enjoy a meal for a low cost of \$3 to \$5 per meal. The funds raised and donated through the purchase of these meals will be used toward purchasing groceries and the ingredients to sustain the kitchen to continue to provide meals.

Apart from the regularly provided meals, snacks and light refreshments will be available to those passing by or visiting the community center for other means. Twice a month, the café will serve free meals to all members of the community who are interested.

3.3.1 Self Defense / Crossfit



This space will be operated by the Emergency Management Task Force (E.M.F.T.) to provide classes in strength training and self-defense. The classes will be a combination of cross-fit and self-defense techniques.

The room will be equipped with a variety of strength and conditioning equipment, including rock walls, balance beams, free-hanging ropes, floor mats and pads, etc. The programs will begin attendees with strength training and will progress into self-defense as strength is built.

The E.M.F.T. staff will be responsible for providing the equipment and staffing for the programs. Programs will be offered in the afternoons after 4:00 p.m. to make them available to as many residents as possible.



3.3.2 Emergency Preparations



This space will be used to offer classes in emergency preparations. Programs will include instruction in CPR, first aid, helicopter landing, construction vehicle operation, water treatment and purification, food preservation, emergency backpacks, and everything survival.

These programs and the supplies required for instruction will be provided by Edgar Ortiz Lugo of the Emergency Management Task Force. Programs will be offered on a need-based schedule.





3. Building Transformations

Chapter Overview:

Exterior Progress & Projections.....	71
Interior Progress & Projections.....	72

Exterior Progress & Projections



Before



After



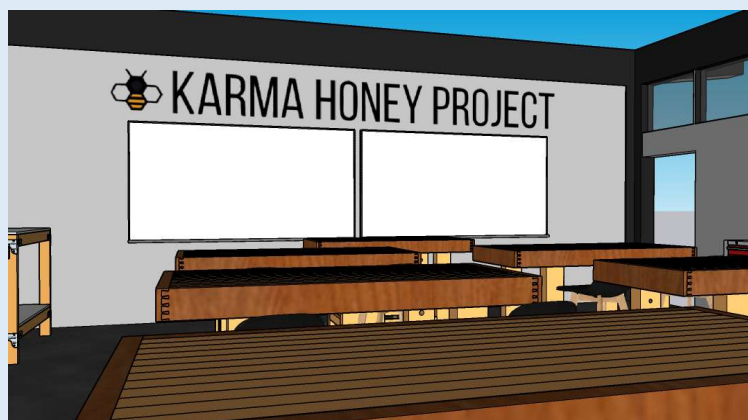
Interior Progress & Projections



Before



After



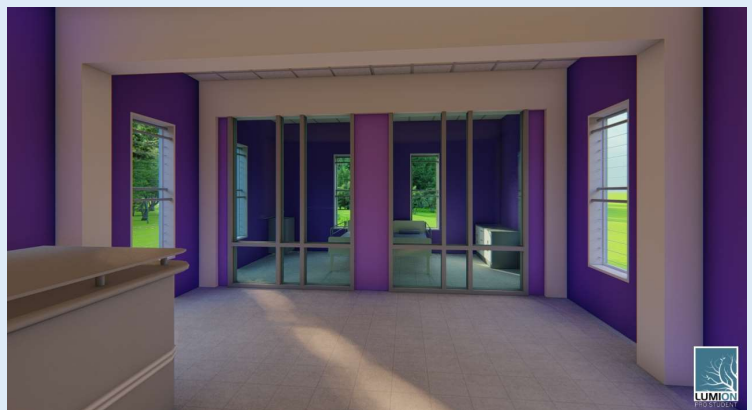
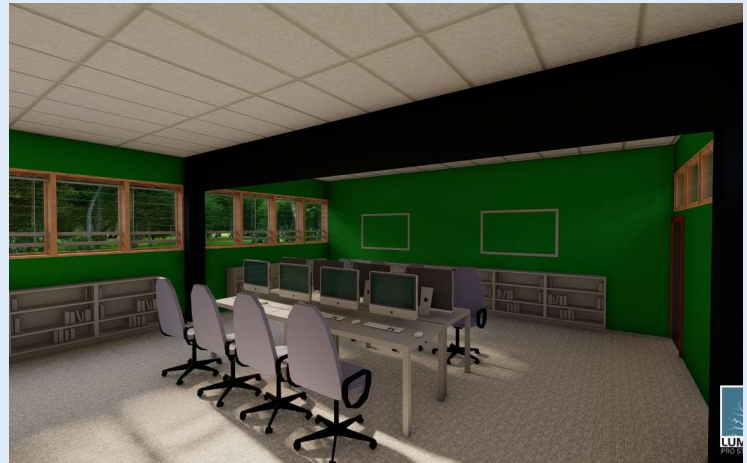
Interior Progress & Projections



Before



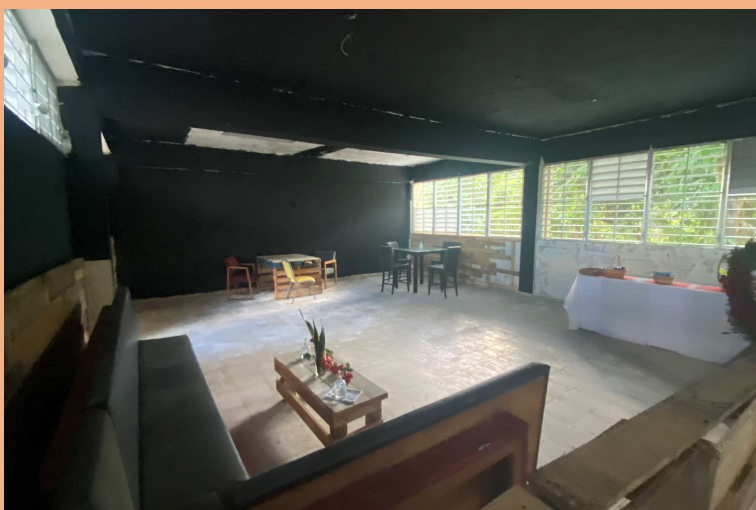
After



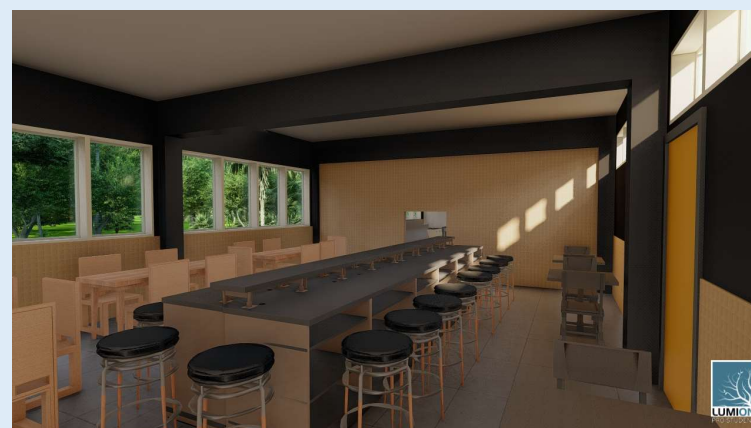
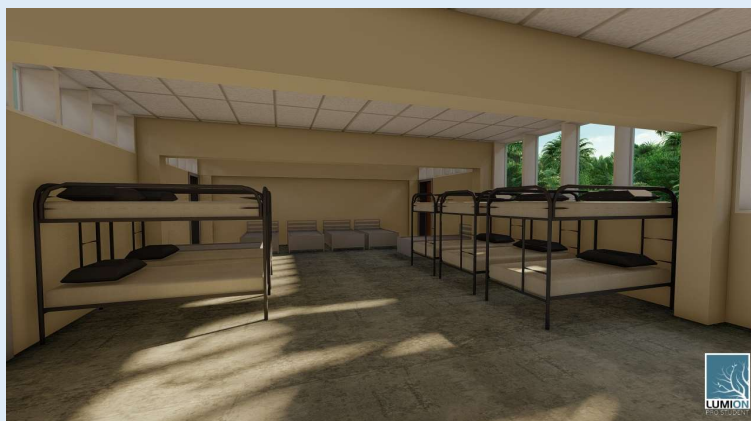
Interior Progress & Projections



Before



After



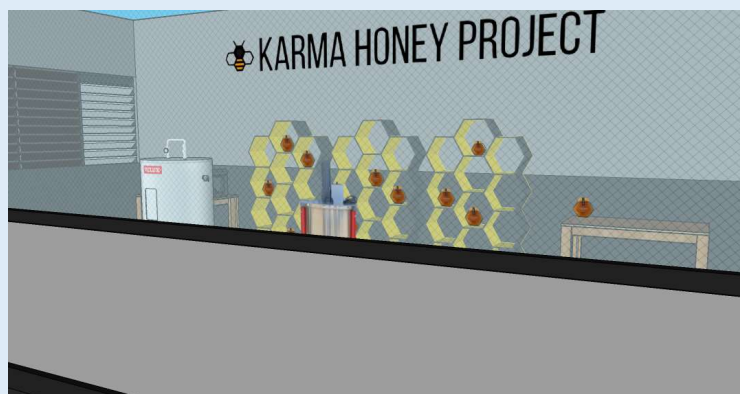
Interior Progress & Projections



Before



After





4. Outreach Plans

Chapter Overview:

Outreach Contact information.....	77
Outreach Email Template.....	78

Outreach Email Template



Good (whatever time it is) **company (personal/direct name)**,

My name is **blank**, and I am a part of a team currently working on a community project in the Cubuy-Lomas region of Puerto Rico. This area was devastated by Hurricane Irma and Hurricane Maria, leaving residents without power and water in some areas for almost two years.

We are taking an abandoned unused school and rebuilding it into a center for the community. Our center will feature a walk-in clinic, laboratory, pharmacy, free soup kitchen, organic food shop, and 5 classrooms where we will teach everything from agriculture to finance, Crypto and more.

In addition, we will have a refuge area, storage for emergency disaster supplies, honey spinning facility, wood workshop, indoor and outdoor theater area, greenhouses, organic agricultural area, farmers market, and community gardens.

We have provided a link to the community center's website so that you can read more about this amazing project and get a better understanding of how it will help the community. This project is sponsored by the Karma Honey Project and ID Shaliah, two community based, non-profit organizations located in Puerto Rico. Due to the nature of their organizations, support from different companies and organizations is vital to the completion of this project. We are reaching out to you to ask for your assistance in the form of a monetary donation or necessary supplies. We believe that you can assist us in obtaining **blank**. ***insert sentence about being able to provide pictures/more info about what you're trying to get them to donate*** We have already established relationships with local partners to meet electricity and photovoltaic needs. We are confident the center will be ready to open in January 2022 thanks to the help of various supporters.

We look forward to hearing back from you with any possible help you can offer.

Sincerely,
Blank



5. Donations & Contributions

Chapter Overview:

Donations & Contributions.....	80
Volunteers.....	81



6. Resiliency Operations

Chapter Overview:

Resiliency Preparations & Recovery.....	83
--	----

Emergency Preparations & Recovery



In the face of a catastrophic event, it is important to prepare, withstand, and then recover in order to provide a community with the best course of action. Preparation should be an ongoing process for communities in high-risk locations, but also should be heightened when an official event alert is announced. In order to withstand an event, it is necessary that the location in which you do so is safe and secure. Both preparing for and properly withstanding a catastrophic event are vital steps to facilitate the recovery process after an event. Once damage and necessities are assessed, resources and support organizations that may be of help should be identified and collaboration should be pursued. Additionally, it is important to listen to local authorities and sources that may provide an update on the situation. The following section breaks down how to prepare, withstand, and recover from a catastrophic event in the context of different community essentials.

Emergency Preparations & Recovery



Shelter

Pre-Emergency

- Refuge will run as a shelter for homeless
- Ensure there is enough space for projected people in need based off storm severity and evacuation notices
- Have an idea for what community members may need shelter beforehand
- Clear out any hazards that may fall such as weak trees

During Emergency

- Shelter in place
- Stay away from anything that may be of risk of falling

Post-Emergency

- Identify community members who most need a place to stay and provide them refuge

First Aid

Pre-Emergency

- Stock medicine and equipment that may be needed based on community profile

During Emergency

- Consider sending message to aid organizations, ration medicine if needed

Post-Emergency

- Continue to aid for those in need, replenish medical supplies
- Learn from experience, know what medical supplies was of high demand

Emergency Preparations & Recovery



Food

Pre-Emergency

- Stock Non-Perishables with at least 3-days of food per person that will be taking shelter
- Identify Dietary restrictions

During Emergency

- Ration food if needed

Post-Emergency

- Replenish food supply
- Reach out to different organizations including FEMA

Power Supplies

Pre-Emergency

- Stock batteries
- secure solar panels

During Emergency

- Ration energy sources if needed

Post-Emergency

- Replenish power supplies

Emergency Preparations & Recovery



Water

Pre-Emergency

- Fill water tanks
- Reduce water use for non-essential purposes
- Store water that doesn't necessarily need to be potable to flush toilets
- General rule of thumb is 1 gallon of potable water per person per day

During Emergency

- Continue to reduce non-essential water usage

Post-Emergency

- Replenish water

Communication

Pre-Emergency

- Reach out to organizations that may be of aid during an emergency like FEMA

During Emergency

- Listen in on updates from local radio/government sources

Post-Emergency

- Reach out to first responders and potential aid organizations



iii. Additional Resources & References

Chapter Overview:

Resources.....89

Resources



Agricultura.pr. "Departamento de Agricultura." *Agricultura.Pr*, 2018, <https://www.agricultura.pr>.

"Alcaldesa de Loíza Ofrece Ideas Para Solucionar El Problema de Escuelas Abandonadas." *Periódico Presencia*, 28 Apr. 2021, <http://www.presenciapr.com/alcaldesa-de-loiza-ofrece-ideas-para-solucionar-el-problema-de-escuelas-abandonadas/>.

Avila-Foucat, S. (n.d.). *Households' Resilience to Hurricanes in Coastal Communities of Oaxaca, Mexico*. <https://www-tandfonline-com.ezpv7-web-p-u01.wpi.edu/doi/pdf/10.1080/08941920.2018.1443236?needAccess=true>

Bischoff-Turner, Shelli. "An Integrated Strategy for Nonprofit Efficacy." *Nonprofit Impact*, 2007, pp. 1–10.

Borges-Mendez. (2020). *Community Development Corporations and Reconstruction Policy in Puerto Rico*. https://go.gale.com/ps/i.do?p=AONE&u=miln_c_worpoly&id=GALE%7CA649830962&v=2.1&it=r&ugroup=outside

Bredenoord, J., Park, J., & Kim, K. (2020). *The Significance of Community Training Centers in Building Affordable Housing and Developing Settlements*. <https://www.proquest.com/docview/2388409344?OpenUrlRefId=info:xri/sid:primo&accountid=29120>

Brechwald, Dana. *REGIONAL RESILIENCE TOOLKIT - 5 STEPS TO BUILD LARGE SCALE RESILIENCE TO NATURAL DISASTERS*. epa, July 2019, https://www.epa.gov/sites/default/files/2019-07/documents/regional_resilience_toolkit.pdf.

Brusi, R. (2021). Erasure and resistance: the state of public education in Puerto Rico. *International Journal of Qualitative Studies in Education*, 1–6. <https://doi.org/10.1080/09518398.2021.1956633>

Carreau C., Cobb J., Telepciak J. (1999). Minimizing Hurricane Damage to Houses in Puerto Rico. Under Interactive Qualifying Project No. 99D239I. Retrieved from Worcester Polytechnic Institute Scanned Projects Collection <https://digital.wpi.edu/collections/iqp?lcale=en>

CDPS. (n.d.). *Resiliency Center Concept*. Colorado Department of Public Safety. https://cdpsdocs.state.co.us/ovp/TRAC/Long-Term/Resiliency_Center_concept.pdf

Resources



- Coastal Structures. (n.d.). *How To Start Community Centers In Your Area* [..Com]. CoastalSteelStructures. <https://coastalsteelstructures.com/how-to-start-community-centers-in-your-area/>
- Colistra, C. M., Schmalz, C., & Glover, T. (2017). The Meaning of Relationship Building in the Context of the Community Center and its Implications. *Journal of Park and Recreation Administration*, 35(2), 37–50. <https://doi.org/10.18666/JPRA-2017-V35-I2-7448>
- College research ethics committee. (n.d.). *Ethical Issues in Interviews*. University of Glasgow College of Arts. https://www.gla.ac.uk/media/Media_237671_smxx.pdf
- Commonwealth of Puerto Rico. (n.d.). *Comprehensive Grant Management Manual*. <https://agencias.pr.gov/agencias/FederalFunds/Documents/Comprehensive%20Federal%20Funds%20Management%20Manual%20Final.pdf>
- de Angel, Yanel. *ResilientSEE-PR*.
- Democracy Collaborative. (n.d.). *Community Development Corporations (CDCs)*. <https://community-wealth.org/strategies/panel/cdcs/index.html>
- “EMFT Corporation.” *Twitter*, <https://twitter.com/EMTFpr>.
- Gonzalez, Candido. *Gelycan Corp in Canovanas - Behavioral Health Agency*. 2020, <https://npino.com/behavioral-health/1245843317-gelycan-corp/>.
- Grants.gov. (n.d.). *Grant Eligibility*. Grants.gov. <https://www.grants.gov/web/grants/learn-grants/grant-eligibility.html>
- Habitat for Humanity. (n.d.). *Mission*. <https://english.habitatpr.org/who-we-are/>
- Harrison, S. (2008). *A five year plan for strengthening and connecting the community*. <https://www.amrshire.wa.gov.au/library/file/1 Council/StrategicDocs/Community%20Development%20Plan.pdf>
- Hernández, J. (2021, April 28). Mayor of Loíza offers ideas to solve the problem of abandoned schools. *Periódico Presencia*. <http://www.presenciapr.com/alcaldesa-de-loiza-ofrece-ideas-para-solucionar-el-problema-de-escuelas-abandonadas/>

Resources



- Hinojosa, J., & Meléndez, E. (2018). *The Housing Crisis in Puerto Rico and the Impact of Hurricane Maria*. 9-15. https://d1wqtxts1xzle7.cloudfront.net/56850158/HousingPuertoRico-with-cover-page-v2.pdf?Expires=1631296496&Signature=UPzICQxW8C2h7iDehykZVFDCflnOjsYDcUeMXsZ65K5OdHv3BRuDco6Vs2qJDPpkquuMYOdWk8jV4BHB8xUWK-HbuTmFvaJqDLXTLODnxL5xrYrXB2sl3iXoP3XlaWPML099uGzGJ6GmhFAZcW-MGJxx7-YugQbzRZWI~6Z9TXlCN5TjCaASxxoyrDJzYUZmQga~L2CVsK~2FK7CPINfw5T814RqWm7fxodQZ4Rna7ThfhROvUWDQneeGxaBiVFpSPriXhrCQJMT~rYxilPjbqSTMWslODhCAXh1lGSaLAVKhh~WJLYyCJs9Zd3p50CwSk-foK3ZcXxLD8okiQOaw_&Key-Pair-Id=APKAJLOHF5GGSLRBV4Z
- Hinojosa, J., Severino Pietri, K., & Meléndez, E. (2019). Population Decline and School Closure in Puerto Rico. *Centro*, RB2019(01), 1-20. https://centropr.hunter.cuny.edu/sites/default/files/PDF_Publications/centro_rb2019-01_cor.pdf
- Hispanic Federation. (2020). *Housing & Community Development*. Hispanic Federation Puerto Rico. <https://hispanicfederationpuertorico.org/housing-community-development>
- Honl-Stuenkel, L. (2020, September 24). *Records reveal: 1.5 years after Hurricane Maria, FEMA had sent only \$3.3 billion to Puerto Rican gov't*. Citizens For Ethics. <https://www.citizensforethics.org/reports-investigations/crew-investigations/records-reveal-1-5-years-after-hurricane-maria-fema-had-sent-only-3-3-billion-to-puerto-rican-govt/>
- Housing And Urban Development. (n.d.). *Community Development*. https://www.hud.gov/program_offices/comm_p_lanning/communitydevelopment
- Housing and Urban Development. (n.d.). *Community Development Block Grant Mitigation Program*. <https://www.hudexchange.info/programs/cdbg-mit/>
- Jackson, J. (2018). *3 DIY Community Resource Centers in Puerto Rico You Need to Know* [..Com]. Remezcla. <https://remezcla.com/lists/culture/3-diy-community-resource-centers-in-puerto-rico-you-need-to-know/>
- Karma Honey Project. (2020). *About Us*. Karma Honey Project. <https://karmahoneyproject.com/pages/about-us>

Resources



- King, T. (2019). *How to Get Funding to Open a Community Recreation Center* [..Com]. BizFluent. <https://bizfluent.com/funding-open-community-recreation-center-5097.html>
- Kunstler, W., & Kuby, R. (1992). *The Disenchanted Island, Puerto Rico and the United States in the Twentieth Century*. <https://books.google.com/books?hl=en&lr=&id=JfJYJ9u4JP4C&oi=fnd&pg=PP7&dq=Puerto+Rico+and+united+states&ots=8HBaGgOp74&sig=kz6QFFEq4qLGZTRZ1u7J6hDZTnE#v=onepage&q=resources&f=false>
- [Map]. (n.d.-a). [Map]. <https://www.bing.com/maps?q=Cubuy+puerto+rico+&FORM=HDRSC6>
- [Map]. (n.d.-b). [Map]. https://en.wikipedia.org/wiki/Cubuy,_Can%C3%B3vanas,_Puerto_Rico
- Maria del Mar Santiago. (n.d.). *Create 2 Resiliency Centers in Cano Martin Pena* [..Org]. Globalgiving. <https://www.globalgiving.org/projects/create-2-resiliency-centers-in-cano-martin-pena/reports/#menu>
- Melendez, E. (2020). *Puerto Rico Housing and Community Development Industry's Capacity for Disaster Recovery*. <https://go.gale.com/ps/i.do?p=AONE&u=mlic worpoly&id=GALE%7CA649830961&v=2.1&it=r&ugroup=outside>
- Meschede, T., Chaganti, S., & Krajcovicova, E. (2015). *Planning for a new Community Center for Homeless Individuals: Stakeholders reflect on services and the need for system change* (pp. 1–23) [Proposal]. Brandeis University. <https://heller.brandeis.edu/iere/pdfs/housing/FBMS-focus-groups.pdf>
- Municipio Canóvanas. "Gobierno Municipal de Canóvanas." *Facebook*, https://www.facebook.com/municipio.canovanas/?ref=page_internal.
- Nechama. (n.d.). Nechama.Org. <https://nechama.org/>
- "Nonprofit Marketing with a Purpose: Developing a Strategic Marketing Plan to Engage New Audiences." *Nonprofit Impact*, Jan. 2004, pp. 1–11.
- Others & Belonging Institute. *Report: Puerto Rico's mass closures of public schools eroding communities*. (2020, September 2). Retrieved October 4, 2021, from <https://belonging.berkeley.edu/report-puerto-ricos-mass-closures-public-schools-eroding-communities>

Resources



- Peréz, M. (2002). The place of abandonment: Geography, race, and nature in Puerto Rico. *UMI*, 3063517, 1-24. <https://www.proquest.com/openview/fabcde6197a0713433elcc6955aft86db/1?pqorigsite=gscholar&cbl=18750&diss=y>
- Perkins and Will. *COMMUNITIES TOGETHER A GUIDE FOR RESILIENT COMMUNITY CENTER DESIGN IN ISLAND COMMUNITIES*. ResilientSEE, 2019, https://static1.squarespace.com/static/5b03087436099b5102da89ba/t/5da759a117efa74e511ffa60/1571248561589/Resilient+Community+Hubs+Guide_ENGLISH_Digital.pdf.
- PR Renace. *Get Involved*. https://www.puertoricorenaceinc.com/get_involved.
- Prigov, A. (2019, May 4). *School Closure Brings Community Rupture*. Conflict Urbanism Puerto Rico Now. <http://puerto-rico-now.c4sr.columbia.edu/2019/05/04/puerto-rico-now.c4sr.columbia.edu/2019/05/04/Prigov.html>
- Puerto Rico Hurricane Maria*. (2021). <https://www.fema.gov/disaster/4339>
- Puerto Rico Hurricane Relief Community Center*. (n.d.). (.Org). Biotectureplanetearth. <https://www.biotectureplanetearth.org/puertoricool/>
- Rafael Hernández, José. "Mayor of Loíza Offers Ideas to Solve the Problem of Abandoned Schools." *Periódico Presencia*, 28 Apr. 2021, <http://www.presenciapr.com/alcaldesa-de-loiza-ofrece-ideas-para-solucionar-el-problema-de-escuelas-abandonadas/>.
- Raj. (2020, September 23). *How To Write An Effective Grant Proposal | A Nonprofit's Guide*. Donorbox. <https://donorbox.org/nonprofit-blog/grant-proposals/>
- Rodríguez-Díaz, C. (2017). Maria in Puerto Rico: Natural Disaster in a Colonial Archipelago. *AJPH*. <https://ajph.aphapublications.org/doi/full/10.2105/AJPH.2017.304198>
- Samuels, B. (n.d.). *Biden administration releases \$8 billion in disaster funding for Puerto Rico*. <https://thehill.com/latino/549074-biden-administration-releases-8-billion-in-disaster-funding-for-puerto-rico>
- Santiago-Robles, H. (2019). *How can we redesign abandoned buildings and turn them into hubs for resilience available for the community?* UMN // Global Convergence Lab.

Resources



- Santner, Zari. *Hillside Park Community Center Business Plan*. 2010, <https://www.portlandoregon.gov/parks/article/473899>.
- Seattle Parks and Recreation. (2016). *Seattle Parks and Recreation Community Center Strategic Plan* (Proposal). [http://www.seattle.gov/Documents/Departments/ParksAndRecreation/PoliciesPlanning/CommunityCenterStrategic%20Plan2016\(9-7-16\).pdf](http://www.seattle.gov/Documents/Departments/ParksAndRecreation/PoliciesPlanning/CommunityCenterStrategic%20Plan2016(9-7-16).pdf)
- Segal, T. (2021, August 17). *Government Grant*. <https://www.investopedia.com/terms/g/government-grant.asp>
- Singh, A. (2019). *Puerto Ricans Transform Closed Schools Into Community Centers*. Truthout. Retrieved October 4, 2021, from <https://truthout.org/articles/puerto-ricans-transform-closed-schools-into-community-centers/>
- Staple-Clark, J. (2011). *Ethics and Photography in Developing Countries*. Unite For Sight. <https://www.uniteforsight.org/global-health-university/photography-ethics>
- The Disappearing Schools of Puerto Rico. (2019, September 12). *The New York Times*. <https://www.nytimes.com/interactive/2019/09/12/magazine/puerto-rico-schools-hurricane-maria.html>
- Toolkits | Community Tool Box*. (n.d.). Retrieved October 4, 2021, from <https://ctb.ku.edu/en/toolkits>
- Torres, L. (2018). Puerto Rico. *Springer Link*. <https://link.springer.com/article/10.1057/s41276-018-0130-2>
- University of Glasgow. (n.d.). *Ethical Issues in Interviews* (.UK). Earthshipglobal. Gla.Ac. https://www.gla.ac.uk/media/Media_237671_smx.pdf
- What is the Puerto Rico Earthship Project?* (n.d.). (.Com). Earshipglobal. <https://www.earthshipglobal.com/puerto-rico>
- Whitten, N. (2002). *Duties of the effective project sponsors*. PMI. <https://www.pmi.org/learning/library/duties-effective-project-sponsor-responsibilities-4469>

Resources



- Wikihow. (2021). *How to Start a Community Center* [..com]. Wikihow. <https://www.wikihow.com/Start-a-Community-Center#:~:text=1%20Write%20bylaws.%20Your%20community%20center%20needs%20a,just%20need%20to%20make%20sure%20that%20people%20come.>
- Zorrilla, C. (2017). The View from Puerto Rico—Hurricane Maria and Its Aftermath. *The New England Journal of Medicine*. <https://www.nejm.org/doi/full/10.1056/NEJMp1713196>